Phase Two Environmental Site Assessment

555, 591, 595, and 603 March Road, Ottawa, ON

Produced for:
March and Main Developments Inc.

Produced by:
Omni-McCann Inc.

Reference Number:
0006-0103

Date:
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1. EXECUTIVE SUMMARY

IMPORTANT: *This executive summary provides an overview of the main findings of the study to which it pertains. This executive summary does not provide a comprehensive report, and its review should not be considered a substitute for reading the report in its entirety.*

Omni-McCann Inc. (OMI) was retained by March and Main Developments Inc. (Owner) to conduct a Phase Two Environmental Site Assessment (ESA) of the combined properties located at *555, 591, 595,* and 603 March Road in Ottawa, Ontario (herein referred to as the 'phase two property').

The phase two property is located on the west side of March Road running south from the intersection of Terry Fox Drive and March Road in the Kanata Technology Park of Ottawa, Ontario. The phase two property covers municipal addresses *555, 591, 595,* and 603 March Road and are legally described as the following:

- **555 March Road** - Part of Lot 9, Concession 3, Part 1, Plan 5R9546 except Part 1, Plan 4R7933, Part 15, Plan 4R12735, Kanata (PIN 04518-0067). Lot size – 2.44 ha
- **591 March Road** - Part of Lot 9, Concession 3, Part 1, Plan 5R12441 save and except part 1 on 4R94, Kanata (PIN 04518-0061). Lot size – 0.37 ha
- **595 March Road** - Block 1, Plan 4M1104 (PIN 04518-0115). Lot size – 0.86 ha
- **603 March Road** - Part of Lot 9, Concession 3, March (PIN 04518-0065). Lot size – 1.88 ha

The phase two property is irregular in shape, is oriented northwest to southeast, and is approximately *5.55* ha in plan area based on information available through the City of Ottawa's Interactive Online Mapping Tool (GeoOttawa). The phase two property location and boundary are shown on Figure 1A and 1C, respectively.

This Phase Two ESA was carried out in general accordance with O. Reg. 153/04 to address the APECs identified in the Phase One ESA for the phase two property. It is OMI's understanding that the Phase Two ESA is required by the Owner in order to redevelop all or a portion of the phase two property into a mixed-use commercial/residential complex. Existing structures will be demolished in phases as development and construction progresses. All new structures are proposed to have sub-surface parking where bedrock surfaces allow. Initial site clearing and preparation are planned for the second quarter of 2023. The proposed redevelopment will have eleven (11) new buildings between six (6) and thirty (30) storeys with below grade levels extending to bedrock, up to 3 m below grade. The Phase Two ESA was conducted building upon previous investigations completed at the phase two property.

Based on the physical conditions and proposed site use, Table 7: Generic Site Condition Standards (Table 7 SCS) for Shallow Soils in a Non-Potable Groundwater Condition for coarse textured soils

Residential/Parkland/Institutional Property Use of the Soil, Ground Water, and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (MECP, 2021a).

Analytical results for soil samples collected at the phase two property returned concentrations of all parameters below the MDL and/or relevant Table 7 SCS, with the exception of the sodium adsorption ratio (SAR) and petroleum hydrocarbon compounds heavier than fraction 4 (PHC F4G) concentrations in the sample collected at MW22-13B from 0.0 to 0.6 mbgs. SAR concentrations were returned to be 8.15 compared to Table 7 SCS of 5 (SAR is a unitless measurement). PHC F4G concentrations were returned to be 7130 mg/kg compared to Table 7 SCS of 5600 mg/kg.

PHC F4G that exceeded applicable SCS in surface samples are attributed to inclusion of surficial asphalt material in the sample from MW22-13B. This location is within the paved area of 603 March Road adjacent to a pedestrian walkway. Similarly, elevated SAR is attributed to the application of salt for the purposes of de-icing roadways and walkways. Neither parameter is believed to be caused by the APECs being investigated.

No PHC, PAH, and/or metals parameters at concentrations above the Table 7 SCS were identified in the groundwater samples analysed. Concentrations of VOCs were identified in groundwater exceeding the Table 7 SCS throughout the phase two property including tetrachloroethylene (PCE) in MW22-39-1 and MW22-41-1 along with trichloroethylene (TCE) in twenty (20) monitoring wells, as summarized in Table 6.

Based on the investigation completed and interpretation of results, OMI offers the following conclusions:

- PHC F4G and SAR in concentrations above applicable SCS were returned in a surficial soil sample at MW22-14B but were not considered representative of PCAs associated with APEC D or APEC G and did not warrant additional investigation or remediation.
- All other soil samples collected on the phase two property did not return any contaminants of concern (COC) concentrations above applicable SCS.
- VOCs at concentrations above SCS were returned in groundwater samples from APEC B and APEC C across the central area of the phase two property, encompassing the majority of 595 March Road and the central and southern portion of 603 March Road.
- All other groundwater samples collected on the phase two property did not return any COC concentrations above applicable SCS.
- No free phase product was encountered in soil or groundwater during the investigation.
- Prior to remedial work on the phase two property Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Table 7: Generic

Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition have not been met.

- Remediation of VOC impacted groundwater is recommended prior to redevelopment of the phase two property.

TABLE OF CONTENTS

List of Appendices

Figures & Tables

APPENDIX A: SAMPLE AND ANALYSIS PLAN
APPENDIX B: FINALIZED FIELD LOGS
APPENDIX C: CERTIFICATES OF ANALYSIS
APPENDIX D: RESIDUE MANAGEMENT
APPENDIX E: SURVEY OF PHASE TWO PROPERTY
APPENDIX F: CITY OF OTTAWA RESPONSE TO USE OF NON-POTABLE GROUNDWATER STANDARDS

List of Tables

List of Figures

2 INTRODUCTION

Omni-McCann Inc. (OMI) was retained by March & Main Developments Inc. and 591 & 595 March Road Developments Inc. (Owner) to conduct a Phase Two Environmental Site Assessment (ESA) of the combined properties located at *555, 591, 595,* and 603 March Road in Ottawa, Ontario (herein referred to as the 'phase two property'). The phase two property location and boundaries are shown in Figure 1A and 1C, respectively.

It was reported to OMI that the Phase Two ESA is required by the Owner to address the conclusions and recommendations of the Phase One ESA which was completed by OMI in August 2022. The Phase One ESA identified multiple Areas of Potential Environmental Concern (APECs) associated with potentially contaminating activities (PCAs) both at the phase two property and in the immediate surrounding area. Details of the Phase One ESA are provided in Section 3.2.

2.1 SITE DESCRIPTION

The phase two property is located on the west side of March Road running south from the intersection of Terry Fox Drive and March Road in the Kanata Technology Park of Ottawa, Ontario. The phase two property covers municipal addresses *555, 591, 595,* and 603 March Road and are legally described as the following:

- **555 March Road** - Part of Lot 9, Concession 3, Part 1, Plan 5R9546 except Part 1, Plan 4R7933, Part 15, Plan 4R12735, Kanata (PIN 04518-0067). Lot size – 2.44 ha
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The phase two property is irregular in shape, is oriented northwest to southeast, and is approximately *5.55* ha in plan area based on information available through the City of Ottawa's Interactive Online Mapping Tool (GeoOttawa). The phase two property location and boundary are shown on Figure 1A and 1C, respectively. Property boundaries and adjacent land uses are described as follows:

- **North boundary:** Terry Fox Drive followed by a residential sub-division.
- **East boundary:** March Road followed by the Nokia office campus.
- **West boundary:** The Ciena office campus, Hines Road, and small high-tech services and supply businesses.

- **South boundary:** Small high-tech services and supply businesses and an insurance company office (Allan Mann Insurance Ltd.).

2.2 PROPERTY OWNERSHIP

The phase two property is owned by March & Main Developments Inc. and 591 & 595 March Road Developments Inc. (jointly referred to as the 'Owner'). Authorization to proceed with the Phase Two ESA was provided by the Owner's representative, Fel Petti, on October 5, 2022. Fel Petti acted as the Owner's representative and project manager for the Phase Two ESA. Contact information for Fel Petti is provided in Table 2-1 below.

Table 2-1: Owner Representative Contact Information

Project Contact:	Fel Petti
Address:	March and Main Developments Inc. 109 Atlantic Avenue, Suite 302B Toronto, ON M6K 1X4
Phone Number:	(416) 530-2438
Mobile Number:	(613) 407-0553

2.3 CURRENT AND PROPOSED FUTURE USES

The phase two property has a variety of current uses and structures. A brief description of each municipal address associated with the phase two property is provided below and in Figure 1C:

- **555 March Road:** The eastern half of the phase two property consists of landscaped areas, a single structure, and parking/drive lanes connected to March Road and the adjoining parcel (591 March Road). The structure is a single storey with an approximate footprint area of 1,654.4 m^2, it sits between the landscaped area adjacent to March Road and a paved parking area to the rear (west) of the structure. Presently, the structure is used as a fitness club. A drive lane connects to the adjacent municipal address to the north, 591 March Road, via the rear parking area. The remaining areas are undeveloped vacant land that wraps around the western boundary of 591 March Road to boarder on the southwestern boundary of 595 March Road.
- **591 March Road:** This portion of the phase two property is surrounded on the south and west by 555 March Road and on the north by 595 March Road. There is a multi-unit commercial plaza in an 'L' shape running along the north and west boundaries. The structure is single-storey with an approximate footprint area of 1,748 m^2 with parking and drive lanes occupying the remainder of this portion of the phase two property.

- **595 March Road:** This address consists of vacant, undeveloped land running from March Road to the east to Hanes Road and a municipal walkway to the west. There are no permanent structures, and the property has significant vegetation growth.
- **603 March Road:** This address occupies the northern most portion of the phase two property and consists of a single, two-storey structure, paved parking lot, and landscaped areas. The structure is approximately 7,060.6 m^2 in footprint area and primarily used as office space and high-tech electronic component research and development. This portion of the property extends from March Road to a municipal walkway on the western boundary. The parking lot extends from the structure to the western boundary of the phase two property.

It was reported to OMI that the Phase Two ESA is required by the Owner in order to redevelop all or a portion of the phase two property into a mixed-use commercial/residential complex with commercial and parking space on the ground floors and residences on upper floors and two office towers. This redevelopment requires a Record of Site Condition (RSC) to be filed in order to change the use from industrial/ commercial to mixed commercial and residential.

2.4 APPLICABLE SITE CONDITION STANDARD

The following conditions were used in the selection of appropriate assessment standard for the phase two property:

- The phase two property is currently operating as fitness club (555 March Road), multi-unit commercial businesses (591 March Road), vacant (595 March Road), and office/ research and development (603 March Road). The current land use is therefore characterised as 'commercial' under O.Reg. 153/04. However, the proposed use of the phase two property includes residential units, therefore, the 'residential' land use criteria under O.Reg. 153/04 is required.
- Drill locations MW22-21, MW22-24, BH22-25, and MW22-37 advanced as part of this Phase Two ESA had a depth to bedrock deeper than 2 m; however, more than one third (1/3) of the phase two property had a depth to bedrock less than 2 m as confirmed through thirty-four (34) additional drill locations.
- Groundwater beneath the phase two property and within the immediately surrounding area is not used as a source of potable drinking water with no plans to be used as potable drinking water.
- The closest permanent surface water body (Shirleys Brook) is located more than 30 m from the phase two property (i.e., approximately 513 m northeast at its closest point).
- Overburden beneath the phase two property is a mixture of coarse fill materials and medium-fine grained native materials based on grainsize analysis conducted on three (3) samples collected as part of the Phase Two ESA. As coarse textured soil criteria are generally

more stringent, soil parameters will be compared to coarse grained criteria. Since no permanent or significant water was found in soil, and a bedrock groundwater table was confirmed by the investigation, coarse textured criteria were adopted for groundwater.

Based on the above, analytical results of soil and groundwater samples collected as part of the Phase Two ESA were compared to:

- Table 7: Generic Site Condition Standards (Table 7 SCS) for Shallow Soils in a Non-Potable Groundwater Condition for coarse textured soils Residential/Parkland/Institutional Property Use of the Soil, Ground Water, and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (MECP, 2022).

3 BACKGROUND INFORMATION

3.1 PHYSICAL SETTING

3.1.1 WATER BODIES

There are no permanent surface water bodies or areas of standing water on the phase two property or in the immediately surrounding area. Surface runoff is directed to parking lot edges, infiltration swales or March Road stormwater catchments. Shirleys Brook is the closest natural surface water body to the phase two property at a distance of approximately 513 m northeast at its closest point. Shirleys Bay, in Lac Deschenes on the Ottawa River is located approximately 2.8 km northeast of the phase two property.

3.1.2 AREAS OF NATURAL AND SCIENTIFIC INTEREST

Based on the Ontario Ministry of Natural Resources Areas of Natural and Scientific Interest (ANSI) map, there are no ANSI on the phase two property or within the phase two study area as shown on Figure 2.

3.1.3 TOPOGRAPHY AND SURFAE WATER DRAINAGE FEATURES

The phase two property is located on a local topographic slope falling from the southwest to the northeast with an elevation of approximately 82.25 m above sea level (masl) at the center of the phase two property. The phase two property is generally flat lying with the exception of drainage swales that runs along the east, south, and west sides of the 555 March Road property, the north side of the 603 March Road property, and localized variations in topography to direct stormwater runoff toward storm drains and away from buildings.

3.1.4 WATER WELLS AND SOURCE WATER PROTECTION

The Ontario water well records database was accessed during OMI's Phase One ESA. A total of seven (7) well records were identified including five (5) for the phase two property (four water supply well records and one monitoring well record) and two (2) for the phase one study area (both records relate to monitoring wells). No water supply wells were observed or reported on the phase two property during reconnaissance. Monitoring wells installed as part of a past investigation on the 595 March Road property were observed (refer to section 3.1).

The City of Ottawa source water protection plan encompasses the Mississippi-Rideau Source Protection Plan and the Raisin-South Nation Source Protection Plan. The phase two property and study area do not fall within a source water protection area.

3.1.5 SERVICING WITH MUNICIPAL DRINKING WATER SYSTEM

As mentioned above, domestic water wells were noted in the records review; however, municipal water supply has reportedly been provided to the phase two property since its development between 1985 and 1991.

No evidence of water supply wells for suspected human consumption or agricultural use was noted during either the Phase One ESA or Phase Two ESA. All properties in the vicinity of the site are therefore expected to be connected to the City of Ottawa's closed-loop municipal drinking water supply system.

3.2 PAST INVESTIGATIONS

OMI reviewed the following reports and documents related to the environmental condition of the phase two property during the Phase One ESA:

- Oliver, Mangione, McCalla & Associates (OMM), 2000. Phase I Environmental Site Assessment, 603 March Road, Kanata, Ontario.
- Golder Associates (Golder), 2001. Phase I Environmental Site Assessment and Limited Asbestos Sampling Program, 603 March Road, Kanata, Ontario.
- Paterson Group (Paterson), 2016. Phase II Environmental Site Assessment, *555, 591, 595* March Road, Ottawa, Ontario.
- Concentric Geoscience Inc. (CGI), 2022. Phase I Environmental Site Assessment Update and Phase II Environmental Site Assessment, 603 March Road, Ottawa, Ontario.
- Omni-McCann Inc. (OMI), 2022. Phase One Environmental Site Assessment, *555, 591, 595,* and 603 March Road, Kanata, Ontario.

A summary of information relevant to the environmental condition of the phase two property from each report is provided in the following subsections.

OMM, 2000

- The 603 March Road portion of the phase two property was first developed with a single storey workshop and office space in 1969. Additional renovations, including a second storey office space, were completed in the 1970's, 1980's and 1990's.

- At the time of the 2000 ESA, 603 March Road was being used for research and development of semi-conductors. Small volumes of acetone, isopropanol, solvents, inks, and propane were reportedly used on the phase two property. All generated wastes were handled by Newbridge, the owner at the time.
- Records provided by the MECP indicated that larger quantities of chlorinated solvents and acids were historically used at 603 March Road during electronic component manufacturing. Electrical components manufacturing had been discontinued by the time the 2000 ESA was conducted.
- A liquid nitrogen tank located on the western exterior of the building was noted during the site visit. A smaller tank of liquid nitrogen was noted inside the building adjacent to the clean room.
- Potential asbestos containing materials (ACMs) were noted on rain downspout and pipe elbows.
- Based on the age of the building at 603 March Road, lead paint and polychlorinated biphenyl (PCB) containing equipment were noted as potential hazards in building materials.
- OMM recommended that any further renovations be preceded by a hazardous substance survey and remedial measures to safely remove ACMs, lead containing materials, and PCB containing materials. No other work was recommended at the time.

Golder, 2001

- At the time of the 2001 ESA, the 603 March Road portion of the phase two property consisted of a combined one and two storey permanent building and three mobile structures used for offices and storage.
- The city directory search indicated the presence of two dry cleaning companies at 591 March Road, approximately 48 m south of 603 March Road in 1991 and 1996. A third dry cleaner was identified at 700 March Road approximately 140 m north of 603 March Road.
- The three dry cleaning facilities identified were not considered PCAs for the 603 March Road property due to the inferred direction of groundwater flow.
- The limited asbestos survey confirmed the presence of asbestos (Chrysotile) is pipe insulation in the former main electrical room.
- No recommendations were made with respect to the subsurface investigation or the presence of ACMs at the 603 March Road property.

Paterson, 2016

- A brief review of previous environmental studies conducted on 591 and 595 March Road is provided in this report. The previous reports were not available for OMI to review but are listed by Paterson to be:
    - "Phase I Environmental Site Assessment, 591 March Road, Kanata, Ontario" prepared by AMEC Earth and Environmental Ltd., dated February 2002.
    - "Subsurface Investigation, Cisco Systems, Block E, 595 March Road, Kanata, Ontario, Canada" prepared by Environmental Resource Management (ERM), dated December 2007.
    - "Phase II Environmental Site Assessment, Existing Commercial Development, 591 March Road, Ottawa, Ontario" prepared by Paterson, dated March 10, 2008.
    - "Groundwater Monitoring, 595 March Road, Kanata, Ontario, Canada" prepared by ERM, dated August 2009.
    - "Supplemental Phase II Environmental Site Assessment, Existing Commercial Development, 591 March Road, Ottawa, Ontario" prepared by Paterson, dated February 14, 2011.
    - "Groundwater Treatment Program, 591 and 595 March Road, Ottawa, Ontario" prepared by Paterson, dated September 30, 2012.
    - Groundwater monitoring reports prepared by Paterson, 2011-2014.
- Previous reports indicated the presence of chlorinated solvent contamination in the subsurface attributed to the dry cleaning facility previously located at 591 March Road. The main points of the previous reports reviewed by Paterson include:
    - AMEC's 2002 Phase I ESA highlighted the presence of a dry cleaning facility on the 591 March Road portion of the phase two property for a short period in the early 1990's. A camera inspection of the 591 March Road buildings drain system was completed, confirming the integrity and ruling out a preferential pathway.
    - The 2007 ERM subsurface investigation of 595 March Road installed three monitoring wells, in addition to four existing wells on the 595 March Road portion of the phase two property. A total of seven (7) groundwater samples were analyzed, several of which returned concentrations of chloroform and tetrachloroethylene (PCE) above regulatory standards at the time.
    - The 2008 Paterson Phase II ESA at 591 March Road advanced three boreholes, one (1) of which was completed as a monitoring well. Soil from the area located adjacent to the rear door of the former dry cleaning facility was impacted with PCE at concentration above the regulatory guidelines. Groundwater samples from the monitoring well installed as part of the Phase II ESA returned concentrations of PCE and trichloroethylene (TCE) above the regulatory standards.
    - The 2011 Supplemental Phase II ESA completed by Paterson added five (5) monitoring wells to the 591 March Road portion of the phase two property. Soil analytical results

were in compliance with regulatory standards of the time, whereas groundwater results returned concentrations of PCE above regulatory standards.

  - An amendment program of groundwater remediation to address chlorinated solvent contamination through in-situ chemical injections was implemented by Paterson in 2012. It was reported that the remediation program initially reduced overall solvent concentrations in groundwater, however, concentrations remained above the applicable provincial SCS at the conclusion of the program and concentration re-bounding was observed in subsequent monitoring events.

- Groundwater sampling conducted by Paterson in October 2015 identified concentrations of PCE, TCE, and cis-1,2-dichloroethylene (DCE) at concentrations exceeding the applicable SCS in monitoring wells located inside the commercial building at 591 March Road and throughout the adjacent property to the northwest at 595 March Road.

CGI, 2022

- The Phase I ESA update highlighted past electronic component manufacturing activities and the presence of heating oil storage on the 603 March Road portion of the phase two property, as well as the former dry cleaning facility located at 591 March Road as PCAs requiring investigation.
- Contaminants of potential concern (COPCs) for 603 March Road were determined to be volatile organic compounds (VOCs), petroleum hydrocarbon fractions 1 to 4 (PHC F1-F4), and benzene, toluene, ethylbenzene, and xylene (BTEX).
- The Phase II ESA conducted at 603 March Road consisted of the advancement of eighteen (18) boreholes, the installation of monitoring wells in all boreholes, and the installation of two (2) indoor sub-slab vapour monitoring wells. A total of five (5) soil samples, twenty-four (24) groundwater samples, and two (2) vapour samples were submitted for analysis of one or more of the COCs.
- Soil was found to be shallow, mostly non-native fill ranging in thickness from 0.15 m to 1.2 m. Bedrock was interbedded dolostone and sandstone to the maximum investigation depth of 12.8 m.
- Analytical results in soil indicated that there were no COCs present.
- Groundwater elevations in shallow monitoring wells indicated a flow direction to the northeast in November 2021 and radially outward from an indoor sump pit in January 2022. In deeper monitoring wells, the flow direction was inferred to be north-northeast in January 2022.
- Analytical results from groundwater collected in January 2022 showed concentrations of TCE above the applicable Table 7 SCS under and around the southwest portion of building located at603 March Road. A potential secondary source of PCE and TCE at concentratios

exceeding the Table 7 SCS was also identified coming on onto 603 March Road from the south adjacent property (595 March Road).

OMI, 2022

- OMI identified eight (8) APECs and associated COPCs on the phase two property as follows:
  - APEC A: Interior and immediately surrounding area of the 555 March Road building.
    - Former (1985 – 2005) use of the building as an electronic component manufacturing facility.
    - COPCs associated to APEC A are VOCs.
  - APEC B: Interior and immediately surrounding area of the 591 March Road building; area of known contamination north of building.
    - Former (1991 – 2000) dry cleaning operation where chemicals are used.
    - COPCs associated to APEC B are VOCs.
  - APEC C: Interior and surrounding area of 603 March Road building; area of known groundwater contamination.
    - Former (1997 – 2007) use of building as an electronic component manufacturing facility.
    - COPCs associated to APEC C are VOCs.
  - APEC D: Interior and immediately surrounding area adjacent to elevator at 603 March Road.
    - Storage of hydraulic oil in a fixed tank.
    - COPCs associated with APEC D include PHC and BTEX.
  - APEC E: Northern property boundary, 591 March Road parking area, and southern corner of 555 March Road building.
    - Presence of two, oil filled, pad mounted, high voltage transformers along the northern boundary. One additional transformer adjacent to the 591 March Road parking area as well as one transformer adjacent to the southern most corner of 555 March Road.
    - COPCs associated with APEC E include PHC, BTEX and polychlorinated biphenyls (PCBs).
  - APEC F: Southern and southwestern phase two property boundary.
    - Potential bulk chemical and ink storage. Electronic component manufacturing in surrounding buildings. Metal fabrication and manufacturing operations in nearby buildings.
    - COPCs associated with APEC F include PHC, BTEX, VOC, and metals.
  - APEC G: Northern and southeastern paved areas; West central area of the phase two property.
    - Imported fill of unknown or quality.

        - COPCs associated with APEC G include PHC, BTEX, polycyclic aromatic hydrocarbons (PAHs), and metals.
    - APEC H: All exterior areas of the phase two property.
        - Potential chlorinated solvent contamination in groundwater from the former March Landfill which operated from 1963 to 1974.
        - COPCs associated with APEC H are VOCs.

- Based on information gathered and the age of the buildings on the phase two property, the potential for various special attention substances including asbestos, lead, mercury, PCBs and crystalline silica to be present in building materials was identified. OMI recommended that a hazardous materials/designated substances survey be completed prior to any major renovations or demolition of the buildings being undertaken.
- Based on a review of the available information and the exercise of professional judgment, OMI concluded that there is potential for the identified COPCs to have affected land and/or water within the identified APECs and a Phase Two ESA would be required prior to redevelopment.

3.2.1 SUMMARY & ASSESSMENT OF PAST INVESTIGATIONS

While OMI is unable to verify the information and data from investigations completed prior to 2022 (i.e. work completed by OMM, Golder and Paterson), the work completed by CGI (amalgamated into OMI in April 2022) and OMI was completed with the same general project team and overseen by the same Project Manager and, as such, is fully verified by OMI as being of adequate quality for informing this Phase Two ESA.

As work completed by previous consultants was not completed with the objective of achieving an RSC, it was used to inform CGI/OMI investigations but was independently verified and/or supplemented by OMI personnel to the maximum extent possible. As such, limited validation of pre-2022 results was required to inform this Phase Two ESA and the adequacy of information or data collected and reported by others is not considered directly relevant to the methods employed during nor results, evaluation and conclusion of this report.

The following information relevant to the environmental condition of the phase two property was obtained through review of the environmental reports and drawings provided by the Owner.

- Shallow groundwater flow across the phase two property appears to vary depending on season, but generally shows a northeastern flow direction. Deeper groundwater flow is to the north-northeast.
- Overburden materials at the phase two property are predominantly coarse textured with bedrock close to surface in many areas. Fill of unknown quality is present under hard capped areas of the phase two property.

- Eight (8) APECs were identified on or surrounding the phase two property due to various PCAs including electrical manufacturing, dry cleaning, bulk chemical storage, imported fill storage, and landfilling. COPCs associated with the identified APECs include VOCs, PHC, BTEX, PCBs, PAHs, and metals.
- Groundwater impacts have been confirmed at 591, 595, and 603 March Road. Remedial actions taken to resolve subsurface contamination at 591 and 595 March Road by Patterson in 2012 were unsuccessful at bringing concentrations below applicable SCS. Concentration re-bounding following remediation was observed at 591 and 595 March Road over subsequent monitoring years.

4 SCOPE OF INVESTIGATION

4.1 OVERVIEW OF SITE INVESTIGATION

The objective of the Phase Two ESA is to complete an assessment of the phase two property to determine the location and concentration of one or more COPCs in the land or water on, in or under the phase two property. In order to achieve the objective, OMI carried out the following scope of work:

- Coordinated public and private utility locates prior to commencement of field work and the advancement of boreholes at the phase two property.
- Completed a subsurface investigation including the advancement thirty-four (34) boreholes across the phase two property to assess the underlying phase two property geology and collect soil samples for laboratory analysis. Groundwater monitoring wells were installed in thirty-two (32) of the new boreholes. Table 4-1 summarizes borehole and monitoring well details.
- Collected groundwater samples for laboratory analysis from the new wells and nineteen (19) previously installed wells at the phase two property. Details of previously installed monitoring wells are included in Table 4-1.
- Surveyed the horizontal and vertical position of all monitoring wells on the phase two property.
- Designed and adhered to a quality assurance and quality control (QA/QC) program including the collection of blind duplicate soil and groundwater samples as well as trip blanks and field blanks for groundwater samples.
- Submitted representative soil and groundwater samples with blind duplicate, trip blank, and field blank samples collected as part of the QA/QC program to ALS Environmental Laboratories (ALS) for analyses of relevant COPCs.
- Evaluated all collected data and sample analytical results in comparison to applicable provincial SCS.
- Completed this Phase Two ESA report in accordance with O. Reg. 153/04 – Record of Site Condition (MECP, 2021a) and Canadian Standards Association (CSA) National Standard of Canada Z769-00 – Phase II Environmental Site Assessment (CSA, R2018).

Details of the Sampling and Analysis Plan are provided in Appendix A, with deviations and impediments from the proposed plan discussed in sections 4.4 and 4.5, respectively.

Table 4-1: Summary of Borehole Details

Borehole ID	Location	Total Depth (m)	Purpose
BH4-10	East of 591 March Road multi-unit commercial building	7.62	Previously installed; Completed by Paterson in 2010 as monitoring well
MW21-01A*	Adjacent to bay door on the west side of 603 March Road building	7.62	Investigate APEC B, APEC C, APEC G, and APEC H; Completed as monitoring well
MW21-01B*	Nested with MW21-01A	12.2	
MW22-01C	Nested with MW21-01A	18.4	
MW21-02A*	Northern parking area across from accessible door of 603 March Road building	7.32	Investigate APEC B, APEC C, APEC G, and APEC H; Completed as monitoring well
MW21-02B*	Nested with MW21-02A	12.2	
MW21-03A*	South across the parking area from main Shipping and Receiving door of 603 March Road building	7.32	Investigate APEC B and APEC H; Completed as monitoring well
MW21-03B*	Nested with MW21-03A	12.2	
MW22-03C	Nested with MW21-03A	18.3	
MW21-04A*	Southeastern corner of 603 March Road property	9.0	Investigate APEC B and APEC H; Completed as monitoring well
MW21-04B*	Nested with MW21-04A	12.8	
MW22-04C	Nested with MW21-04A	18.3	
MW21-05A*	East of 603 March Road building in landscaped area adjacent to March Road	8.1	Investigate APEC B, APEC C, and APEC H; Completed as monitoring well
MW21-05B*	Nested with MW21-05A	12.2	
MW22-05C	Nested with MW21-05A	18.3	
MW21-06A*	North of 603 March Road building in landscaped area adjacent to Terry Fox Drive	8.1	Investigate APEC B, APEC C, APEC E, and APEC H; Completed as monitoring well
MW22-06B	Nested with MW21-06A	12.7	
MW21-07*	Former sump, interior of 603 March Road building	7.0	Investigate APEC C, APEC D, and APEC H; Completed as monitoring well
MW21-08*	Existing sump, interior of 603 March Road building	7.3	Investigate APEC C, APEC D, and APEC H; Completed as monitoring well
MW21-13A*	West of emergency exit door on the northwestern side of the 603 March Road building	7.6	Investigate APEC B, APEC C, APEC D, APEC G, and APEC H; Completed as monitoring well
MW22-13B*	Nested with MW21-13B	12.2	

Table 4-1: Summary of Borehole Details

Borehole ID	Location	Total Depth (m)	Purpose
MW21-14A*	Middle of western parking area of 603 March Road property	8.2	Investigate APEC B, APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-14B	Nested with MW21-14A	12.8	
MW21-15A*	Adjacent to southwestern corner of 603 March Road building	7.9	Investigate APEC B, APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-15B	Nested with MW21-15A	12.8	
MW21-16A*	Southern parking area across from accessible door of 603 March Road building	7.6	Investigate APEC B, APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-16B	Nested with MW21-16A	12.2	
MW21-17A*	South of cafeteria eating area of 603 March Road building	7.6	Investigate APEC B, APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-17B	Nested with MW21-17A	12.3	
MW22-18	Adjacent to bay door on the west side of 555 March Road building	9.8	Investigate APEC A, APEC G, and APEC H; Completed as monitoring well
BH22-19	South of pad mounted transformer for the 555 March Road property	1.2	Investigation APEC E
MW22-20	South-central phase two property boundary	8.2	Investigate APEC F, APEC G, and APEC H; Completed as monitoring well
MW22-21	South central side of the 555 March Road building	10.7	Investigate APEC A, APEC G, and APEC H; Completed as monitoring well
MW22-22	Southeastern corner of the 555 March Road parking area	8.8	Investigate APEC F, APEC G, and APEC H; Completed as monitoring well
MW22-23	East central side of the 555 March Road building	9.1	Investigate APEC A, APEC G, and APEC H; Completed as monitoring well
MW22-24	North central side of the 555 March Road building	9.8	Investigate APEC A, APEC G, and APEC H; Completed as monitoring well
BH22-25	South of pad mounted transformer located on 591 March Road	2.7	Investigation APEC E
MW22-26	Southwestern corner of phase two property adjacent to Hines Road	8.2	Investigate APEC F and APEC H; Completed as monitoring well
MW22-27	Southwestern property boundary of the phase two property	8.2	Investigate APEC F and APEC H; Completed as monitoring well

Table 4-1: Summary of Borehole Details

Borehole ID	Location	Total Depth (m)	Purpose
MW22-28	Southwestern corner of the 603 March Road parking area	8.2	Investigate APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-29	West central parking area of the 603 March Road property	9.8	Investigate APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-30	Northwestern corner of the phase two property	9.1	Investigate APEC H; Completed as monitoring well
MW22-31	South central fence line of 603 March Road property.	7.6	Investigate APEC C and APEC H; Completed as monitoring well
MW22-32	South central area of vacant portion of the 555 March Road property, immediately north of desire path	8.2	Investigate APEC H; Completed as monitoring well
MW22-33	Center of the vacant portion of the 555 March Road property	8.1	Investigate APEC H; Completed as monitoring well
MW22-34	Western central portion of the 595 March Road property	7.9	Investigate APEC B and APEC H; Completed as monitoring well
MW22-35	Adjacent to northwestern entrance to 603 March Road building	8.0	Investigate APEC C, APEC G, and APEC H; Completed as monitoring well
MW22-36	Western central phase two property boundary	7.9	Investigate APEC F and APEC H; Completed as monitoring well
MW22-37	Western property boundary of 595 March Road, adjacent to Hines Road turn around.	8.8	Investigate APEC G and APEC H; Completed as monitoring well
MW22-38	Northern corner of phase two property, adjacent to pad mounted transformer at Terry Fox Drive and March Road	8.5	Investigate APEC C, APEC E, and APEC H; Completed as monitoring well
MW22-39-1	Northeastern property boundary of 595 March Road property	9.1	Investigate APEC B and APEC H; Completed as monitoring well
MW22-39-3	Installed within MW22-39-1	16.2	
MW22-39-4	Installed within MW22-39-1	19.8	
MW22-39-5	Installed within MW22-39-1	22.9	
MW22-19-7	Installed within MW22-39-1	25.9	
MW22-39-7	Installed within MW22-39-1	30.5	
MW22-40-1	Northern property boundary of 595 March Road property	9.1	Investigate APEC B and APEC H; Completed as monitoring well
MW22-40-2	Installed within MW22-40-1	13.7	

Table 4-1: Summary of Borehole Details

Borehole ID	Location	Total Depth (m)	Purpose
MW22-40-3	Installed within MW22-40-1	18.3	
MW22-40-4	Installed within MW22-40-1	23.8	
MW22-40-5	Installed within MW22-40-1	26.5	
MW22-40-6	Installed within MW22-40-1	28.0	
MW22-40-7	Installed within MW22-40-1	30.5	
MW22-41-1	Chlorinated solvent release point on 595 March Road property behind commercial plaza on 591 March Road	9.1	
MW22-41-2	Installed within MW22-41-1	16.8	Investigate APEC B and APEC H; Completed as monitoring well
MW22-41-3	Installed within MW22-41-1	20.7	
MW22-41-4	Installed within MW22-41-1	23.5	
MW22-41-5	Installed within MW22-41-1	25.6	
MW22-41-6	Installed within MW22-41-1	27.7	
MW22-41-7	Installed within MW22-41-1	30.5	

Notes:
**: previously installed by CGI in 2021* (CGI, 2022)

4.2 MEDIA INVESTIGATED

The nature of the COPCs and the APECs identified during the Phase One ESA dictated the need to collect soil and groundwater samples from the phase two property. Due to the physical setting of the phase two property, sediment was determined not to be present on the phase two property and, therefore, no sediment sampling was required. A description of the APECs (including the associated PCA from the Phase One ESA as described in Section 3.2), associated COPCs, and potentially impacted media can be found in Table 4-2 below.

Table 4-2: Areas of Potential Environmental Concern

APEC	Location of APEC	PCA No. (153/04 Schd. D)	PCA on/off phase two prop.	COPCs	Media Potentially Impacted
APEC A Former electronic component manufacturing	Interior and immediately surrounding area of the 555 March Road building on the phone two property.	19	On	VOC	Soil and Groundwater
APEC B	Interior and immediately surrounding area of	37	On	VOC	Soil and Groundwater

APEC	Location of APEC	PCA No. (153/04 Schd. D)	PCA on/off phase two prop.	COPCs	Media Potentially Impacted
Former dry cleaning facility	the 591 March Road building; area of known contamination north of building on the phase two property				
APEC C Former electronic component manufacturing	Interior and surrounding area of 603 March Road building; area of known groundwater contamination on the phase two property.	8 19	On	VOC	Soil and Groundwater
APEC D Storage of hydraulic oil	Interior and immediately surrounding area adjacent to elevator at 603 March Road on the phase two property.	28	On	PHC BTEX	Soil and Groundwater
APEC E High voltage electrical transformers	Northern phase two property boundary; 591 March Road parking area; 555 March Road building	55	On	PHC BTEX PCB	Soil and Groundwater
APEC F Potential bulk chemical and ink storage; electronic component manufacturing; metal fabrication	Southern and southwestern phase two property boundaries	8 19 31 34	Off	PHC VOC Metals	Soil and Groundwater
APEC G Imported fill used as base for roads and parking areas; broken rock fill adjacent to Hines Road	Northern and southeastern paved areas; West central area of the phase two property	30	On	PHC BTEX PAH Metals	Soil

APEC	Location of APEC	PCA No. (153/04 Schd. D)	PCA on/off phase two prop.	COPCs	Media Potentially Impacted
APEC H Former March Landfill risk management area	All exterior areas of the phase two property.	55	Off	VOC	Groundwater

Given the overlapping nature of the APECs identified as part of the Phase One ESA, sample locations and depths were typically selected to assess multiple APECs on the phase two property. Soil samples collected during the investigation are summarized in Table 5-1 (Section 5.3) and groundwater samples collected during the investigation are summarized in Table 5-3 (Section 5.7).

4.3 PHASE ONE CONCEPTUAL SITE MODEL

As part of the requirements of Part V in Schedule D of O. Reg. 153/04, a phase one Conceptual Site Model (CSM) was developed as part of the Phase One ESA (MECP, 2021a).

The phase one CSM consists of a figure and narrative descriptions that are intended to illustrate the results of the Phase One ESA and to provide a basis of further work if required. The phase one CSM is illustrated in Figure 1B.

4.3.1 AREAS OF PCAS POTENTIALLY AFFECTING THE PHASE TWO PROPERTY

A description of areas of PCAs identified on the phase two property and study area is provided in Table 4-3 below.

Table 4-3: PCAs Identified During Phase One ESA

O.Reg. 153/04 Schedule D, Table 2 PCA Category	Location/Description
8. Chemical manufacturing, processing and bulk storage	Various waste generator records indicating chemical usage at properties around the phase two property.
19. Electronic and computer equipment manufacturing	Electronic equipment manufacturing operations within the 555 March Road building. Electronic equipment manufacturing operations on properties adjacent to the phase two property and up gradient across Hines Road.
28. Gasoline and associated products storage in fixed tanks	603 March Road building elevator and associated hydraulic oil pump and storage tank.
30. Importation of fill of unknown quality	Fill identified from borehole logs beneath asphalt driveways and parking areas across the phase two property.

O.Reg. 153/04 Schedule D, Table 2 PCA Category	Location/Description
31. Ink manufacturing, processing and bulk storage	Carbon paper and ink ribbon manufacturer adjacent to the phase two property.
34. Metal fabrication	Tool and die fabrication facility across Hines Road from the phase two property.
37. Operation of dry-cleaning equipment (where chemicals are used)	Dry cleaning facility within 591 March Road, known subsurface contamination due to release of dry cleaning chemicals.
55. Transformer manufacturing, processing and use	One transformer adjacent to the 591 March Road parking area. One transformer adjacent to the 555 March Road building.
58. Waste disposal and waste management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	The phase two property is within the risk management area of the former March Landfill, located approximately 1.6 km to the west of the phase two property.

Refer to Section 4.2 for a description of APECs on the phase two property based on the identified PCAs.

4.3.2 POTENTIAL INFLUENCE OF UNDERGROUND UTILITIES

COPCs have the potential to preferentially migrate in utility corridors at the phase two property. The current location of some buried utilities is shown on Figure 1C.

Native soil sitting on bedrock at the phase two property is fine textured thus providing a layer of low permeability material above the bedrock aquifer. Buried utilities on the phase two property placed directly on top of bedrock and backfilled with typical utility corridor fills, these corridors potentially provide preferential pathways for migration to the underlying bedrock water table.

4.3.3 GEOLOGICAL/HYDROGEOLOGICAL INFORMATION

Based on the records review and information gathered during the phase two investigation the following is known of the phase two property:

- The phase two property is generally flat lying and has a slight slope down from northwest to southeast with an elevation of approximately 82.25 masl in the center of the phase two property.
- Fill materials are present below paved surfaces.
- Native overburden material consists of sandy silt or clay with some to no gravel.

- Depth to bedrock undulates and varies across the phase two property but ranges from 0.30 m to 2.74 m. Generally, the depth to bedrock is greatest in the southwestern portion of the phase two property north of the 555 March Road building.
- Native material is described as quaternary age, stone-poor, sandy silt to silty sand textured till.
- Bedrock beneath the phase two property and the immediately surrounding area is Lower Ordovician age interbedded dolostone and sandstone of the Beekmantown Group.
- There are no permanent surface water bodies on the phase two property or within the immediately surrounding area. The closest surface water bodies are Shirleys Brook approximately 513 m to the northeast. Shirleys Bay, in Lac Deschenes on the Ottawa River is located approximately 2.8 km northeast.

Shallow groundwater flow under the phase two property varies with surface influences, generally it flows to the northeast. Regional groundwater flow is expected to be influenced by the presence of the Ottawa River to the northeast. As the water table is within bedrock, and no permanent or substantial aquifer has been observed in overburden, groundwater flow is somewhat likely to be affected by subsurface utilities. Measured groundwater elevations show preferential mounding in areas of increased infiltration such as swales and drainage ditches.

4.4 DEVIATIONS FROM SAMPLING AND ANALYSIS PLAN

As required by Section 3 (2) of Part II in Schedule E, O. Reg. 153/04 (MECP, 2021a), a sampling and analysis plan was developed to address the APECs identified in the Phase One ESA. The sampling and analysis plan developed for this phase two investigation is included in Appendix A. Table 4-4 shows the deviations from the sampling and analysis plan and descriptions of conditions contributing to the deviation.

Table 4-4: Deviations from the Sample and Analysis Plan

Plan	Deviation	Explanation	Solution
Collect and submit for Metals, VOC, PHC, and PAH analysis two (2) soil samples from location MW22-18	Only one (1) soil sample, 22-18 0-1, was analyzed from MW22-18	ALS was unable to report VOC results from the sample collected from 0.76-1.14 mbgs due to insufficient quantities of unpreserved sample. No sample remained to submit to ALS	Add VOC analysis to sample 22-18 0-1
Collect and submit for Metals, VOC, PHC, and PAH analysis two (2) soil	Only one (1) soil sample, 22-20 0-1, was analyzed from MW22-20	ALS was unable to report VOC results from the sample collected from 0.61-1.22 mbgs due to insufficient quantities of unpreserved	Re-sample the 0.61 to 1.22 mbgs interval immediately adjacent to the

Plan	Deviation	Explanation	Solution
samples from location MW22-20		sample. No sample remained to submit to ALS	original location using a hand auger
Collect and submit for Metals, VOC, PHC, and PAH analysis two (2) soil samples from location MW22-21	Only one (1) soil sample, 22-21 0-0.5, was analyzed from MW22-21	ALS was unable to report VOC results from the sample collected from 0.76-1.37 mbgs due to insufficient quantities of unpreserved sample. No sample remained to submit to ALS	Exclude sample from program as the primary concern for VOCs was related to groundwater
Collect and submit for Metals, VOC, PHC, and PAH analysis two (2) soil samples from location MW22-22	Only one (1) soil sample, 22-22 0-1.25, was analyzed from MW22-22	ALS was unable to report VOC results from the sample collected from 0.76-0.91 mbgs due to insufficient quantities of unpreserved sample. No sample remained to submit to ALS	Re-sample the 0.76 to 0.91 mbgs interval immediately adjacent to the original location using a hand auger
Collect and submit for VOC analysis two (2) soil samples from location MW22-23	Only one (1) soil sample, 22-23 0-1, was analyzed from MW22-23	ALS was unable to report VOC results from the sample collected from 0.30-0.61 mbgs due to insufficient quantities of unpreserved sample. No sample remained to submit to ALS	Re-sample the 0.30 to 0.61 mbgs interval immediately adjacent to the original location using a hand auger
Collect a duplicate from each APEC on the phase two property	No duplicate was collected from APEC G	During drilling activities a blind duplicate soil sample was not collected from APEC G at location MW22-24	Re-sample the 0 to 0.38 mbgs interval and collect a duplicate immediate adjacent to the original location using a hand auger
Collect one (1) groundwater sample from each monitoring well	MW22-33 and MW22-36 were re-sampled for VOCs	Analytical results from MW22-33 and MW22-36 returned chloroform concentrations above Table 7 SCS	Re-develop and resample locations for VOCs to determine the potential cause of the exceedance
Advance one (1) borehole north of the northwest entrance to the 603 March Road building	No borehole was advanced north of the northwestern entrance to the 603 March Road building	Sub-surface utilities in the area combined with a cobble infiltration swale and the proximity to the property boundary prevented the advancement of a borehole in that area	Adjust the location of a nearby borehole to the south side of the infiltration swale while staying close enough to the original location
Sample all ports of the installed	Port 2 of MW22-39 was not sampled	Port 2 of MW22-39 did not maintain the seal and became cross	Licensed well technician backfilled Port 2 with grout to

Plan	Deviation	Explanation	Solution
multilevel monitoring well.		connected to the bottom of the borehole, Port 7	prevent continued cross connection.
Conduct rising head hydraulic testing of select monitoring wells	Both rising and falling head tests were conducted at select monitoring wells	The rate of recharge in monitoring wells was faster than manual and mechanical pumping methods. OMI field staff was unable to conduct only rising head tests	A physical slug was used to conduct falling and rising head hydraulic tests on selected monitoring wells

Procedures set in the Sampling and Analysis Plan were followed throughout the field investigation portion of the Phase Two ESA. Deviations from the Sampling and Analysis Plan are not considered to have affected the overall quality of the data collected and will have no material effect on the conclusions and recommendations of the investigation.

4.5 IMPEDIMENTS

Due to subsurface utilities, one (1) proposed location along the northwestern property boundary was removed from the program and another proposed location, MW22-35, was adjusted to cover the area of interest. No other physical impediments or denial of access were encountered during the investigation.

5 INVESTIGATION METHOD

5.1 GENERAL

The Phase Two ESA was conducted in accordance with Schedule E of O. Reg. 153/04 (MECP, 2021a), as required for filing an RSC.

Marking of public and private underground utility locates was completed by USL-1 Underground Service Locators (USL-1) in advance of the phase two property subsurface investigation activities. The intended borehole locations were marked on the ground surface by OMI in advance of the locates being completed.

Boreholes were advanced on the phase two property between October 17 to November 24, 2022. All the boreholes were advanced through the overburden and into bedrock to total depth of 7.6 to 30.5 mbgs, with the exception of two (2) locations that were advanced through the overburden to refusal on bedrock at 1.2 and 2.7 mbgs (BH22-19 and BH22-25, respectively). During drilling activities, soil stratigraphy was logged by OMI personnel using the modified Unified Soil Classification System (USCS). Soil samples were collected at regular intervals, where recovery allowed, in addition to observed changes in soil colour, texture, and/or an indication of possible contaminants (visual or olfactory evidence). Samples were split at the time of collection for field screening with half of the sample placed in laboratory supplied containers and the other half placed into single use sealed bags. Further details on drilling and soil sampling methods are provided in section 5.2 through 5.4.

Monitoring wells were installed in all but two (2) locations, BH22-19 and BH22-25 (see Figure 1C for locations). Monitoring well installations were completed immediately after a borehole was extended to its target depth or there was evidence of intersection with saturated conditions in the desired hydrostratigraphic unit. Monitoring well installation methods are provided in section 5.5.

Monitoring wells were developed by vigorously removing up to ten (10) times the well volume or until purge water was observed to be clear and free of sediment. Prior to groundwater sample collection, groundwater elevations were measured in all monitoring wells on the phase two property. Following measurement of water levels, groundwater was purged from each. During purging, field water quality parameters were measured in the purge water including temperature, pH, conductivity (EC), dissolved oxygen (DO), and oxidation-reduction potential (ORP). When parameters were observed to stabilize over three (3) consecutive readings to within specified limits, groundwater samples were collected into laboratory supplied containers. Groundwater development, testing and sampling procedures are provided in sections 5.6 through 5.8.

No sediment sampling was completed as part of the Phase Two ESA, as noted in section 5.9. Analytical testing and elevation surveying methods are provided in sections 5.10 and 5.12, respectively.

All soil, groundwater, and wash water wastes were contained within sealed drums. Samples of the waste were collected as appropriate to be analyzed for COPCs and other parameters as required by disposal facilities. Residue management practices implemented during the Phase two ESA are described in Section 5.11.

5.2 DRILLING AND EXCAVATING

All boreholes were advanced by Aardvark Drilling Inc. using a CME 55 track mounted drilling rig equipped with hollow stem augers and split spoon samplers for overburden and downhole air percussion drilling head (air hammer) for bedrock, with the exception of eight (8) locations which were rock was cored with a triple tube diamond coring system.

Split spoon samplers were advanced 0.61 m (2 ft) into undisturbed soil ahead of the hollow stem auger with a 0.15 m (0.5 ft) space between sample intervals. As boreholes were advanced through the overburden, soil samples were collected at regular depth intervals to a maximum of 0.61 m (2 ft), where recovery allowed, in addition to when there was a change in soil colour, texture, and/or an indication of possible contaminants (visual or olfactory evidence).

Following soil strata logging and sample collection, split spoon samplers were washed using a stiff brush and an Alconox solution before being returned to use to minimize the potential for cross contamination. In addition, any equipment or surfaces that were in contact with soil were cleaned with the Alconox solution. New, single use, disposable nitrile gloves were donned prior to handling each split spoon sampler.

Upon reaching refusal with the split spoon samplers, the augers were turned into the top of rock with reasonable effort in order to create a temporary seal between the soil-rock interface prior to rock drilling. An air hammer was then deployed to advance boreholes into the water table or target depths between 7.6 and 18.4 mbgs within the bedrock, based on information obtained from previous environmental investigations (Section 3.2). Rock cuttings from the air hammer were examined every 1.5 m. Drilling rods were not removed from the borehole between sampling intervals so as to prevent cross contamination between strata. At locations MW22-32, MW22-33, MW22-34, MW22-35, MW22-36, MW22-39, MW22-40, and MW22-41 a triple tube diamond coring system was deployed in order to recover rock core for geotechnical logging purposes. At cored locations boreholes were advanced to between 7.9 and 30.5 mbgs. Core runs were recovered every 1.5 m with core tube components cleaned using the same methods described above.

5.3 SOIL: SAMPLING

At the time of collection, each soil sample was split in the field where half of the sample was placed in laboratory supplied jars, either 150 or 250 mL depending on required analytical parameters, and stored in coolers with ice for possible laboratory analysis, and the other half of the sample was placed in single use sealed food grade plastic bags for field screening of headspace organic vapour concentrations (OVCs). All soil samples collected for potential analysis of VOCs, BTEX and light-fraction PHCs were preserved at the time of sample collection in clear, glass vials pre-charged with 10 mL of methanol. Using a new QED Terra Core disposable soil sampler provided by ALS, a representative sub-sample of approximately 10 mg was collected and placed into the methanol, care was taken to ensure no methanol was lost. Table 5-1 lists the soil samples collected and a description of the soil, with full borehole log descriptions in Appendix B.

Table 5-1: Geologic Descriptions of Soil Samples

Location ID	Sample ID	Sample Depth (m)	Soil Description
MW22-01C	22-01C 0.25-2	0.1 – 0.6	Sand and gravel fill, trace clay, loose, grey, moist
	22-01C 2.5-3	0.8 – 0.9	Sand and gravel fill, trace clay, loose, grey, moist
MW22-03C	22-03C 0-1	0.0 – 0.3	Silt, sand, and gravel, some clay, organics, loose, brown, moist
	22-03C 2.5-2.75	0.8 – 0.8	Clay, some sand, high plasticity, soft, brown, moist
MW22-04C	22-04C 2.5-4.25	0.8 – 1.3	Sandy clay, some gravel, low plasticity, firm, brown grey, dry
MW22-05C	22-05C 0-1	0.0 – 0.3	Sandy silt, organics, loose, dark brown, moist
MW22-06B	22-06B 0.75-1.75	0.2 – 0.5	Sand and clay, some gravel, medium plasticity, soft, loose, brown, moist
	22-06C 2.5-3.25	0.8 – 1.0	Sand and clay, low plasticity, firm, loose, brown, moist
MW22-13B	22-13B 0-2	0.0 – 0.6	Sand and gravel fill, trace silt and clay, loose, brown-grey, moist
MW22-14B	22-14B 0-2	0.0 – 0.6	Sand and gravel fill, silt, firm, compact, brown, dry
	22-14B 2.5-4	0.8 – 1.2	Sandy silt, firm, dark brown, moist
MW22-15B	22-15B 0-1	0.0 – 0.3	Sand, gravel, silt, and clay, low plasticity, firm, loose, brown, moist
	22-15B 4-4.25	1.2 – 1.3	Sandy clay, low plasticity, firm, tan, moist
MW22-16B	22-16B 0-1	0.0 – 0.3	Sand and gravel fill, loose, grey, moist
	22-16B 2.5-3	0.8 – 0.9	Silty sand, some clay, some gravel, loose, tan, dry
MW22-17B	22-17B 0-0.75	0.0 – 0.2	Sand and gravel fill, loose, grey, moist
	22-17B 2.5-3.5	0.8 – 1.1	Sandy clay, some gravel, high plasticity, soft, dark brown, moist
MW22-18	22-18 0-1	0.0 – 0.3	Sand and gravel fill, loose, grey, moist
BH22-19	22-19 2-3.5	0.6 – 1.1	Clay, some gravel, with a 0.02 m sand pocket, firm, high plasticity, grey, moist

Location ID	Sample ID	Sample Depth (m)	Soil Description
MW22-20	22-20 0-1	0.0 – 0.3	Sand and gravel fill, loose, grey, moist
	22-20 2-4	0.6 – 1.2	Clay, some sand, soft, medium plasticity, grey-brown, moist
MW22-21	22-21 0-0.5	0.0 – 0.2	Sand and gravel fill, loose, grey, moist; Gravelly clay fill, soft, medium plasticity, grey, moist
MW22-22	22-22 0-1.25	0.0 – 0.4	Topsoil – sandy silt, organics, loose, soft, dark brown, moist; Gravelly sand fill, loose, brown and grey, moist becoming wet
	22-22 2.5-3	0.8 – 0.9	Sand and clay, loose, firm, non-plastic, brown and grey, moist
MW22-23	22-23 0-1	0.0 – 0.3	Topsoil – clayey silt, some sand, firm, non-plastic, brown, moist
	22-23 1-2	0.3 – 0.6	Sandy clay, some gravel, loose, non-plastic, tan
MW22-24	22-24 0-1.25	0.0 – 0.4	Topsoil – sandy silt, some clay, organics, non-plastic, loose, firm, dark brown; Sandy clay, firm, non-plastic, grey-brown, moist
BH22-25	22-25 3-4.5	0.9 – 1.4	Clay, some sand, firm, non-plastic, dark brown, moist
	22-25 7-8.5	2.1 – 2.6	Clay, some sand, 0.15 m sand and gravel pocket, firm, non-plastic, dark brown, moist
MW22-26	22-26 0-1	0.0 – 0.3	Topsoil – sandy silt, some clay, trace gravel, organics, soft, non-plastic, dark brown, moist; Sandy clay, low plastic, soft, grey-brown, moist
MW22-27	22-27 0-1	0.0 – 0.3	Topsoil – sandy silt, organics, loose, dark brown, moist
MW22-28	22-28 0-1	0.0 – 0.3	Sand and gravel fill, some clay, loose, grey, moist
MW22-29	22-29 0.25-2.5	0.1 – 0.8	Sand and gravel fill, silt, loose, brown, moist
	22-29 2.5-3.75	0.8 – 1.1	Sandy silt and clay, medium plasticity, soft, brown, moist
MW22-30	22-30 0-1.75	0.0 – 0.5	Topsoil – Sandy silt, some gravel, organics, loose, brown, moist
MW22-31	22-31 0-1	0.0 – 0.3	Topsoil – Sandy silt, organics, loose, dark brown, dry
	22-31 2.5-3.5	0.8 – 1.1	Sandy clay, soft to firm, grey-brown, moist
MW22-35	22-35 0-1	0.0 – 0.3	Topsoil – Sandy silt, gravelly, loose becoming more compact, brown, moist
MW22-36	22-36 0-0.75	0.0 – 0.2	Topsoil – Sandy silt, organics, soft, dark brown, moist; Sand, some silt, loose, tan, moist
MW22-37	22-37 0-0.5	0.0 – 0.2	Topsoil – Sandy silt, loose, dark brown, moist
MW22-38	22-38 0-0.75	0.0 – 0.2	Topsoil – Silty sand, trace gravel, loose, soft, dark brown, dry

Location ID	Sample ID	Sample Depth (m)	Soil Description
	22-38 0.75-2	0.2 – 0.6	Sand and clay, some gravel, low plasticity, loose, firm, dark brown, moist
MW22-39	22-39 0.5-1	0.2 – 0.3	Sandy clay, medium plasticity, soft, light brown, moist
	22-39 2.5-3.5	0.8 – 1.1	Clay, some sand, low plasticity, firm, grey, moist
MW22-40	22-40 0-1.5	0.0 – 0.5	Topsoil – Sandy clay, organics, high plasticity, soft, brown, moist
	22-40 2-3	0.6 – 0.9	Sandy clay, organics, high plasticity, soft, brown, moist
MW22-41	22-41 2.75-4	0.8 – 1.2	Sandy clay, trace gravel, trace silt, high plasticity, firm, brown, moist
	22-41 4-4.5	1.2 – 1.4	Sandy clay, trace gravel, trace silt, high plasticity, firm, brown, moist

5.4 FIELD SCREENING MEASUREMENTS

Headspace OVCs were measured and recorded from the bag sample headspace using an RKI GX 6000 photoionization detector (PID) organic vapour meter calibrated to an isobutylene standard with an indication accuracy of ±10% of the reading or ±1 increment (whichever is greater). The PID was configured to detect VOCs in the 0 – 6000 ppm range. The OVCs were measured in parts per million by volume of gas (ppmv) and recorded on the borehole logs (Appendix B). The PID was bench top calibrated by Maxim Environmental and Safety Inc. (Maxim) prior to deployment in the field, certificates of calibration are included in Appendix B. The PID calibration was checked each morning using an isobutylene standard to ensure readings were within the manufacturer's recommended ±20%. If the calibration was outside of the manufacturer's recommendation, a span calibration was completed on the device. Records of daily calibration checks can be found in Appendix B. No variations from these field screening methods occurred during the Phase Two ESA.

Field screening results, in conjunction with observed soil conditions, the specific APEC(s) being investigated, and an objective of obtaining lateral and vertical coverage of the phase two property were used to select soils for laboratory analysis. Samples were submitted under chain of custody documentation to ALS for analysis of the relevant COPCs. As summarized in Table 5-2, a total of fifty-seven (57) soil samples were submitted for laboratory analysis including nine (9) blind duplicate samples.

Table 5-2: Sample Summary and OVC Readings

Location ID	Sample ID	Sample Depth (m)	OVC (ppm)	Analysis Completed
MW22-01C	22-01C 0.25-2	0.1 – 0.6	2.0	Metals, BTEX, PHC, PAH

Location ID	Sample ID	Sample Depth (m)	OVC (ppm)	Analysis Completed
	22-01C 2.5-3	0.8 – 0.9	3.2	VOC
MW22-03C	22-03C 0-1	0.0 – 0.3	1.4	Metals, BTEX, PHC, PAH
	22-03C 2.5-2.75	0.8 – 0.8	1.4	VOC
MW22-04C	22-04C 2.5-4.25	0.8 – 1.3	0.0	VOC
MW22-05C	22-05C 0-1	0.0 – 0.3	0.2	VOC
MW22-06B	22-06B 0.75-1.75 (DUP5)	0.2 – 0.5	0.1	BTEX, PHC, PCB
	22-06C 2.5-3.25	0.8 – 1.0	0.2	VOC, PHC, PCB
MW22-13B	22-13B 0-2 (DUP6)	0.0 – 0.6	0.8	pH, Metals, SAR, VOC, PHC, PAH
MW22-14B	22-14B 0-2 (DUP2)	0.0 – 0.6	0.9	Metals, BTEX, PHC, PAH
	22-14B 2.5-4	0.8 – 1.2	0.0	Metals, BTEX, PHC, PAH
MW22-15B	22-15B 0-1	0.0 – 0.3	0.0	Metals, BTEX, PHC, PAH
	22-15B 4-4.25	1.2 – 1.3	1.2	VOC
MW22-16B	22-16B 0-1	0.0 – 0.3	0.0	Metals, BTEX, PHC, PAH
	22-16B 2.5-3	0.8 – 0.9	0.0	VOC
MW22-17B	22-17B 0-0.75	0.0 – 0.2	1.0	Metals, BTEX, PHC, PAH
	22-17B 2.5-3.5 (DUP3)	0.8 – 1.1	0.0	VOC
MW22-18	22-18 0-1	0 – 0.3	0.6	Metals, VOC, PHC, PAH
BH22-19	22-19 2-3.5	0.6 – 1.1	0.0	BTEX, PHC, PCB
MW22-20	22-20 0-1	0 – 0.3	0.7	Metals, BTEX, PHC, PAH
	22-20 2-4	0.6 – 1.2	0.4	VOC
MW22-21	22-21 0-0.5	0 – 0.2	0.0	BTEX, PHC
MW22-22	22-22 0-1.25	0 – 0.4	0.8	Metals, BTEX, PHC, PAH
	22-22 2.5-3	0.8 – 0.9	0.3	VOC
MW22-23	22-23 0-1	0 – 0.3	4.0	PHC, BTEX, PAH, Metals
	22-23 1-2 (DUP4)	0.3 – 0.6	0.0	VOC
MW22-24	22-24 0-1.25 (DUP9)	0 – 0.4	0.7	Metals, VOC, PHC, PAH
BH22-25	22-25 3-4.5	0.9 – 1.4	0.0	Grain Size, SAR, BTEX, PHC, PCB
	22-25 7-8.5	2.1 – 2.6	0.3	pH, BTEX, PHC, PCB
MW22-26	22-26 0-1	0 – 0.3	0.0	Metals, VOC, PHC
MW22-27	22-27 0-1	0 – 0.3	0.0	Metals, VOC, PHC
MW22-28	22-28 0-1	0.0 – 0.3	0.1	Metals, BTEX, PHC, PAH
MW22-29	22-29 0.25-2.5	0.1 – 0.8	1.1	Metals, BTEX, PHC, PAH
	22-29 2.5-3.75	0.8 – 1.1	0.0	Metals, BTEX, PHC, PAH
MW22-30	22-30 0-1.75 (DUP1)	0.0 – 0.5	0.0	Metals, BTEX, PHC, PAH
MW22-31	22-31 0-1	0.0 – 0.3	0.4	Metals, BTEX, PHC, PAH
	22-31 2.5-3.5	0.8 – 1.1	0.7	pH, Grain size
MW22-35	22-35 0-1	0.0 – 0.3	0.7	Metals, VOC, PHC, PAH
MW22-36	22-36 0-0.75	0 – 0.2	0.6	Grain Size, Metals, VOC, PHC
MW22-37	22-37 0-0.5	0.0 – 0.2	0.3	Metals, BTEX, PHC, PAH
MW22-38	22-38 0-0.75	0.0 – 0.2	0.2	BTEX, PHC, PCB
	22-38 0.75-2	0.2 – 0.6	0.8	BTEX, PHC, PCB

Location ID	Sample ID	Sample Depth (m)	OVC (ppm)	Analysis Completed
MW22-39	22-39 0.5-1 (DUP7)	0.2 – 0.3	3.8	VOC
	22-39 2.5-3.5	0.8 – 1.1	0.7	VOC
MW22-40	22-40 0-1.5	0.0 – 0.5	1.3	VOC
	22-40 2-3	0.6 – 0.9	2000	VOC
MW22-41	22-41 2.75-4 (DUP8)	0.8 – 1.2	3.4	VOC
	22-41 4-4.5	1.2 – 1.4	3.7	VOC

5.5 GROUNDWATER: MONITORING WELL INSTALLATION

All monitoring wells were installed by Aardvark Drilling Inc. immediately following the advancement of a given borehole. Of the thirty-four (34) boreholes advanced on the phase two property, thirty-two (32) were completed with monitoring wells. Monitoring well construction details are shown on the borehole logs in Appendix B and summarised on Table 1. Monitoring well screens were placed to intercept the perceived location of the water table as determined by moisture in rock cuttings returned during air hammering (i.e., screen placed at depth where saturated cuttings were observed). At MW22-32, MW22-33, MW22-34, MW22-35, and MW22-36, coring was completed to targeted depths based on water table observations from nearby monitoring wells previously completed. Locations MW22-39, MW22-40, and MW22-41 were completed to a target depth to allow for installation of Solinst 7 channel CMT multilevel monitoring systems.

Monitoring well construction at all locations, except MW22-39, MW22-40, and MW22-41, consisted of threaded 50.8 mm (2 inch) diameter, schedule 40 polyvinylchloride (PVC) 10 slot well screens and solid riser pipe. All pipe was contained within clean plastic sheaths until installation where it was handled with clean nitrile gloves. A threaded cap was fitted to the bottom of the well screen and clean quartz sand pack was placed around each well screen to no more than 0.6 m above the screened interval. Monitoring wells were sealed with bentonite from the top of the sand pack to surface and completed below grade with locking flush mount protective casing in parking lots and landscaped areas or with locking stick-up monuments in the vacant areas of the phase two property. The tops of all monitoring wells were sealed with a removable, water-tight J-plug.

Three (3) locations, MW22-39, MW22-40, and MW22-41, were selected for the installation of a Solinst 7 channel CMT multilevel monitoring system. The CMT tubing, stainless steel screens, port blocks, and tubing centralizers were supplied by Solinst Canada Ltd. Ports were measured and cut into the CMT tubing per the manufacturer's instructions. The port blocks were installed to ensure no cross connection between each of the designed monitoring intervals. Stainless steel mesh was placed over each port and wrapped around the tube then secured to the CMT tubing with stainless steel compression clamps. Centralizers were secured to the CMT tubing using stainless steel compression clamps at regular intervals to ensure the tubing remained within the center of the borehole upon installation. Once installed in the borehole, silica sand was used as filter pack around each port.

Monitoring intervals were designed to be no longer than 3 m. Coated bentonite pellets were used to create seals between each monitoring interval. At the top of the shallowest monitoring interval, bentonite chips were used to seal the remainder of the borehole to surface. All CMTs were finished as stick ups with a steel monument to protect the capped well head.

After installation, wells were left to recover prior to being developed. Well development was staged, starting on November 16, 2022, with the wells that were installed earliest. Depth to groundwater and total well depth was measured at each well using a Heron Instruments electronic oil-water interface probe. The probe was decontaminated between each well following the methods described in Section 5.12.1. Total well depths and water levels were collected from the highest point of the top of casing and used to calculate the standing water volume in each well. Monitoring wells were then developed using dedicated 0.02 m diameter Waterra™ tubing and foot valves. All tubing and foot valves were retained in clean plastic bags until deployment within the well. The wells were developed to ensure that subsequent groundwater samples collected were relatively free of sediment and representative of groundwater conditions within the surrounding soil. Well development was accomplished by removing water from the well at a rate fast enough to hydraulically stress the formation and to re-suspend and extract sediment from the well bottom and well screen, where present. The tubing intake (foot valve) was positioned at the bottom of the well and was agitated during pumping to disturb and extract any sediment. The CMT multilevel monitoring wells were developed using dedicated 6 mm polyethylene tubing fed down to the bottom of each port. The tubing was then connected to a peristaltic pump and water was drawn as rapidly as possible from the port. The well, or port, was developed until a minimum of ten (10) standing well water volumes were removed or the purge water was observed to be relatively clear and sediment free; whichever occurred first. All purge water was contained for later disposal as discussed in Section 5.10.

Following well development, all onsite monitoring wells were left to recover until December 5, 2022. Water levels in all onsite wells were measured on December 5, 2022 and measured groundwater levels in meters below the top of casing (TOC) and meters above sea level (masl) are provided in Table 2.

5.6 GROUNDWATER: FIELD MEASUREMENT OF WATER QUALITY PARAMETERS

Prior to groundwater sample collection, monitoring wells were purged through a turbulence reducing flow through cell with a YSI Pro Plus multiparameter meter mounted within. The multiparameter meter was equipped with Temperature, pH, conductivity/specific conductance (EC), DO, and ORP probes. The multiparameter probe was bench top calibrated by prior to use in the field, certificates of calibration are provided in Appendix B. Calibration standard solutions were provided by Maxim for pH and EC. The calibration of pH and EC were checked at the start of each sampling event.

Dedicated 6 mm polyethylene tubing was inserted into the well so the intake was located at approximately the center of the screened interval. The other end of the tubing was connected to a peristaltic pump using dedicated silicone pump tubing. The outlet of the peristaltic pump was then connected with dedicated polyethylene tubing to the bottom port of the flow through cell with and bit of silicon tubing. The peristaltic pump was set to pump from the well at a rate which did not decrease the overall water level of the well by more than 0.1 m of the static water level. Once the flow through cell was filled, a three (3) minute timer was started to mark collection of the first set of parameters. Parameters were recorded every three (3) minutes until three (3) consecutive measurements were within set limits. The three (3) consecutive readings should be within ±0.1 for pH, ±3% for EC, and ±10% for DO and ORP over the average of the last three (3) consecutive readings. All purge water was collected and retained for disposal as discussed in Section 5.10. The flow through cell and multiparameter meter were cleaned using the methods specified in Section 5.12.1 prior to use at a new location.

5.7 GROUNDWATER: SAMPLING

Groundwater monitoring and sampling was conducted from December 1 to 15, 2022. The depth to groundwater was measured in each monitoring well and the depth was recorded to the nearest millimetre from the highest point of the well riser to the water surface. The oil-water interface probe was cleaned following the methods described in Section 5.12.1 between each water level measurement to prevent potential cross contamination.

Following measurement of water levels, groundwater was pumped from each well using a peristaltic pump connected to dedicated 6 mm diameter polyethylene tubing. Prior to sample collection, each well was purged and field parameters (temperature, pH, EC, DO, ORP) were measured and recorded using a YSI Pro Plus multiparameter probe. When parameters were observed to stabilize over three (3) consecutive readings to within specified limits (see Section 5.6), the multiparameter probe was disconnected from the pump outlet and the groundwater samples were collected. Groundwater samples were collected in laboratory supplied sample containers directly from the open end of the dedicated polyethylene tubing connected to the peristaltic pump.

A total of seventy-six (76) groundwater samples were collected for laboratory analysis including one (1) from each monitoring well and eight (8) blind duplicate samples. Five (5) field blank and trip blank samples were also collected for the QA/QC program. Table 5-3 below summarizes details the groundwater samples collected.

Table 5-3: Groundwater Sample Summary

Location	Sample ID	Screen Interval (mbgs)	Parameters Analyzed
BH4-10	BH4-10-6DEC22	4.6 – 7.6	VOC
MW21-01A	MW21-01A-6DEC22 DUP5-6DEC22	4.6 – 7.6	VOC

Location	Sample ID	Screen Interval (mbgs)	Parameters Analyzed
MW21-01B	MW21-01B-6DEC22	9.1 – 12.2	VOC
MW22-01C	MW22-01C-6DEC22	15.4 – 18.4	VOC
MW21-02A	MW21-02A-6DEC22	4.3 – 7.3	VOC
MW21-03A	MW21-03A-5DEC22	4.3 – 7.3	VOC
MW21-03B	MW21-03B-5DEC22	9.1 – 12.2	VOC
MW22-03C	MW22-03C-5DEC22	15.2 – 18.3	VOC
MW21-04A	MW21-04A-5DEC22	5.9 – 9.0	VOC
MW21-04B	MW21-04B-5DEC22 DUP3-5DEC22	9.8 – 12.8	VOC
MW22-04C	MW22-04C-5DEC22	15.2 – 18.3	VOC
MW21-05A	MW21-05A-5DEC22	5.0 – 8.0	VOC
MW21-05B	MW21-05B-5DEC22	9.1 – 12.2	VOC
MW22-05C	MW22-05C-5DEC22	15.2 – 18.3	VOC
MW21-06A	MW21-06A-6DEC22	5.0 – 8.0	VOC, PHC
MW22-06B	MW22-06B-6DEC22	9.7 – 12.7	VOC
MW21-07	MW21-07-6DEC22	4.0 – 7.0	VOC
MW21-08	MW21-08-5DEC22	4.3 – 7.3	VOC
MW21-13A	MW21-13A-7DEC22 DUP6-7DEC22	4.6 – 7.6	VOC, PHC
MW22-13B	MW22-13B-7DEC22	9.1 – 12.2	VOC
MW21-14A	MW21-14A-6DEC22	5.2 – 8.2	Metals, VOC, PHC, PAH
MW22-14B	MW22-14B-6DEC22	9.8 – 12.8	VOC
MW21-15A	MW21-15A-6DEC22	4.9 – 7.9	VOC
MW22-15B	MW22-15B-6DEC22	9.8 – 12.8	VOC
MW21-16A	MW21-16A-6DEC22	4.6 – 7.6	VOC
MW22-16B	MW22-16B-6DEC22	9.1 – 12.2	VOC
MW21-17A	MW21-17A-5DEC22	4.6 – 7.6	VOC
MW22-17B	MW22-17B-5DEC22	9.3 – 12.3	VOC
MW22-18	22-18-01DEC22	6.7 – 9.8	VOC
MW22-20	22-20-01DEC22	5.2 – 8.2	Metals, VOC, PHC, PAH
MW22-21	22-21-01DEC22	7.6 – 10.7	VOC
MW22-22	22-22-01DEC22	5.8 – 8.8	Metals, VOC, PHC, PAH
MW22-23	22-23-01DEC22	6.1 – 9.1	VOC
MW22-24	22-24-01DEC22 DUP1-01DEC22	6.7 – 9.8	VOC
MW22-26	22-26-01DEC22 DUP2-01DEC22	5.2 – 8.2	Metals, VOC, PHC, PAH
MW22-27	22-27-01DEC22	5.2 – 8.2	Metals, VOC, PHC, PAH
MW22-28	MW22-28-6DEC22	5.0 – 8.1	Metals, VOC, PHC, PAH
MW22-29	MW22-29-6DEC22	6.7 – 9.8	Metals, VOC, PHC, PAH
MW22-30	MW22-30-6DEC22	6.1 – 9.1	VOC
MW22-31	MW22-31-6DEC22	4.6 – 7.6	VOC

Location	Sample ID	Screen Interval (mbgs)	Parameters Analyzed
MW22-32	22-32-01DEC22	5.2 – 8.2	VOC
MW22-33	22-33-01DEC22 22-33-15DEC22	5.2 – 8.2	VOC
MW22-34	MW22-34-5DEC22	4.8 – 7.9	VOC
MW22-35	MW22-35-6DEC22	5.0 – 7.9	VOC
MW22-36	22-36-01DEC22 22-36-15DEC22	4.9 – 7.9	Metals, VOC, PHC, PAH
MW22-37	MW22-37-5DEC22	5.7 – 8.8	Metals, VOC, PHC, PAH
MW22-38	MW22-38-6DEC22 DUP4-6DEC22	5.4 – 8.5	VOC, PHC
MW22-39 Port 1	MW22-39-01-07DEC22	7.6 – 9.1	VOC
MW22-39 Port 3	MW22-39-03-07DEC22	14.3 – 16.2	VOC
MW22-39 Port 4	MW22-39-04-07DEC22	18.3 – 19.1	VOC
MW22-39 Port 5	MW22-39-05-07DEC22	21.3 – 22.9	VOC
MW22-39 Port 6	MW22-39-06-07DEC22 DUP7-07DEC22	24.9 – 25.9	VOC
MW22-39 Port 7	MW22-39-07-07DEC22	27.4 – 30.5	VOC
MW22-40 Port 1	MW22-40-01-07DEC22	6.1 – 9.1	VOC
MW22-40 Port 2	MW22-40-02-07DEC22	10.7 – 13.7	VOC
MW22-40 Port 3	MW22-40-03-07DEC22	15.2 – 18.3	VOC
MW22-40 Port 4	MW22-40-04-07DEC22	20.7 – 23.8	VOC
MW22-40 Port 5	MW22-40-05-07DEC22	24.4 – 26.5	VOC
MW22-40 Port 6	MW22-40-06-07DEC22	27.1 – 28.0	VOC
MW22-40 Port 7	MW22-40-07-07DEC22	28.5 – 30.5	VOC
MW22-41 Port 1	MW22-41-01-07DEC22 DUP8-07DEC22	6.1 – 9.1	VOC
MW22-41 Port 2	MW22-41-02-07DEC22	13.7 – 16.8	VOC
MW22-41 Port 3	MW22-41-03-07DEC22	17.7 – 20.7	VOC
MW22-41 Port 4	MW22-41-04-07DEC22	21.3 – 23.5	VOC
MW22-41 Port 5	MW22-41-05-07DEC22	24.1 – 25.6	VOC
MW22-41 Port 6	MW22-41-06-07DEC22	26.2 – 27.7	VOC
MW22-41 Port 7	MW22-41-07-07DEC22	28.6 – 30.5	VOC

Once collected, the samples were placed in coolers with ice packs and submitted under chain of custody documentation to ALS for analyses of COPCs. Groundwater quality results are provided in Table 4.

5.8 GROUNDWATER: HYDRAULIC CONDUCTIVITY TESTING

The hydraulic conductivity of select monitoring wells was conducted on December 19, 2022. Twelve (12) locations considered representative of the range of hydraulic conditions of the phase two

property were selected; MW21-01A, MW21-01B, MW22-01C, MW21-03A, MW21-03B, MW21-04A, MW21-04B, MW22-04C, MW22-21, MW22-23, and MW22-36.

Due to the speed of groundwater recharge in monitoring wells on the phase two property, a Solinst Levelogger pressure transducer and data logger with 10 m resolution was used in conjunction with a physical slug made of high-density PVC. The pressure transducer was programmed to log at a one (1) second interval in order to capture the change in water level during the test. Prior to deployment of the transducer, the water level of the monitoring well was measured and recorded. The transducer was deployed to the bottom of the monitoring well with a nylon string for recovery. The slug was then rapidly deployed into the water column with a nylon rope for recovery, such that the top of the slug was submerged after the water column in the well had returned to static conditions. Once the water level in the well had returned to static conditions, the slug was rapidly removed from the well casing. Again, the water column was allowed to return to static conditions. Hydraulic conductivity data was evaluated using the Bouwer & Rice method on the rising head portions of the tests. All reusable equipment was cleaned following methods described in Section 5.12.1.

5.9 SEDIMENT: SAMPLING

This section intentionally left blank. No sediment sampling as part of Phase Two ESA.

5.10 ANALYTICAL TESTING

As discussed in previous Sections 4.1, 5.3, and 5.6, all soil and groundwater samples were submitted to ALS for analytical testing.

5.11 RESIDUE MANAGEMENT

All soil cuttings, rock cuttings, purge water, and wash water was contained in sealed drums on the phase two property until analytical testing was complete. A composite sample of soil and rock cuttings was collected and submitted to ALS for toxic characteristic leachate procedure (TCLP). Results from the TCLP sample, when compared to leachate quality criteria Schedule 4 of O. Reg. 558, indicate that the cuttings were not classified as hazardous. The waste soil drums were removed from the phase two property and disposed of by Drain-All Inc.

Purge water and wash water generated during soil and groundwater investigations on the phase two property was contained in water-tight, sealed totes. Once analytical results indicated the purge and wash water was non-hazardous, the water was removed from the phase two property.

Information pertaining to the management of residue on the phase two property including the laboratory certificate of analysis is provided in Appendix D.

5.12 ELEVATION SURVEYING

A vertical and horizontal survey was completed using a Sokkia GCX3 high resolution GPS survey system. Several survey points collected for the plan of survey completed by Annis O'Sullivan Vollebekk Ltd. were repeated in order to ground truth or correct the survey completed by OMI. The concrete pad for the west bay door of the 603 March Road building was used as the benchmark for the survey.

5.13 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

A QA/QC program was followed to ensure that the sampling and analytical data were interpretable, meaningful, and reproducible. Two (2) stages of QA/QC were completed, with one (1) stage completed as part of the standard field procedures performed by OMI and the other completed by the laboratory.

5.13.1 FIELD SAMPLING QUALITY ASSURANCE/QUALITY CONTROL

Soil and groundwater samples for laboratory analysis were placed in appropriate laboratory-supplied, clean sample containers and labeled with the project name and number, date, sample identification, and type of analyses required. After collection, all samples were placed in laboratory-supplied, insulated coolers with the appropriate packing materials (i.e., bubble wrap and plastic bags) and ice packs for delivery to ALS under chain of custody documentation. Chain of custody forms were filled out and double checked against samples before coolers were submitted. Field sampling was completed according to standard protocols, including:

- Decontaminating non-dedicated sampling equipment with sulphate-free detergent and distilled water between sample locations;
- Donning a new pair of disposable nitrile gloves at each sample location;
- Calibration of field equipment prior to use in accordance with manufacturer instructions, at least once daily.

To demonstrate that the field sampling techniques utilized by OMI personnel are capable of yielding reproducible results and to verify the reproducibility of the laboratory analyses, OMI collected blind duplicate, field blank, and trip blank samples. The blind duplicate samples were collected by evenly splitting the original sample into two sets of sample containers at the time of sampling, with separate labelling on the duplicate sample containers. The blind duplicate samples

were analysed for the same parameters as the original samples. The blind duplicate sample pairs are summarized in Table 5-4.

Table 5-4: Duplicate Pairs

Media	Sample ID	Duplicate ID
Soil	22-30 0-1.75	DUP1
	22-14B 0-2	DUP2
	22-17B 2.5-3.5	DUP3
	22-23 1-2	DUP4
	22-06B 0.75-1.75	DUP5
	22-13B 0-2	DUP6
	22-39 0.5-1	DUP7
	22-41 2.75-4	DUP8
	22-24 0-1.25	DUP9
Groundwater	22-24-01DEC22	DUP1-01DEC22
	22-26-01DEC22	DUP2-01DEC22
	MW21-04B-5DEC22	DUP3-5DEC22
	MW22-38-6DEC22	DUP4-6DEC22
	MW21-01A-6DEC22	DUP5-6DEC22
	MW21-13A-07DEC22	DUP6-07DEC22
	MW22-39-06-07DEC22	DUP7-07DEC22
	MW22-41-01-07DEC22	DUP8-07DEC22

Sampling precision is measured by calculating the relative percentage difference (RPD) for the duplicate samples. Standards for evaluating the repeatability of duplicate samples are described by the Canadian Council of Ministers of Environment (CCME, 2016). This guidance document suggests the use of 60% RPD for solids and 40% RPD for liquids as QA/QC acceptance criteria. Concentration results less than 5 times the Method Detection Limit (MDL) become increasingly imprecise. Acceptance criteria are therefore relaxed for concentrations within 5 times the MDL; for concentrations less than 5 times the MDL it is recommended that the difference between duplicate sample concentrations should be less than 2 times the MDL (CCME, 2016). RPD is calculated as follows:

$$\text{RPD} = \frac{|X1 - X2|}{(X1 + X2)/2} \times 100$$

RPD calculation results for the duplicate soil and groundwater sample pairs are provided in Table 8.

Five (5) field blanks were collected during groundwater sampling to ensure ambient conditions on the phase two property were not interfering with collection of groundwater VOC samples. The field blanks were collected using laboratory supplied distilled water once a day during the collection of regular samples as outlined below in Table 5-5. The field blanks were poured through open air into laboratory supplied sample containers. Field blanks were then packed into coolers with ice packs and submitted to ALS for VOC analysis under chain of custody.

A trip blank remained with groundwater sample containers throughout the sample collection and transportation process to measure potential interference during each transportation event. Five (5) trip blanks for PHCs and/or VOCs were supplied by ALS and remained within the cooler used to transport and store groundwater samples for each event. The trip blanks were submitted to ALS for analysis of PHC and VOC under chain of custody with all other groundwater samples collected from the phase two property. Trip blanks are summarized in Table 5-5.

Analytical results for the collected field blanks and trip blanks can be found in Table 7.

Table 5-5:Trip Blanks and Field Blanks

QA/QC	Sample ID	Sample Event
Trip Blanks	TB1-1DEC22	December 1, 2022
	TB2-5DEC22	December 5, 2022
	TB3-6DEC-22	December6, 2022
	TB4-07DEC22	December 7, 2022
	TB5-15DEC22	December 15, 2022
Field Blanks	FB1-1DEC-22	December 1, 2022
	FB2-5DEC22	December 5, 2022
	FB3-6DEC22	December 6, 2022
	FB4-07DEC22	December 7, 2022
	FB5-15DEC22	December 15, 2022

5.13.2 LABORATORY ANALYTICAL QUALITY ASSURANCE/QUALITY CONTROL

All samples were analyzed by ALS, a Canadian Association of Laboratory Accreditation (CALA) accredited laboratory that uses provincially recognized methods to conduct laboratory analyses (MECP, 2021b).

As conveyed by the laboratory, method blanks, control standards samples, certified reference material standards, method spikes, replicates, duplicates, and instrument blanks are routinely analyzed as part of their internal QA/QC programs. As an internal quality control measure, the project laboratory reports the results of laboratory prepared QA/QC analyses. If these criteria are not met, the laboratory is asked by OMI to either reanalyze the affected samples or qualify the results. The QA/QC reports supplied by ALS are provided in Appendix C.

6 REVIEW AND EVALUATION

6.1 GEOLOGY

The geologic strata of the phase two property were determined based on the observations made during borehole advancement and soil sampling. Details of the observed stratigraphy are shown on the borehole logs in Appendix B. A summary of geologic units observed, and the elevation range is provided in Table 6-1.

Table 6-1: Geologic Units and Elevations

Strata Description	Aquifer Present	Top Elevation Range (masl)	Bottom Elevation Range (masl)	Estimated Thickness (m)	Locations Observed
Asphalt	No	84.39 – 81.94	84.31 – 81.87	0.08 – 0.07	MW22-01C MW22-13B MW22-14B MW22-16B MW22-17B MW22-18 MW22-20 MW22-21 MW22-28 MW22-29
Imported Topsoil	No	84.12 – 81.93	83.51 – 81.86	0.07 – 0.61	MW22-03C MW22-04C MW22-05C MW22-06B MW22-15B BH22-19 MW22-23 MW22-24 BH22-25 MW22-30 MW22-31 MW22-35 MW22-38
Humic Topsoil	No	84.06 – 82.27	83.45 – 82.12	0.15 – 0.61	MW22-26 MW22-27 MW22-32 MW22-33 MW22-34 MW22-36 MW22-37

Strata Description	Aquifer Present	Top Elevation Range (masl)	Bottom Elevation Range (masl)	Estimated Thickness (m)	Locations Observed
					MW22-39 MW22-40 MW22-41
Sand and Gravel Fill (broken stone at MW22-37)	No	84.31 – 81.87	84.16 – 81.18	0.15 – 0.69	MW22-01C MW22-03C MW22-06B MW22-13B MW22-14B MW22-15B MW22-16B MW22-17B MW22-18 BH22-19 MW22-20 MW22-21 MW22-22 MW22-28 MW22-29 MW22-31 MW22-37 MW22-38
Gravelly clay to clay with some gravel, suspected fill	No	81.97 – 81.62	81.36 – 81.01	0.61	MW22-18 BH22-19 MW22-21
Non-plastic or low-plastic sandy silt/clay to silt/clay with some sand	No	83.21 – 81.18	82.34 – 79.78	0.87 – 1.4	MW22-04C MW22-6B MW22-15B MW22-22 MW22-23 MW22-24 BH22-25 MW22-26 MW22-27 MW22-31 MW22-32 MW22-34 MW22-38
Medium to high plasticity sandy silt/clay to	No	83.48 – 80.80	83.01 – 79.87	0.47 – 0.93	MW22-03C MW22-06B MW22-16B

Strata Description	Aquifer Present	Top Elevation Range (masl)	Bottom Elevation Range (masl)	Estimated Thickness (m)	Locations Observed
silt/clay with some sand/gravel					MW22-17B MW22-18 BH22-19 MW22-20 MW22-21 MW22-23 BH22-25 MW22-27 MW22-33 MW22-28 MW22-39 MW22-40 MW22-41
Bedrock (aquifer) Interbedded dolostone and sandstone	Yes	83.51 – 79.80	N/A bedrock extends beyond base depth of investigation	31.91	All

No significant quantities of water were observed in soil under the phase two property. As such, no monitoring wells were installed within the overburden. The investigation of the bedrock aquifer was founded in information gathered from previous investigations and the APEC being investigated.

During bedrock drilling activities for all APECs, with the exception of APEC B, the presence of the water table was based on moisture returned to surface with rock cuttings. Once the upper most hydraulicly active zone was encountered, drilling ceased, and a monitoring well was installed. The shallow bedrock aquifer under the phase two property was targeted as the most likely area to show evidence of COCs identified during the Phase One ESA (CGI, 2022). Any PCAs on the phase two property would have released COCs to the surface before migrating down to the shallow bedrock aquifer. Similarly, off-site PCAs would require COCs to infiltrate to the shallow bedrock aquifer to migrate.

Known VOC impacts in groundwater related to APEC B extended to 69.2 masl in locations surrounding the 603 March Road building. Since the VOCs identified during previous investigations are denser than water, the investigation proceeded to 64.2 masl within the bedrock aquifer in order to determine the vertical limit of impacts. No further groundwater impacts were returned from any of the monitoring wells within the 68.4 to 64.2 masl monitoring interval. From core collected within the former source zone, the geologic unit was consistently interbedded dolostone and sandstone of the Beekmantown Group.

Investigations outside of the former source area were not continued below 64.2 masl since no evidence of downward contaminant migration or retention was observed. Former source zone coring conducted from ground surface, at approximately 83.0 masl, to 51.6 masl showed interbedded dolostone and sandstone of the Beekmantown Group to the full depth of the investigation. Groundwater analytical results showed no impacts at the bottom of the investigation; therefore, deeper investigations were not completed. Further commentary on groundwater quality results can be found in Section 6.5.

6.2 GROUNDWATER: ELEVATIONS AND FLOW DIRECTION

Water levels were measured prior to well development on November 16, 2022, and again on December 5, 2022. Pre-development water levels collected on November 16, 2022, were not considered for the development of groundwater elevations and flow direction as they are not an accurate representation of groundwater conditions on the phase two property. Groundwater elevations were separated into six (6) elevation ranges based on the monitoring wells installed during the investigation. Table 6-2 below shows the monitoring interval range and corresponding groundwater elevation range.

Table 6-2: Groundwater Monitoring Intervals and Elevation Ranges

Elevation Range (masl)	Boreholes Included in Range	Groundwater Elevation Range (masl)
79.43 – 71.45	BH4-10, MW21-01A, MW21-02A, MW21-03A, MW21-04A, MW21-05A, MW21-06A, MW21-07, MW21-08, MW21-13A, MW21-14A, MW21-15A, MW21-16A, MW21-17A, MW22-18, MW22-20, MW22-21, MW22-22, MW22-23, MW22-24, MW22-26, MW22-27, MW22-28, MW22-29, MW22-30, MW22-31, MW22-32, MW22-33, MW22-34, MW22-35, MW22-36, MW22-37, MW22-38, MW22-39-1, MW22-40-1, MW22-41-1	79.29 – 76.38
74.57 – 69.29	MW21-01B, MW21-02B, MW21-03B, MW21-04B, MW21-05B, MW22-06B, MW22-13B, MW22-14B, MW22-15B, MW22-16B, MW22-17B, MW22-40-2	77.17 – 76.02
68.39 – 64.16	MW22-01C, MW22-03C, MW22-04C, MW22-05C, MW22-39-3, MW22-40-3, MW22-41-2	77.09 – 76.31
64.38 – 59.23	MW22-39-4, MW22-40-4, MW22-41-3	78.00 – 77.09
58.62 – 56.36	MW22-39-6, MW22-40-5, MW22-41-5	78.11 – 77.86
54.84 – 51.55	MW22-39-7, MW22-40-7, MW22-41-7	79.18 – 78.10

Monitoring well locations and screen intervals were based on the APECs being addressed and to ensure lateral and vertical coverage of the phase two property. See Table 4-1 in Section 4.1 for

a list of monitoring well locations and associated APECs. Screen intervals chosen to intersect the top of the water table, between 79.43 and 71.45 masl, had water levels above the top of the screened interval in select wells. This is due to groundwater conditions in a fractured bedrock environment, which can lead to confinement of an aquifer based on the connectivity of the fracture network laterally and vertically.

Using the methods and equipment specified in Section *5.7* groundwater measurements were recorded and no free product was detected during groundwater elevation collection. Water levels were subtracted from the surveyed elevation of the top of casing to obtain the groundwater elevations indicated in Table 2.

Groundwater elevations from BH4-10 and MW22-30 appeared to be anomalous and were not included in the interpretation of flow direction. Generally, shallow groundwater elevations were observed to be highest on the southern portion of the phase two property as well as around the southern end of the 603 March Road building. Flow was interpreted to be in a north to northeastern direction across much of the phase two property with flow in the northwestern portion of the phase two property moving toward the northwest. Assuming minimal or coarse textured material atop bedrock, infiltration within utility corridors, drainage/infiltration ditches or foundation backfill would cause groundwater mounding and skew groundwater elevations as shown in Figure 3A.

Similar to shallow conditions, groundwater flows in elevation ranges 74.57 – 69.29 masl, 68.39 – 64.16 masl, and 64.38 – 59.23 masl were observed to be towards the northeast or east-northeast, as shown in Figures 3B, 3C and 3D, respectively. Groundwater flow for monitoring wells installed to capture deep groundwater conditions in elevation ranges 58.62 – 56.36 masl and 54.84 – 51.55 masl were observed to flow towards the southeast as illustrated in Figures 3E and 3F, respectively.

Groundwater elevations are expected to experience seasonal variation consistent with the surrounding area. However, thin overburden and the presence of coarse textured fill, typical of utility corridors, drainage/infiltration ditches or foundation backfill, sitting directly on bedrock, create preferential pathways for infiltration into the subsurface will have an exaggerated effect on the shallow flow regime. These preferential infiltration areas will cause mounding of groundwater, as interpreted from the December 5, 2022, elevations.

6.3 GROUNDWATER: HYDRAULIC GRADIENTS

Horizontal gradients at the phase two property were calculated for each of the monitoring intervals noted in Table 6-2 above. Table 6-3 below shows the horizontal gradients calculated for each interval.

Table 6-3: Horizontal Gradients

Monitoring Interval (masl)	Maximum Gradient	Minimum Gradient	Average Gradient
79.43 – 71.45	6.1×10^{-2}	6.3×10^{-5}	7.5×10^{-3}
74.57 – 69.29	1.1×10^{-2}	8.0×10^{-4}	5.9×10^{-3}
68.39 – 64.16	2.9×10^{-2}	2.5×10^{-4}	8.3×10^{-3}
64.38 – 59.23	2.9×10^{-2}	6.2×10^{-3}	1.8×10^{-2}
58.62 – 56.36	6.0×10^{-3}	3.6×10^{-3}	4.8×10^{-3}
54.84 – 51.55	3.3×10^{-2}	5.7×10^{-4}	2.0×10^{-2}

Vertical hydraulic gradients were calculated for the well clusters on 603 March Road and the multilevel wells in the former source zone. Vertical gradient calculations were completed between an interval and the interval below it. Table 6-4 shows the calculated vertical gradient maximums, minimums, average, and direction of flow. The bottom interval had none below it and was not calculated.

Table 6-4: Vertical Gradients

Monitoring Interval (masl)	Maximum Gradient	Minimum Gradient	Average Gradient	Direction of Flow
79.43 – 71.45	0.363	-0.005	0.239	Down
74.57 – 69.29	1.154	-0.075	0.305	Down
68.39 – 64.16	-0.356	0.000	-0.213	Up
64.38 – 59.23	-0.181	0.008	-0.060	Up
58.62 – 56.36	-0.233	-0.042	-0.112	Up
54.84 – 51.55	N/C	N/C	N/C	N/C

Vertical gradients show the upper portion of the bedrock aquifer act together with a similar average gradient across the phase two property. Average gradients show a hydraulic confinement between the intervals 74.57 – 69.29 and 68.39 – 64.16 with an overall change in the system to an upward vertical flow. The hydraulic confinement and upward flow would provide a barrier to contaminant transport and migration to deeper strata and fracture network.

In addition, hydraulic conductivity tests were conducted at locations MW21-01A/B/C, MW21-03A/B/C, MW21-04A/B/C, MW22-21, MW22-32, and MW22-36. The upper three (3) monitoring intervals were tested since the multilevel monitoring wells could not be tested for hydraulic response. For each of the intervals the overall average hydraulic conductivity was calculated. Where multiple tests were completed per monitoring well, the average of the tests was calculated to provide the maximum and minimum values, as shown in Table 6-5 below. The overall average for each interval is also shown in Table 6-5 below. Hydraulic test analysis can be found in Appendix B.

Table 6-5: Hydraulic Conductivity

Interval (masl)	Maximum (m/s)	Minimum (m/s)	Average (m/s)
79.43 – 71.45	7.85×10^{-5}	1.20×10^{-5}	3.32×10^{-5}
74.57 – 69.29	4.92×10^{-5}	8.85×10^{-7}	2.97×10^{-5}
68.39 – 64.16	6.01×10^{-5}	3.54×10^{-7}	2.79×10^{-5}

6.4 FINE-MEDIUM SOIL TEXTURE

This section intentionally left blank. As discussed in section 2.4, Fine-medium soil texture site condition standards not used.

6.5 SOIL: FIELD SCREENING

Soil field screening results showed little to no presence of volatile organic vapours within soil samples collected during the investigation with the exception to OVC reading of 2,000 parts per million (ppm) at MW22-40 from 0.6 to 0.9 mbgs. All other OVC measurements were below 4 ppm with some locations having no detectable organic vapours. Given the overall low level of OVC readings and no odours or staining indicative of COCs were noted during advancement of any boreholes or during soil sample collection, no recent significant releases of volatile or semi-volatile materials were suspected to have occurred at the test locations. Headspace OVC readings are shown on borehole logs in Appendix B. Headspace OVC readings in soil samples selected for laboratory analysis are shown on Table 5-2 in Section 5.4.

6.6 SOIL QUALITY

Soil sample information is summarized in Table 5-2, with analytical results for all parameters summarized in Table 3 and shown in Figures 4A through 4E. Soil quality maximums are summarized in Table 5. Laboratory certificates of analysis are provided in Appendix C.

Analytical results for soil samples collected at the phase two property returned concentrations of all parameters below the MDL and/or relevant Table 7 SCS, with the exception of the sodium adsorption ratio (SAR) and petroleum hydrocarbon compound heavier than fraction 4 (PHC F4G) in the sample collected at MW22-13B from 0.0 to 0.6 mbgs. SAR concentrations were returned to be 8.15 compared to a Table 7 SCS value of 5 (SAR is a unitless measurement). PHC F4G concentrations were returned to be 7130 mg/kg compared to Table 7 SCS of 5600 mg/kg.

PHC F4G that exceeded applicable SCS in surface samples is attributed to inclusion of surficial asphalt material in the sample from MW22-13B. This location is within the paved area of 603 March Road adjacent to a pedestrian walkway. Similarly, elevated SAR is attributed to the

application of salt for the purposes of de-icing roadways and walkways. Neither parameter is believed to be caused by the APECs being investigated.

PHC F4G and SAR were not shown to migrate to the groundwater table. Concentrations of both parameters were low enough that they are not believed to be a concern for leaching to the water table. No non-aqueous phase liquids are expected based on the soil concentrations/ Table 7 SCS exceedances.

6.7 GROUNDWATER QUALITY

Groundwater samples are summarized in Table 5-3 above while analytical results for all parameters are summarized in Table 4 and shown in Figures 5A through 5I. Groundwater maximum concentrations are summarized in Table 6. Laboratory certificates of analysis are provided in Appendix C.

No PHC, PAH, and/or dissolved metals parameters at concentrations above Table 7 SCS were identified in the groundwater samples analysed. All dissolved metals analyzed as part of the Phase Two ESA were field filtered by OMI staff prior to preservation using single-use, 45-micron in-line filters.

Concentrations of several chlorinated solvents (part of the VOC analyte package) were identified in groundwater exceeding Table 7 SCS throughout the phase two property including PCE in MW22-39-1 and MW22-41-1 along with TCE in twenty (20) monitoring wells, as summarized in Table 6.

PCE and TCE exceedances were detected in the top two (2) monitoring intervals, 79.43 – 71.45 masl and 74.57 – 69.29 masl, as well as in the 58.62 – 56.36 masl monitoring interval in the former source zone.

TCE concentrations above Table 7 SCS within the shallow monitoring intervals only exceeded the applicable SCS of 0.5 µg/L by more than three (3) times. Similarly, TCE concentrations above applicable SCS in the 58.62 – 56.36 masl monitoring interval were less than two (2) times applicable SCS.

Concentrations of PCE below applicable SCS were not detected in any other monitoring well on the phase two property. Based on analytical results there is no evidence that soils are acting as a source of continued contaminant flux into groundwater. There was no evidence of free phase product recovered from any of the monitoring wells. It appears that two (2) sources of TCE are present on the phase two property, from the former electronic component manufacturer at 603 March Road and from anaerobic reduction of PCE released by the former dry cleaning facility at 591 March Road.

Low concentrations of PCE and TCE observed in groundwater indicate that past amendment applications were successful in reducing the overall contaminant mass. Since previous amendment application and removal of the source, the contaminant plumes have intermixed and show temporal variability. Remaining groundwater impacts are the product of back diffusion from the rock matrix or migration from off-site sources.

Concentrations of chloroform exceeding Table 7 SCS were returned in the samples from MW22-33 and MW22-36. As indicated on Table 4-4 in Section 4.4, when the samples were collected on December 1, 2022, both MW22-33 and MW22-36 returned concentrations of chloroform exceeding Table 7 SCS. In addition to these exceedances, chloroform concentrations below Table 7 SCS were also detected in MW21-04B, MW22-27, MW22-32, MW22-39-3, MW22-40-2, MW22-40-3, and MW22-40-6.

Chloroform has been identified as a common disinfection by-product of water by chlorination (Rook, 1974). Therefore, when analytical results were received, MW22-33 and MW22-36 were re-developed to remove any residual drilling fluid prior to collection of a second sample set on December 15, 2022. As shown in Table 4, chloroform concentrations in December 15 samples decreased at both locations. OMI noted the heavy usage of a municipally authorized commercial filling station (hydrant) was in close proximity to MW22-27, MW22-33, and MW22-36, see Figure 1C. Since locations MW22-32, MW22-33, MW22-36, MW22-29, and MW22-40 were advanced by rock coring using treated municipal water and, given MW22-27 was not cored using municipal water, is upgradient of MW22-33, and cross gradient of MW22-36, the most likely source of chloroform in groundwater is spillage or seepage from the hydrant during water truck filling activities. Paragraph 2 of Section 49.1 under O. Reg. 153/04 indicates that SCS are met if a Qualified Person (QP) has determined there has been a discharge of drinking water. Based on the evidence collected during the investigation, groundwater samples with chloroform exceedances are interpreted to meet Table 7 SCS.

6.8 SEDIMENT QUALITY

This section intentionally left blank. No sediment sampling as part of Phase Two ESA.

6.9 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS

6.9.1 FIELD QA/QC

Analytical results for all groundwater field and trip blanks can be found in Table 7. Calculated RPD values for the blind duplicate soil and groundwater sample pairs are provided in Table 8.

Groundwater field and trip blanks were used to determine if groundwater samples collected for VOC analysis were being affected during sample collection and transportation to the laboratory. Both field and trip blanks returned no VOC or PHC concentrations above applicable SCS.

Analytical results for VOC parameters in soil duplicate pairs did not return any concentrations above method detection limits; therefore, RPDs could not be calculated. Only select physical, PHC, PAH, soluble ions, and metal parameters in soil duplicate pairs returned concentrations above method detection limits. All RPDs calculated met the recommended 60% guideline or the relaxed criteria for concentrations within five times the MDL with the exception of blind duplicate pair 22-23 1-2/DUP4 for moisture. This RPD exceedance is interpreted to be due sample heterogeneity and not expected to affect the overall findings of the report.

For groundwater blind duplicate pairs, all of the parameters with detectable concentrations had RPD results meeting the recommended 40% guideline or criteria for concentrations within five times the MDL.

Throughout the field and analytical program of the Phase Two ESA all samples were handled in accordance with the Analytical protocol (MECP, 2021b). No variation from the protocol occurred with respect to hold tiles, preservation methods, storage requirements, or container type.

6.9.2 LABORATORY QA/QC

ALS laboratory QA/QC reports are included in the laboratory certificates of analysis provided in Appendix C. ALS reported eight (8) different qualifiers on multiple samples as outlined below along with an explanation of how the qualifiers effect interpretation of the analytical data:

DL – Reported lowest detection limit is higher than requested analyte lowest detection limit.

- Hexavalent Chromium (Soil): 22-18 0-1, 22-20 0-1, 22-22 0-1.25, 22-23 0-1, 22-24 0-1.25, 22-26 0-1, and 22-27 0-1 [ALS Work Order: WT2219243].
- All sample results were below the detection limit of 0.50 mg/kg, which is still below the Table 7 SCS of 8 mg/kg. This qualifier does not have an impact on the reliability of the data or conclusions predicated on the data.

DLM – Detection limit adjusted due to sample matrix effects (e.g., chemical interference, colour, turbidity).

- Copper (Soil): 22-28 0.25-1.5, 22-29 0.25-1.5, 22-29 2.5-3.75, 22-30 0-1.75, DUP1, 22-31 0-1, 22-14B 0-2, 22-14B 2.5-4, DUP2, 22-15B 0-1, 22-16B 0-1, 22-17B 0-0.75, 22-03C 0-1 [ALS Work Order: WT2219916].

- PAH (Soil): 22-14B 0-2, DUP2, 22-16B 0-1, 22-17B 0-0.75, 22-03C 0-1 [ALS Work Order: WT2219916].
- F2 (Soil) DUP6 and Chrysene (Soil) 22-13B 0-2 [ALS Work Order: WT2221612].
- All sample results were below the Table 7 SCS. This qualifier does not have an impact on the reliability of the data or conclusions predicated on the data.

AI – Analytical interferences may be present. Result may be biased high.

- PAH (Soil): 22-14B 0-2, DUP2, 22-17B 0-0.75 [ALS Work Order: WT2219916].
- No PAHs exceedances were returned; thus this qualifier is not expected to have an affect on the overall results of the data.

RRR – Reporting limit raised due to suspected laboratory contamination.

- Dichloromethane (Soil): 22-23 1-2 [ALS Work Order: WT2221344].
- Dichloromethane (Water): TB5-15DEC22 [ALS Work Order: WT2225424]; TB3-6DEC22 [ALS Work Order: WT2224485].
- The concentrations were below the Table 7 SCS; therefore, this qualifier does not have an impact on the reliability of the data or conclusions predicated on the data.

DLQ – Detection limit raised due to co-eluting interference.

- BTEX (Soil): 22-38 0-0.75, 22-38 0.75-2 [ALS Work Order: WT2221344].
- All BTEX results were below the raised detection limit, which is still below the Table 7 SCS and is therefore not considered to impact report findings.

RRV – Reported result verified by repeat analysis.

- F1 (Soil): DUP6 [ALS Work Order: WT2221612].
- Dichloromethane (Water): TB1-1DEC22 [ALS Work Order: WT2224015], TB2-5DEC22 [ALS Work Order: WT2224326]; TB4-07DEC22 [ALS Work Order: WT2224609].
- Analytical results were below Table 7 SCS. Therefore, this qualifier is not considered to impact report findings.

DLHC – Detection Limit Raised. Dilution required dur to high concentration of test analyte.

- Dissolved metals (Water): 22-20-01DEC22, 22-22-01DEC22 [ALS Work Order: WT2224015]; MW21-14A-6DEC22, MW22-28-6DEC22, MW22-29-6DEC22 [ALS Work Order: WT2224485].

- Dissolved sodium (Water): 22-26-01DEC22, 22-27-01DEC22, DUP2-01DEC22 [ALS Work Order: WT2224015]; MW22-37-5DEC22 [WT2224326]
- All sample results were below the Table 7 SCS. This qualifier does not have an impact on the reliability of the data or conclusions predicated on the data.

OWP – Organic was sample contained visible sediment. Measured concentrations of organic substances in water can be biased high due to presence of sediment.

- VOCs (Water): 22-23-01DEC22 [ALS Work Order: WT2224015]; MW22-31-6DEC22 [ALS Work Order: WT2224485].
- Sediment within the sample matrix of samples that require VOC analysis will bias results high. In the case of the above sample, all VOC parameter concentrations were below method detection limits. As such, this qualifier does not have an impact on the reliability of the data or conclusions predicated on the data.

The above qualifiers are related to laboratory analysis methods and are not reflective of sample quality.

ALS accepted the results for all of their internal quality control results despite several qualifiers which were the result of one or more of the following for various parameters:

- Laboratory control sample recovery was outside of data quality objectives
- Analysis holding time compliance breaches
- Frequency of quality control samples
- Data quality objective was marginally exceeded
- Sample heterogeneity
- Method blank exceeded data quality objectives

OMI reviewed the qualifiers on the internal QC report and did not conclude that they impact the overall data quality or interpretations of the phase two property condition predicated on the data.

6.10 PHASE TWO CONCEPTUAL SITE MODEL

The Phase Two ESA Conceptual Site Model (CSM) described below is based on data from previous investigations and the results of this Phase Two ESA. The CSM consists of cross sections and figures that show the condition of the phase two property at the time of writing. The narrative below is intended to support the cross sections and figures. The figures that comprise the Phase Two CSM are as follows:

Figure 8C: Cross Section C-C' Interpreted Geological and Hydrogeological Conditions with PHC Analytical Results
Figure 8D: Cross Section C-C' Interpreted Geological and Hydrogeological Conditions with PAH Analytical Results
Figure 9A: Cross Section D-D' Interpreted Geological and Hydrogeological Conditions with Metals Analytical Results
Figure 9B: Cross Section D-D' Interpreted Geological and Hydrogeological Conditions with VOC Analytical Results
Figure 9C: Cross Section D-D' Interpreted Geological and Hydrogeological Conditions with PHC Analytical Results
Figure 9D: Cross Section D-D' Interpreted Geological and Hydrogeological Conditions with PAH Analytical Results
Figure 10A: Cross Section E-E' Interpreted Geological and Hydrogeological Conditions with Metals Analytical Results
Figure 10B: Cross Section E-E' Interpreted Geological and Hydrogeological Conditions with VOC Analytical Results
Figure 10C: Cross Section E-E' Interpreted Geological and Hydrogeological Conditions with PHC Analytical Results
Figure 10D: Cross Section E-E' Interpreted Geological and Hydrogeological Conditions with PAH Analytical Results
Figure 11: Exposure Pathways for Volatile Organic Compounds

6.10.1 DESCRIPTION AND ASSESMENT OF PCAS AND APECS

Areas of Potentially Contaminating Activities and Areas of Potential Environmental Concern

The following table summarizes the PCAs resulting in APECs identified during the Phase One ESA. Figure 1B shows the locations and extents of APECs.

Table 6-6: Table of APECs

APEC	Location of APEC	PCA No.	PCA on/off phase two property	COCs	Media Potentially Impacted
APEC A Former electronic component manufacturing	Interior and immediately surrounding area of the 555 March Road building on the phone one property.	19	On	VOC	Soil and Groundwater
APEC B Former dry cleaning facility	Interior and immediately surrounding area of the 591 March Road building; area of known contamination north of	37	On	VOC	Soil and Groundwater

APEC	Location of APEC	PCA No.	PCA on/off phase two property	COCs	Media Potentially Impacted
	building on the phase one property				
APEC C Former electronic component manufacturing	Interior and surrounding area of 603 March Road building; area of known groundwater contamination on the phase one property.	8 19	On	VOC	Soil and Groundwater
APEC D Storage of hydraulic oil	Interior and immediately surrounding area adjacent to elevator at 603 March Road on the phase one property.	28	On	PHC BTEX	Soil and Groundwater
APEC E High voltage electrical transformers	Northern phase one property boundary; 591 March Road parking area; 555 March Road building	55	On	PHC BTEX PCB	Soil and Groundwater
APEC F Potential bulk chemical and ink storage; electronic component manufacturing; metal fabrication	Southern and southwestern phase one property boundaries	8 19 31 34	Off	PHC VOC Metals	Soil and Groundwater
APEC G Imported fill used as base for roads and parking areas; broken rock fill adjacent to Hines Road	Northern and southeastern paved areas; West central area of the phase one property	30	On	PHC BTEX PAH Metals	Soil

APEC	Location of APEC	PCA No.	PCA on/off phase two property	COCs	Media Potentially Impacted
APEC H Former March Landfill risk management area	All exterior areas of the phase one property.	55	Off	VOC	Groundwater

Subsurface Structures and Utilities

All buildings are slab on grade construction due to the shallow depth to bedrock. Subsurface utility corridors are present at various locations throughout the phase two property; however, these utilities do not extend into bedrock far enough to encounter the groundwater table. Figure 1C displays the approximate locations of sewer and water utilities. Since native soils on the phase two property generally consist of silt and clay based soils, the utility corridors would act as preferential infiltration pathways to the bedrock and bedrock aquifer. The shallow groundwater flow regime may be affected by preferential infiltration. Utility corridors are not likely to act as distribution mechanisms because no permanent or significant groundwater table was found in the overburden.

6.10.2 SITE PHYSICAL SETTING

Stratigraphy

Geologic units for each borehole location can be found on completed borehole logs in Appendix B and on cross section in Figures 6A to 6E, 7A to 7D, 8A to 8D, 9A to 9D, and 10A to 10D.

Surface soil across the phase two property varied depending upon location. Hard covered areas such as drive lanes and parking lots were asphalt covered immediately followed by engineered sand and gravel fill. Landscaped areas were typically covered with imported topsoil followed by other imported fill containing gravel. Vegetated areas, which had not been developed previously, had a layer of organic rich humic topsoil. These various surficial coverings were underlain by sandy silt or clay with plasticity ranging from low to high and depth extending to the top of rock.

Bedrock beneath the phase two property consisted of interbedded dolostone and sandstone of the Beekmantown Group of the Lower Ordovician.

Hydrogeological Characteristics

Soils on the phase two property did not contain any significant quantities of water to indicate the presence of a water table. The groundwater table was found in the bedrock under the phase two

property. Within the bedrock aquifer, six (6) monitoring intervals were installed as indicated by Table 6-7 below. Groundwater elevations can be found in Table 2.

Table 6-7: Groundwater Monitoring Intervals

Elevation Range (masl)	Boreholes Included in Range	Groundwater Elevation Range (masl)
79.43 – 71.45	BH4-10, MW21-01A, MW21-02A, MW21-03A, MW21-04A, MW21-05A, MW21-06A, MW21-07, MW21-08, MW21-13A, MW21-14A, MW21-15A, MW21-16A, MW21-17A, MW22-18, MW22-20, MW22-21, MW22-22, MW22-23, MW22-24, MW22-26, MW22-27, MW22-28, MW22-29, MW22-30, MW22-31, MW22-32, MW22-33, MW22-34, MW22-35, MW22-36, MW22-37, MW22-38, MW22-39-1, MW22-40-1, MW22-41-1	79.29 – 76.38
74.57 – 69.29	MW21-01B, MW21-02B, MW21-03B, MW21-04B, MW21-05B, MW22-06B, MW22-13B, MW22-14B, MW22-15B, MW22-16B, MW22-17B, MW22-40-2	77.17 – 76.02
68.39 – 64.16	MW22-01C, MW22-03C, MW22-04C, MW22-05C, MW22-39-3, MW22-40-3, MW22-41-2	77.09 – 76.31
64.38 – 59.23	MW22-39-4, MW22-40-4, MW22-41-3	78.00 – 77.09
58.62 – 56.36	MW22-39-6, MW22-40-5, MW22-41-5	78.11 – 77.86
54.84 – 51.55	MW22-39-7, MW22-40-7, MW22-41-7	79.18 – 78.10

Shallow groundwater elevations were observed to be highest on the southern portion of the phase two property as well as around the southern end of the 603 March Road building. Flow was interpreted to be in a north to northeastern direction across much of the phase two property. Groundwater flows in elevation ranges 74.57 – 69.29 masl, 68.39 – 64.16 masl, and 64.38 – 59.23 masl were observed to be towards the northeast or east-northeast, as shown in Figures 3B, 3C and 3D, respectively. Groundwater flow interpreted from monitoring wells installed to capture deep groundwater conditions in elevation ranges 58.62 – 56.36 masl and 54.84 – 51.55 masl were observed to flow towards the southeast as illustrated in Figures 3E and 3F, respectively.

Vertical gradients show the upper monitoring intervals 79.43 – 71.45 masl and 74.57 – 69.29 masl act together with average vertical gradients 0.239 and 0.305 downward. Average gradients show a hydraulic confinement between the intervals 74.57 – 69.29 masl and 68.39 – 64.16 masl with an overall change in the system to an upward vertical flow. Monitoring intervals 68.39 – 64.16 masl, 64.38 – 59.23 masl, and 58.62 – 56.36 masl had vertical hydraulic gradients of -0.213, -0.060, and -0.112, respectively, where the negative values indicate an upward flow direction.

Hydraulic conductivity testing was completed for monitoring intervals 79.43 – 71.45 masl, 74.57 – 69.29 masl, and 68.39 – 64.16 masl. The average hydraulic conductivity of each interval was 3.32

x 10^{-5} m/s, 2.97 x 10^{-5} m/s, and 2.79 x 10^{-5} m/s, respectively. These hydraulic conductivity values are consistent with fractured bedrock environments.

Depth to Bedrock

The thickest overburden was observed in the east-central area of the phase two property at BH22-25 with an overburden thickness of 2.7 m. The thinnest overburden was measured at MW21-05A at only 0.15 m. The overburden thickness of the majority of the phase two property was between 0.6 and 1.2 m.

Given the above thicknesses, depth to bedrock is expressed as elevations to provide context based on surface elevation. Elevations to bedrock varied between 83.52 masl and 79.83 masl across the phase two property. Bedrock was highest in the northwestern corner at MW22-30 and lowest at MW22-24. The bedrock elevation of majority of the phase two property fell between 82 and 81 masl.

Depth to Water Table

All measured water elevations can be found in Table 2. The water table elevation ranged between 78.77 masl and 76.38 masl. The deepest water table elevation was measured at MW22-22 in the southeastern corner of the phase two property while the shallowest water table elevation was measured in Port 1 of MW22-40 in the northeastern property boundary.

Water elevations from monitoring intervals below the upper most were not considered as part of this section as a hydraulic barrier was observed in the multilevel wells and an upward vertical gradient was measured in the deeper portions of well clusters and multilevel wells.

Section 35 of the Regulation

The phase two property and all properties within 250 m are supplied with municipal drinking water. The City of Ottawa municipal clerk was provided written notice of the intention to apply non-potable drinking water site condition standards to the phase two property. At the time of writing, no response has been received to the written notice.

Section 41 of the Regulation

Section 41 of O. Reg. 153/04 does not apply to the phase two property.

Section 43.1 of the Regulation

More than one third (1/3) of the phase two property has a soil thickness of less than 2 m. As such, the phase two property has had shallow soil site condition standards applied.

Areas On, In, or Under the Phase Two Property Where Excess Soil is Finally Placed

No excess soil was placed on the phase two property. Broken rock from infrastructure projects was placed on the phase two property along the south-central property boundary, adjacent to the Hines Road turn around. MW22-37 was placed to assess potential impacts from the broken rock.

Existing Buildings and Structures

There are three (3) existing buildings on the phase two property. One (1) fitness club on the southeastern portion of the 555 March Road property. One (1) commercial plaza with various retail, commercial, restaurant, and animal care tenants on the 591 March Road Property. One (1) office building with technology research and development as well as recruitment tenants on the 603 March Road property. All buildings are slab on grade construction with footings extending to bedrock.

Subsurface water, sewer, and power corridors are located across the phase two property. No records were available for review to determine if bedrock had been excavated for the utilities. Four (4) pad mounted transformers were located across the site, one (1) each supplying 555 and 591 March Road and two (2) supplying 603 March Road.

Proposed Buildings

Existing structures will be demolished in phases as development and construction progresses. All new structures are proposed to have sub-surface parking where bedrock surfaces allow. Initial site clearing and preparation are planned for the second quarter of 2023. The proposed redevelopment includes eleven (11) new buildings between six (6) and thirty (30) storeys with below grade levels extending to bedrock, up to 3 m below grade.

6.10.3 ENVIRONMENTAL CONDITION

Findings of Assessment

To address the PCAs and APECs identified, soil and groundwater sampling and analysis for COCs was completed as part of the Phase Two ESA. MECP Table 7 SCS were used to evaluate analytical results. A summary of findings is provided in Table 6-8 below.

Table 6-8: Summary of Exceedances from PCAs and APECs Identified by Phase One ESA

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
APEC A	MW22-18	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW22-21	Soil: BTEX, PHC	None

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
Former electronic component manufacturing		Groundwater: VOC	None
	MW22-23	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW22-24	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
APEC B Former dry cleaning facility	BH10-4	Groundwater: VOC	None
	MW21-03A	Groundwater: VOC	None
	MW21-03B	Groundwater: VOC	VOC
	MW22-03C	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW21-04A	Groundwater: VOC	None
	MW21-04B	Groundwater: VOC	None
	MW22-04C	Soil: VOC	None
		Groundwater: VOC	None
	MW22-34	Groundwater: VOC	VOC
	MW22-39	Soil: VOC	None
		Groundwater: VOC	VOC
	MW22-40	Soil: VOC	None
		Groundwater: VOC	VOC
	MW22-41	Soil: VOC	None
		Groundwater: VOC	VOC
APEC C Former electronic component manufacturing	MW21-01A	Groundwater: VOC	VOC
	MW21-01B	Groundwater: VOC	VOC
	MW22-01C	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW21-02A	Groundwater: VOC	VOC
	MW21-02B	Groundwater: VOC	VOC
	MW21-03A	Groundwater: VOC	None
	MW21-03B	Groundwater: VOC	VOC
	MW22-03C	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW21-04A	Groundwater: VOC	None
	MW21-04B	Groundwater: VOC	None
	MW22-04C	Soil: VOC	None
		Groundwater: VOC	None
	MW21-05A	Groundwater: VOC	None
	MW21-05B	Groundwater: VOC	None
	MW22-05C	Soil: VOC	None
		Groundwater: VOC	None
	MW21-06A	Groundwater: VOC, PHC	None
	MW22-06B	Soil: VOC, PHC, PCB	None

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
		Groundwater: VOC	None
	MW21-07	Groundwater: VOC	VOC
	MW21-08	Groundwater: VOC	VOC
	MW21-13A	Groundwater: VOC, PHC	VOC
	MW22-13B	Soil: pH, Metals, SAR, VOC, PHC, PAH	PHC, SAR
		Groundwater: VOC	None
	MW21-14A	Groundwater: Metals, VOC, PHC, PAH	VOC
	MW22-14B	Soil: Metals, BTEX, PHC, PAH	None
		Groundwater: VOC	None
	MW21-15A	Groundwater: VOC	VOC
	MW22-15B	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW21-16A	Groundwater: VOC	VOC
	MW22-16B	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW21-17A	Groundwater: VOC	VOC
	MW22-17B	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW22-31	Soil: pH, Grain Size, Metals, BTEX, PHC, PAH	None
		Groundwater: VOC	VOC
	MW22-35	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	MW22-38	Soil: BTEX, PHC, PCB	None
		Groundwater: VOC, PHC	None
APEC D Storage of hydraulic oil	MW21-13A	Groundwater: VOC, PHC	VOC
	MW22-13B	Soil: pH, Metals, SAR, VOC, PHC, PAH	PHC, SAR
		Groundwater: VOC	None
APEC E High voltage electrical transformers	MW21-06A	Groundwater: VOC, PHC	None
	MW22-06B	Soil: VOC, PHC, PCB	None
		Groundwater: VOC	None
	MW22-18	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None
	BH22-19	Soil: BTEX, PHC, PCB	None
	MW22-21	Soil: BTEX, PHC	None
		Groundwater: VOC	None
	MW22-24	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: VOC	None

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
	BH22-25	Soil: BTEX, PHC, PCB	None
	MW22-38	Soil: BTEX, PHC, PCB	None
		Groundwater: VOC, PHC	None
APEC F Potential bulk chemical and ink storage; electronic component manufacturing; metal fabrication	MW22-20	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None
	MW22-22	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None
	MW22-26	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None
	MW22-27	Soil: Metals, VOC, PHC	None
		Groundwater: Metals, VOC, PHC, PAH	None
	MW22-36	Soil: Metals, VOC, PHC	None
		Groundwater: Metals, VOC, PHC, PAH	None*
APEC G Imported fill used as base for roads and parking areas; broken rock fill adjacent to Hines Road	MW22-01C	Soil: Metals, VOC, PHC, PAH	None
	MW22-03C	Soil: Metals, VOC, PHC, PAH	None
	MW22-13B	Soil: pH, Metals, SAR, VOC, PHC, PAH	PHC, SAR
	MW21-14A	Groundwater: Metals, VOC, PHC, PAH	VOC
	MW22-14B	Soil: Metals, VOC, PHC, PAH	None
	MW22-15B	Soil: Metals, VOC, PHC, PAH	None
	MW22-16B	Soil: Metals, VOC, PHC, PAH	None
	MW22-17B	Soil: Metals, VOC, PHC, PAH	None
	MW22-18	Soil: Metals, VOC, PHC, PAH	None
	MW22-20	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None
	MW22-22	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None
	MW22-28	Soil: Metals, BTEX, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	VOC
	MW22-29	Soil: Metals, BTEX, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
	MW22-30	Soil: Metals, BTEX, PHC, PAH	None
	MW22-37	Soil: Metals, VOC, PHC, PAH	None
		Groundwater: Metals, VOC, PHC, PAH	None

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
APEC H Former March Landfill risk management area	MW21-01A	Groundwater: VOC	VOC
	MW21-01B	Groundwater: VOC	VOC
	MW22-01C	Groundwater: VOC	None
	MW21-02A	Groundwater: VOC	VOC
	MW21-02B	Groundwater: VOC	VOC
	MW21-03A	Groundwater: VOC	None
	MW21-03B	Groundwater: VOC	VOC
	MW22-03C	Groundwater: VOC	None
	MW21-04A	Groundwater: VOC	None
	MW21-04B	Groundwater: VOC	None
	MW22-04C	Groundwater: VOC	None
	MW21-05A	Groundwater: VOC	None
	MW22-05B	Groundwater: VOC	None
	MW22-05C	Groundwater: VOC	None
	MW21-06A	Groundwater: VOC, PHC	None
	MW22-06B	Groundwater: VOC	None
	MW21-07	Groundwater: VOC	VOC
	MW21-08	Groundwater: VOC	VOC
	MW21-13A	Groundwater: VOC, PHC	VOC
	MW22-13B	Groundwater: VOC	None
	MW21-14A	Groundwater: Metals, VOC, PHC, PAH	VOC
	MW22-14B	Groundwater: VOC	None
	MW21-15A	Groundwater: VOC	VOC
	MW22-15B	Groundwater: VOC	None
	MW21-16A	Groundwater: VOC	VOC
	MW22-16B	Groundwater: VOC	None
	MW21-17A	Groundwater: VOC	VOC
	MW22-17B	Groundwater: VOC	None
	MW22-18	Groundwater: VOC	None
	MW22-20	Groundwater: Metals, VOC, PHC, PAH	None
	MW22-21	Groundwater: VOC	None
	MW22-22	Groundwater: Metals, VOC, PHC, PAH	None
	MW22-23	Groundwater: VOC	None
	MW22-24	Groundwater: VOC	None
	MW22-26	Groundwater: Metals, VOC, PHC, PAH	None
	MW22-27	Groundwater: Metals, VOC, PHC, PAH	None

APEC	Location ID	COCs Analyzed	Results Exceeding Applied SCS
	MW22-28	Groundwater: Metals, VOC, PHC, PAH	VOC
	MW22-29	Groundwater: Metals, VOC, PHC, PAH	None
	MW22-30	Groundwater: VOC	None
	MW22-31	Groundwater: VOC	VOC
	MW22-32	Groundwater: VOC	None
	MW22-33	Groundwater: VOC	None
	MW22-34	Groundwater: VOC	VOC
	MW22-35	Groundwater: VOC	None
	MW22-36	Groundwater: Metals, VOC, PHC, PAH	None*
	MW22-37	Groundwater: Metals, VOC, PHC, PAH	None
	MW22-38	Groundwater: VOC, PHC	None
	MW22-39	Groundwater: VOC	VOC
	MW22-40	Groundwater: VOC	VOC
	MW22-41	Groundwater: VOC	VOC

Note:
** Indicates that the concentration of one or more parameter exceeds the applied SCS, however, the parameter falls within a regulatory exemption.*

The results of the Phase Two ESA indicate historic activities on or around the phase two property have adversely impacted the soil and/or groundwater on or under the phase two property. In particular, the following were observed:

- **APEC B:** PCE and TCE impacts in groundwater originating from a former dry cleaning facility on the 591 March Road property.
- **APEC C:** TCE impacts in groundwater present under and around the building located at 603 March Road from former electronic component manufacturing. Isolated soil impacts of heavy PHC and SAR due to road maintenance and de-icing
- **APEC D:** Soil impacted with PHC and SAR not related to storage and use of hydraulic oil for elevator operations. TCE impacted groundwater also unrelated to APEC D.
- **APEC G:** Soil impacted with PHC and SAR not related to fill of poor quality used to construct roadways. TCE impacted groundwater also unrelated to APEC G.
- **APEC F:** Shallow and deep groundwater impacted with TCE not related to the former March Landfill.

Soil impacted with PHC F4G and SAR detected within APEC D and APEC G are not related to PCAs or historical site operations. The surficial soil sample that returned concentrations of PHC F4G above the applicable SCS is believed to have included a portion of asphalt from the parking area that the borehole was advanced. Since no other surficial sample collected in APEC G returned results of PHC 4G above applicable SCS, the sample at MW22-14B was considered anomalous with no further investigation or remedial actions are required. SAR exceeding applicable SCS are exempt under Paragraph 1 of Section 49.1 under O. Reg. 153/04 which indicates that de-icing activities conducted within the phase two property and affect the environmental quality are deemed not to exceed the applicable SCS. Since the sample was collected close to the surface at location MW22-14B, which was advanced in the parking area adjacent to a pedestrian walkway where de-icing activities are performed, OMI does not consider the SAR exceedance requires further investigation of remedial actions.

Concentrations of chloroform exceeding Table 7 SCS were returned in the samples from MW22-33 and MW22-36. As indicated on Table 4-4 in Section 4.4, when the samples were collected on December 1, 2022, both MW22-33 and MW22-36 returned concentrations of chloroform exceeding Table 7 SCS. Chloroform concentrations below Table 7 SCS were also detected in MW21-04B, MW22-27, MW22-32, MW22-39-3, MW22-40-2, MW22-40-3, and MW22-40-6.

Chloroform has been identified as a common disinfection by-product of water by chlorination (Rook, 1974). Therefore, when analytical results were received, MW22-33 and MW22-36 were re-developed to remove any residual drilling fluid prior to collection of a second sample set on December 15, 2022. As shown in Table 4, chloroform concentrations in December 15 samples decreased at both locations.

OMI further noted the heavy usage of a municipally authorized commercial filling station (hydrant) was in close proximity to MW22-27, MW22-33, and MW22-36, see Figure 1C. Since locations MW22-32, MW22-33, MW22-36, MW22-29, and MW22-40 were advanced by rock coring using treated municipal water and, given MW22-27 was not cored using municipal water, is upgradient of MW22-33, and cross gradient of MW22-36, the most likely source of chloroform in groundwater is spillage or seepage from the hydrant during water truck filling activities. Paragraph 2 of Section 49.1 under O. Reg. 153/04 indicates that SCS are met if a Qualified Person (QP) has determined there has been a discharge of drinking water. Based on the evidence collected during the investigation, groundwater samples with chloroform exceedances are interpreted to meet Table 7 SCS.

Extents of PCE and TCE impacted groundwater are displayed in plan view Figures 4B, 5B, and 5H as well as cross section Figures 6B, 7B, 8B, and 9B. The distribution of groundwater impacted with PCE and TCE is restricted to the 595 and 603 March Road properties of the phase two property. Groundwater flow regimes in the shallow portion of the bedrock aquifer appears to vary seasonally with influence from subsurface structures that increase infiltration into bedrock. Vertical

distribution of PCE and TCE is limited to the upper portion of the bedrock aquifer across much of the phase two property due to an upward vertical gradient found in bedrock below 69.29 masl. TCE impacted groundwater discovered in the former source zone between 58.62 – 56.36 masl is evidence of potential off-site impacts migrating to the site based on the interpreted groundwater flow regime shown in Figure 3E.

Contaminant Discharge

Discharge of PCE to the environment is believed to have occurred due to improper disposal of dry cleaning fluids from former dry cleaning operations at 591 March Road. Based on information gathered from previous investigations (Paterson, 2016), soil impacted with PCE was observed to the rear of the former dry cleaning facility. During this Phase Two ESA, no PCE impacted soils were observed which indicates that previous remedial amendments were successful in reducing PCE concentrations soil to below applicable SCS. PCE impacts in groundwater were attributed to the migration of PCE from soil into the shallow bedrock aquifer. Since TCE is a common daughter product of anerobic PCE reduction, detected concentrations of TCE in the PCE discharge area are attributed to breakdown of PCE over time. Once within the bedrock aquifer, fracture flow and connectivity in the shallow bedrock distributed PCE and TCE to the wider area.

TCE impacts in groundwater around and under the 603 March Road building and in the surrounding area, as shown in Figures 5B and 5E, are attributed to the use and improper disposal of TCE for electronic component manufacturing. No source of TCE in soil was discovered during previous investigations or this Phase Two ESA (CGI, 2022). As such, TCE impacts in groundwater are likely due to release or leakage from sanitary sewer or stormwater management (sump pit) infrastructure. Aged sanitary sewer infrastructure combined with multiple renovations provides a potential pathway for release of improperly disposed TCE. Migration through coarse materials beneath the building slab into the bedrock aquifer would occur rapidly. The fracture network would then conduct TCE to the wider area.

Climatic Conditions

Based on discharge mechanisms, migration of COCs into the bedrock aquifer was enhanced by meteorological precipitation. Seasonal variability of the bedrock groundwater table would cause COCs to travel through the fracture network at various depths depending on the influx of meteorological precipitation. Likewise, meteorological precipitation could cause shifts in the flow direction creating a fan effect of the COC plume. These combined factors provide a reasonable basis for the COC distribution observed during this Phase Two ESA.

6.10.4 EXPOSURE PATHWAYS

Potential receptors for the proposed development of the phase two property are humans including residents of all ages, mammals and birds, and terrestrial plants. The most likely exposure pathway is via volatilization of the COCs which would affect indoor and outdoor air. There is also a potential for direct dermal contact or incidental ingestion for construction workers during the redevelopment process. Since the phase two property is and will continue to be supplied with municipal drinking water, there is no risk of residents being exposed to groundwater via direct contact or ingestion. Root uptake by plants is not a viable pathway because no COCs were present in soil samples collected during the investigation and the groundwater table is only present in the bedrock.

The exposure paths via indoor and outdoor air include direct contact by vapours and inhalation or respiration of vapours by residents, workers, mammals and birds, and terrestrial plants. Figure 11 shows a flow chart of potential exposure pathways.

7 CONCLUSIONS

This Phase Two ESA was carried out in general accordance with O. Reg. 153/04 to address the APECs identified in the Phase One ESA for the phase two property. Based on the investigation completed and interpretation of results, OMI offers the following conclusions:

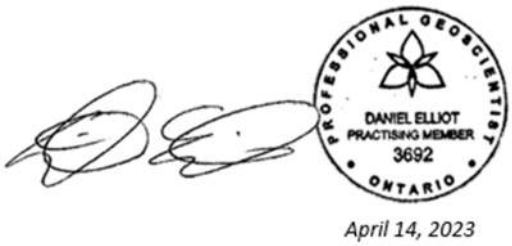
- PHC F4G and SAR in concentrations above applicable SCS were returned in a surficial soil sample at MW22-14B but were not considered representative of PCAs associated with APEC D or APEC G and did not warrant additional investigation or remediation.
- All other soil samples collected on the phase two property did not return any contaminants of concern (COC) concentrations above applicable SCS.
- VOCs at concentrations above SCS were returned in groundwater samples from APEC B and APEC C across the central area of the phase two property, encompassing the majority of 595 March Road and the central and southern portion of 603 March Road.
- All other groundwater samples collected on the phase two property did not return any COC concentrations above applicable SCS.
- No free phase product was encountered in soil or groundwater during the investigation.
- Prior to remedial work on the phase two property Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition have not been met.
- Remediation of VOC impacted groundwater is recommended prior to redevelopment of the phase two property.

7.1 SIGNATURES

I, Daniel Elliot, as a qualified person confirm that this Phase Two ESA was conducted and/or supervised by me and agree with the findings and conclusions of this report.

Respectfully Submitted,
Omni-McCann Inc.

Chayla Exner, E.I.T



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9 CLOSING

This report was prepared exclusively for the purposes, project, and site locations outlined in the report. The report is based on information provided to, or obtained by Omni-McCann, as indicated in the report, and applies solely to site conditions existing at the time of the site investigation. Although a reasonable investigation was conducted by Omni-McCann, Omni-McCann's investigation was by no means exhaustive and cannot be construed as a certification of the absence of any contaminants from the site. Rather, Omni-McCann's report represents a reasonable review of available information within an established work scope, schedule, and budget. It is therefore possible that currently unrecognized contamination or potentially hazardous materials may exist at the site, and the levels of contamination or hazardous materials may vary across the site. Further review and updating of the report may be required as local and site conditions, and the regulatory and planning frameworks, change over time.

This report was prepared by Omni-McCann for the benefit of March and Main Developments Inc. The material in it reflects Omni-McCann's judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Omni-McCann accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

FIGURES AND TABLES

Table 1: Monitoring Well Construction Details

Well ID	Top of Casing	Grade	Top of Screen	Bottom of Screen	Screen Length	Top of Screen	Bottom of Screen	Northing	Easting	UTM Zone
	(masl)	(masl)	(mbgs)	(mbgs)	(m)	(masl)	(masl)	(m)	(m)	
BH4-10	82.66	82.78	4.57	7.62	3.05	78.21	75.16	5023188.2	349941.9	18
MW21-01A	83.24	83.29	4.57	7.62	3.05	78.72	75.67	5023251.4	349824.2	18
MW21-01B	83.28	83.34	9.14	12.19	3.05	74.20	71.15	5023250.6	349824.8	18
MW22-01C	83.10	83.26	15.39	18.44	3.05	67.86	64.82	5023250.7	349823.7	18
MW21-02A	82.90	83.04	4.27	7.32	3.05	78.77	75.73	5023251.0	349860.3	18
MW21-02B	82.83	83.02	9.14	12.19	3.05	73.88	70.83	5023250.6	349860.1	18
MW21-03A	82.36	82.45	4.27	7.32	3.05	78.18	75.13	5023240.1	349888.8	18
MW21-03B	82.34	82.40	9.14	12.19	3.05	73.26	70.21	5023239.5	349888.4	18
MW22-03C	82.37	82.44	15.24	18.29	3.05	67.20	64.16	5023241.5	349890.0	18
MW21-04A	82.71	82.84	5.94	8.99	3.05	76.89	73.84	5023263.5	349917.8	18
MW21-04B	82.66	82.82	9.75	12.80	3.05	73.06	70.01	5023261.9	349917.5	18
MW22-04C	82.68	82.86	15.24	18.29	3.05	67.62	64.57	5023262.0	349918.4	18
MW21-05A	83.62	83.72	5.03	8.08	3.05	78.69	75.64	5023317.8	349895.7	18
MW21-05B	83.61	83.72	9.14	12.19	3.05	74.57	71.53	5023318.3	349895.0	18
MW22-05C	83.52	83.63	15.24	18.29	3.05	68.39	65.35	5023319.4	349895.2	18
MW21-06A	82.90	83.04	5.03	8.08	3.05	78.01	74.97	5023323.8	349835.4	18
MW22-06B	82.97	83.05	9.68	12.73	3.05	73.37	70.32	5023324.5	349836.1	18
MW21-07	83.31	83.39	3.96	7.01	3.05	79.43	76.38	5023158.1	349828.0	18
MW21-08	83.34	83.42	4.27	7.32	3.05	79.15	76.10	5923261.5	349941.2	18
MW21-13A	83.12	83.25	4.57	7.62	3.05	78.68	75.63	5023263.8	349813.2	18
MW22-13B	83.16	83.28	9.14	12.19	3.05	74.13	71.08	5023262.8	349813.1	18
MW21-14A	83.64	83.77	5.18	8.23	3.05	78.59	75.54	5023235.2	349807.4	18
MW22-14B	83.85	83.84	9.75	12.80	3.05	74.09	71.04	5023234.4	349806.5	18
MW21-15A	83.28	83.43	4.88	7.92	3.05	78.55	75.50	5023236.2	349843.7	18
MW22-15B	83.38	83.44	9.75	12.80	3.05	73.69	70.64	5023235.3	349842.8	18
MW21-16A	82.61	82.72	4.57	7.62	3.05	78.15	75.10	5023239.8	349870.5	18
MW22-16B	82.64	82.74	9.14	12.19	3.05	73.60	70.55	5023239.2	349870.1	18
MW21-17A	82.64	82.74	4.57	7.62	3.05	78.16	75.12	5023270.2	349884.9	18
MW22-17B	82.63	82.73	9.30	12.34	3.05	73.43	70.38	5023270.8	349885.4	18
MW22-18	82.37	82.50	6.71	9.75	3.05	75.79	72.75	5023134.3	349982.5	18
BH22-19	--	82.23	--	--	--	--	--	5023101.9	350001.5	18
MW22-20	81.91	81.98	5.18	8.23	3.05	76.80	73.75	5023087.3	350004.3	18
MW22-21	82.02	82.12	7.62	10.67	3.05	74.50	71.45	5023117.8	350011.9	18
MW22-22	81.85	81.94	5.79	8.84	3.05	76.15	73.10	5023130.6	350051.0	18
MW22-23	82.22	82.32	6.10	9.14	3.05	76.23	73.18	5023163.4	350016.1	18
MW22-24	81.84	81.93	6.71	9.75	3.05	75.23	72.18	5023175.2	349981.4	18
BH22-25	--	82.61	--	--	--	--	--	5023169.4	349945.8	18
MW22-26	83.98	83.07	5.18	8.23	3.05	77.89	74.84	5023019.3	349926.3	18
MW22-27	84.16	83.11	5.18	8.23	3.05	77.92	74.88	5023062.3	349888.6	18
MW22-28	83.91	83.97	5.03	8.08	3.05	78.94	75.90	5023174.6	349805.4	18
MW22-29	84.30	84.39	6.71	9.75	3.05	77.68	74.63	5023206.8	349776.5	18
MW22-30	84.07	84.12	6.10	9.14	3.05	78.03	74.98	5023239.4	349747.3	18
MW22-31	83.35	83.44	4.57	7.62	3.05	78.87	75.82	5023201.9	349840.7	18
MW22-32	83.51	82.56	5.18	8.23	3.05	77.38	74.33	5023068.6	349939.2	18
MW22-33	83.70	82.73	5.03	8.08	3.05	77.70	74.65	5023113.7	349895.4	18
MW22-34	84.22	83.20	4.83	7.87	3.05	78.38	75.33	5023185.1	349840.4	18
MW22-35	82.88	83.01	4.98	8.03	3.05	78.03	74.98	5023276.9	349790.0	18
MW22-36	83.98	83.19	4.88	7.92	3.05	78.32	75.27	5023108.3	349869.5	18
MW22-37	85.00	84.06	5.72	8.76	3.05	78.35	75.30	5023143.2	349822.7	18
MW22-38	82.99	83.03	5.41	8.46	3.05	77.62	74.57	5023343.3	349857.1	18
MW22-39-1	83.01	82.27	7.62	9.14	1.52	74.65	73.13	5023242.5	349915.2	18
MW22-39-3	83.01	82.27	14.33	16.15	1.83	67.94	66.12			
MW22-39-4	83.01	82.27	18.29	19.81	1.52	63.98	62.46			
MW22-39-5	83.01	82.27	21.34	22.86	1.52	60.93	59.41			
MW22-39-6	83.01	82.27	24.38	25.91	1.52	57.89	56.36			
MW22-39-7	83.01	82.27	27.43	30.48	3.05	54.84	51.79			
MW22-40-1	83.91	83.00	6.10	9.14	3.05	76.91	73.86	5023265.4	349942.8	18
MW22-40-2	83.91	83.00	10.67	13.72	3.05	72.34	69.29			
MW22-40-3	83.91	83.00	15.24	18.29	3.05	67.76	64.72			
MW22-40-4	83.91	83.00	20.73	23.77	3.05	62.28	59.23			
MW22-40-5	83.91	83.00	24.38	26.52	2.13	58.62	56.49			
MW22-40-6	83.91	83.00	27.13	27.97	0.84	55.88	55.04			
MW22-40-7	83.91	83.00	28.52	30.56	2.03	54.48	52.45			
MW22-41-1	83.07	82.06	6.10	9.14	3.05	75.96	72.92	5023219.0	349937.1	18
MW22-41-2	83.07	82.06	13.72	16.76	3.05	68.34	65.30			
MW22-41-3	83.07	82.06	17.68	20.73	3.05	64.38	61.33			
MW22-41-4	83.07	82.06	21.34	23.47	2.13	60.72	58.59			
MW22-41-5	83.07	82.06	24.08	25.60	1.52	57.98	56.46			
MW22-41-6	83.07	82.06	26.21	27.74	1.52	55.85	54.32			
MW22-41-7	83.07	82.06	28.35	30.51	2.16	53.71	51.55			

Notes:

masl Meters above sea level
mbgs Meters below ground surface

Table 2: Water Elevations

Well ID	Date	Water Level	Water Elevation
	(d/m/y)	(mbtoc)	(masl)
BH4-10	5-Dec-22	3.375	79.289
MW21-01A	5-Dec-22	4.862	78.379
MW21-01B	5-Dec-22	6.242	77.038
MW22-01C	5-Dec-22	6.045	77.056
MW21-02A	5-Dec-22	4.530	78.373
MW21-02B	5-Dec-22	6.018	76.813
MW21-03A	5-Dec-22	4.002	78.357
MW21-03B	5-Dec-22	5.583	76.760
MW22-03C	5-Dec-22	5.382	76.991
MW21-04A	5-Dec-22	6.221	76.484
MW21-04B	5-Dec-22	6.151	76.505
MW22-04C	5-Dec-22	5.766	76.911
MW21-05A	5-Dec-22	6.501	77.120
MW21-05B	5-Dec-22	7.586	76.020
MW22-05C	5-Dec-22	7.205	76.310
MW21-06A	5-Dec-22	5.216	77.683
MW22-06B	5-Dec-22	6.551	76.423
MW21-07	5-Dec-22	4.961	78.347
MW21-08	5-Dec-22	4.953	78.386
MW21-13A	5-Dec-22	4.950	78.172
MW22-13B	5-Dec-22	6.145	77.011
MW21-14A	5-Dec-22	5.643	77.999
MW22-14B	5-Dec-22	6.676	77.170
MW21-15A	5-Dec-22	4.866	78.414
MW22-15B	5-Dec-22	6.427	76.949
MW21-16A	5-Dec-22	4.211	78.400
MW22-16B	5-Dec-22	5.898	76.745
MW21-17A	5-Dec-22	4.777	77.863
MW22-17B	5-Dec-22	6.044	76.582
MW22-18	5-Dec-22	4.333	78.035
BH22-19	--	--	--
MW22-20	5-Dec-22	3.269	78.643
MW22-21	5-Dec-22	4.589	77.432
MW22-22	5-Dec-22	3.084	78.766
MW22-23	5-Dec-22	5.173	77.048
MW22-24	5-Dec-22	4.446	77.396
BH22-25	--	--	--
MW22-26	5-Dec-22	5.302	78.676
MW22-27	5-Dec-22	5.565	78.595
MW22-28	5-Dec-22	5.375	78.530
MW22-29	5-Dec-22	7.034	77.265
MW22-30	5-Dec-22	5.574	78.500
MW22-31	5-Dec-22	4.882	78.463
MW22-32	5-Dec-22	5.061	78.452
MW22-33	5-Dec-22	5.123	78.578
MW22-34	5-Dec-22	5.595	78.627
MW22-35	5-Dec-22	5.973	76.906
MW22-36	5-Dec-22	5.471	78.506
MW22-37	5-Dec-22	6.449	78.548
MW22-38	5-Dec-22	5.709	77.279
MW22-39-1	5-Dec-22	6.415	76.595
MW22-39-3	5-Dec-22	6.364	76.646
MW22-39-4	5-Dec-22	5.006	78.004
MW22-39-5	5-Dec-22	5.148	77.862
MW22-39-6	5-Dec-22	5.054	77.956
MW22-39-7	5-Dec-22	4.895	78.115
MW22-40-1	5-Dec-22	7.531	76.380
MW22-40-2	5-Dec-22	7.640	76.271
MW22-40-3	5-Dec-22	7.638	76.273
MW22-40-4	5-Dec-22	6.081	77.830
MW22-40-5	5-Dec-22	6.056	77.855
MW22-40-6	5-Dec-22	9.750	74.161
MW22-40-7	5-Dec-22	5.812	78.099
MW22-41-1	5-Dec-22	6.011	77.057
MW22-41-2	5-Dec-22	5.983	77.085
MW22-41-3	5-Dec-22	5.983	77.085
MW22-41-4	5-Dec-22	4.960	78.108
MW22-41-5	5-Dec-22	4.960	78.108
MW22-41-6	5-Dec-22	4.890	78.178
MW22-41-7	5-Dec-22	3.891	79.177

Notes:

masl Meters above sea level

mbtoc Meters below top of casing

Table 3: Soil Quality Results

			Borehole ID	MW22-01C		MW22-03C			MW22-04C	MW22-05C	MW22-06B			MW22-13B	
			Sample ID	22-01C 0.25-2	22-01C 2.5-3	22-03C 0-1	22-03C 2.5-2.75		22-04C 2.5-4.25	22-05C 0-1	22-06B 0.75-1.75	22-06B 2.5-3.25	DUP5	22-13B 0-2	DUP6
			Lab ID	WT2221612-004	WT2221612-005	WT2219916-018	WT2219916-019		WT2220569-001	WT2221612-008	WT2221612-001	WT2221612-002	WT2221612-003	WT2221612-006	WT2221612-007
			Sample Depth (m)	0.1 - 0.6	0.8 - 0.9	0 - 0.3	0.8 - 0.8		0.8 - 1.3	0 - 0.3	0.2 - 0.5	0.8 - 1.0	0.2 - 0.5	0 - 0.6	0 - 0.6
			Sample Date (d/m/y)	09-Nov-2022	09-Nov-2022	26-Oct-2022	26-Oct-2022		28-Oct-2022	10-Nov-2022	09-Nov-2022	09-Nov-2022	09-Nov-2022	10-Nov-2022	10-Nov-2022
Parameter	**Units**	**MDL**	**Table 7 SCS**												
Physical Characteristics															
moisture	%	0.25	NV	5.11	5.28	16.1	22.6		7.75	19.2	18.2	17.3	18	3.91	4.45
pH (1:2 soil:CaCl2-aq)	pH units	0.1	NV	--	--	--	--		--	--	--	--	--	8.14	8.13
Particle Size															
passing (0.0312 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (9.5 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.020 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (1.0 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (4.75 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.005 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.841 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (19 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.004 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.50 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (25.4 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.002 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.420 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (38.1 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.250 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (50.8 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.149 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (76.2 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.125 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (2.0 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.075 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.063 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
passing (0.05 mm)	%	1	NV	--	--	--	--		--	--	--	--	--	--	--
Metals															
antimony	mg/kg	0.1	7.5	0.2	--	0.26	--		--	--	--	--	--	<0.10	<0.10
arsenic	mg/kg	0.1	18	1.6	--	2.17	--		--	--	--	--	--	1.16	1.1
barium	mg/kg	0.5	390	200	--	96.4	--		--	--	--	--	--	66.5	67.7
beryllium	mg/kg	0.1	5	0.27	--	0.37	--		--	--	--	--	--	0.18	0.16
boron	mg/kg	5	120	8.6	--	5.8	--		--	--	--	--	--	8.7	6.6
boron, hot water soluble	mg/kg	0.1	1.5	0.15	--	0.23	--		--	--	--	--	--	0.23	0.27
cadmium	mg/kg	0.02	1.2	0.151	--	0.258	--		--	--	--	--	--	0.03	0.03
chromium	mg/kg	0.5	160	14.6	--	25.2	--		--	--	--	--	--	9.91	7.3
chromium, hexavalent	mg/kg	0.1	10	<0.10	--	<0.10	--		--	--	--	--	--	<0.10	<0.10
cobalt	mg/kg	0.1	22	4.55	--	6.15	--		--	--	--	--	--	2.77	2.52
copper	mg/kg	0.5	180	11.5	--	20.4	--		--	--	--	--	--	9.25	6.13
lead	mg/kg	0.5	120	11.6	--	24.1	--		--	--	--	--	--	7.69	7.6
mercury	mg/kg	0.005	1.8	0.0119	--	0.0216	--		--	--	--	--	--	0.0073	0.0074
molybdenum	mg/kg	0.1	6.9	1.06	--	0.68	--		--	--	--	--	--	0.63	0.56
nickel	mg/kg	0.5	130	10.1	--	13.4	--		--	--	--	--	--	7.69	6.88
selenium	mg/kg	0.2	2.4	<0.20	--	0.21	--		--	--	--	--	--	<0.20	<0.20
silver	mg/kg	0.1	25	<0.10	--	<0.10	--		--	--	--	--	--	<0.10	<0.10
thallium	mg/kg	0.05	1	0.176	--	0.135	--		--	--	--	--	--	0.099	0.096
uranium	mg/kg	0.05	23	0.44	--	0.598	--		--	--	--	--	--	0.293	0.25
vanadium	mg/kg	0.2	86	19.5	--	36	--		--	--	--	--	--	16.4	14.7
zinc	mg/kg	2	340	21.7	--	65.2	--		--	--	--	--	--	19.6	16.7
Soluable Ions															
calcium, soluble ion content	mg/L	0.5	NV	--	--	--	--		--	--	--	--	--	12.2	8.14
magnesium, soluble ion content	mg/L	0.5	NV	--	--	--	--		--	--	--	--	--	1.13	0.77
sodium, soluble ion content	mg/L	0.5	NV	--	--	--	--		--	--	--	--	--	111	111
sodium adsorption ratio [SAR]	--	0.1	5	--	--	--	--		--	--	--	--	--	**8.15**	**9.43**
Volatiles Organic Compounds (VOC)															
Acetone	mg/kg	0.5	28	--	<0.50	--	<0.50		<0.50	<0.50	--	<0.50	--	<0.50	<0.50
benzene	mg/kg	0.005	0.17	<0.0050	<0.0050	<0.0050	<0.0050		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
bromodichloromethane	mg/kg	0.05	13	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
bromoform	mg/kg	0.05	0.26	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
bromomethane	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
carbon tetrachloride	mg/kg	0.05	0.12	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
chlorobenzene	mg/kg	0.05	2.7	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
chloroform	mg/kg	0.05	0.17	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dibromochloromethane	mg/kg	0.05	9.4	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dibromoethane, 1,2-	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichlorobenzene, 1,2-	mg/kg	0.05	4.3	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichlorobenzene, 1,3-	mg/kg	0.05	6	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichlorobenzene, 1,4-	mg/kg	0.05	0.097	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichlorodifluoromethane	mg/kg	0.05	25	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloroethane, 1,1-	mg/kg	0.05	11	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloroethane, 1,2-	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloroethylene, 1,1-	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloroethylene, cis-1,2-	mg/kg	0.05	30	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloroethylene, trans-1,2-	mg/kg	0.05	0.75	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloromethane	mg/kg	0.045	0.96	--	<0.045	--	<0.045		<0.045	<0.045	--	<0.045	--	<0.045	<0.045
dichloropropane, 1,2-	mg/kg	0.05	0.085	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloropropylene, cis+trans-1,3-	mg/kg	0.05	0.083	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
dichloropropylene, cis-1,3-	mg/kg	0.03	NV	--	<0.030	--	<0.030		<0.030	<0.030	--	<0.030	--	<0.030	<0.030
dichloropropylene, trans-1,3-	mg/kg	0.03	NV	--	<0.030	--	<0.030		<0.030	<0.030	--	<0.030	--	<0.030	<0.030
ethylbenzene	mg/kg	0.015	15	<0.015	<0.015	<0.015	<0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
hexane, n-	mg/kg	0.05	34	--	0.079	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	0.350
methyl ethyl ketone [MEK]	mg/kg	0.5	44	--	<0.50	--	<0.50		<0.50	<0.50	--	<0.50	--	<0.50	<0.50
methyl isobutyl ketone [MIBK]	mg/kg	0.5	4.3	--	<0.50	--	<0.50		<0.50	<0.50	--	<0.50	--	<0.50	<0.50
methyl-tert-butyl ether [MTBE]	mg/kg	0.04	1.4	--	<0.040	--	<0.040		<0.040	<0.040	--	<0.040	--	<0.040	<0.040
styrene	mg/kg	0.05	2.2	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
tetrachloroethane, 1,1,1,2-	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
tetrachloroethane, 1,1,2,2-	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
tetrachloroethylene	mg/kg	0.05	2.3	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
toluene	mg/kg	0.05	6	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trichloroethane, 1,1,1-	mg/kg	0.05	3.4	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
trichloroethane, 1,1,2-	mg/kg	0.05	0.05	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
trichloroethylene	mg/kg	0.01	0.52	--	0.011	--	<0.010		<0.010	<0.010	--	<0.010	--	<0.010	<0.010
trichlorofluoromethane	mg/kg	0.05	5.8	--	<0.050	--	<0.050		<0.050	<0.050	--	<0.050	--	<0.050	<0.050
vinyl chloride	mg/kg	0.02	0.022	--	<0.020	--	<0.020		<0.020	<0.020	--	<0.020	--	<0.020	<0.020
xylene, m+p-	mg/kg	0.03	NV	<0.030	<0.030	<0.030	<0.030		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.062
xylene, o-	mg/kg	0.03	NV	<0.030	<0.030	<0.030	<0.030		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylenes, total	mg/kg	0.05	25	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.062
BTEX, total	mg/kg	0.1	NV	<0.10	<0.10	<0.10	<0.10		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Petroleum Hydrocarbons (PHC)															
F1 (C6-C10)	mg/kg	5.0	65	<5.0	--	<5.0	--		--	--	<5.0	<5.0	<5.0	<5.0	19.5
F2-naphthalene	mg/kg	25	NV	<25	--	--	--		--	--	--	--	--	<25	<25
F3-PAH	mg/kg	50	NV	317	--	--	--		--	--	--	--	--	1230	1090
F1-BTEX	mg/kg	5.0	65	<5.0	--	<5.0	--		--	--	<5.0	<5.0	<5.0	<5.0	19.5
F2 (C10-C16)	mg/kg	10	150	<10	--	<10	--		--	--	<10	<10	<10	15	<12
F3 (C16-C34)	mg/kg	50	1300	317	--	106	--		--	--	<50	<50	<50	1230	1090
F4 (C34-C50)	mg/kg	50	5600	714	--	405	--		--	--	<50	<50	<50	2450	2360
F4G-sg	mg/kg	250	5600	2420	--	2370	--		--	--	--	--	--	**7130**	**7740**
hydrocarbons, total (C6-C50)	mg/kg	80	NV	1030	--	511	--		--	--	<80	<80	<80	3700	3470
Polycyclic Aromatic Hydrocarbons (PAH)															
acenaphthene	mg/kg	0.05	58	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
acenaphthylene	mg/kg	0.05	0.17	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
anthracene	mg/kg	0.05	0.74	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
benz(a)anthracene	mg/kg	0.05	0.63	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
benzo(a)pyrene	mg/kg	0.05	0.3	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
benzo(b+j)fluoranthene	mg/kg	0.05	0.78	<0.050	--	<0.050	--		--	--	--	--	--	0.056	0.053
benzo(g,h,i)perylene	mg/kg	0.05	7.8	<0.050	--	<0.050	--		--	--	--	--	--	0.08	0.057
benzo(k)fluoranthene	mg/kg	0.05	0.78	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
chrysene	mg/kg	0.05	7.8	<0.050	--	<0.050	--		--	--	--	--	--	<0.103	<0.050
dibenz(a,h)anthracene	mg/kg	0.05	0.1	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
fluoranthene	mg/kg	0.05	0.69	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
fluorene	mg/kg	0.05	69	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
indeno(1,2,3-c,d)pyrene	mg/kg	0.05	0.48	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
methylnaphthalene, 1+2-	mg/kg	0.05	3.4	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
methylnaphthalene, 1-	mg/kg	0.03	3.4	<0.030	--	<0.030	--		--	--	--	--	--	<0.030	<0.030
methylnaphthalene, 2-	mg/kg	0.03	3.4	<0.030	--	<0.030	--		--	--	--	--	--	<0.030	<0.030
naphthalene	mg/kg	0.01	0.75	<0.010	--	<0.020	--		--	--	--	--	--	<0.010	<0.010
phenanthrene	mg/kg	0.05	7.8	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
pyrene	mg/kg	0.05	78	<0.050	--	<0.050	--		--	--	--	--	--	<0.050	<0.050
PCBs															
Aroclor 1016	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1221	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1232	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1242	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1248	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1254	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1260	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1262	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
Aroclor 1268	mg/kg	0.01	NV	--	--	--	--		--	--	<0.010	<0.010	<0.010	--	--
PCBs, total	mg/kg	0.03	0.35	--	--	--	--		--	--	<0.030	<0.030	<0.030	--	--

Notes:

Table 7 SCS — Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)

MDL — Method Detection Limit

ND (0.00) — Concentration below the MDL

NV — No value specified in Table 3 SCS

BOLD — Concentration exceeds Table 3 SCS

Table 3: Soil Quality Results

			Borehole ID	MW22-14B			MW22-15B		MW22-16B		MW22-17B			MW22-18
			Sample ID	22-14B 0-2	22-14B 2.5-4	DUP 2	22-15B 0-1	22-15B 4-4.25	22-16B 0-1	22-16B 2.5-3	22-17B 0-0.75	22-17B 2.5-3.5	DUP3	22-18 0-1
			Lab ID	WT2219916-008	WT2219916-009	WT2219916-010	WT2219916-011	WT2219916-012	WT2219916-013	WT2219916-014	WT2219916-015	WT2219916-016	WT2219916-017	WT2219243-001
			Sample Depth (m)	0 - 0.6	0.8 - 1.2	0 - 0.6	0 - 0.3	1.2 - 1.3	0 - 0.3	0.8 - 0.9	0 - 0.2	0.8 - 1.1	0.8 - 1.1	0 - 0.3
			Sample Date (d/m/y)	24-Oct-2022	24-Oct-2022	24-Oct-2022	25-Oct-2022	25-Oct-2022	25-Oct-2022	25-Oct-2022	26-Oct-2022	26-Oct-2022	26-Oct-2022	17-Oct-2022
Parameter	**Units**	**MDL**	**Table 7 SCS**											
Physical Characteristics														
moisture	%	0.25	**NV**	9.14	14.3	12	12.6	9.52	5.12	11.2	3.06	10.6	11.2	7.53
pH (1:2 soil:CaCl2-aq)	pH units	0.1	**NV**	--	--	--	--	--	--	--	--	--	--	--
Particle Size														
passing (0.0312 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (9.5 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.020 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (1.0 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (4.75 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.005 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.841 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (19 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.004 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.50 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (25.4 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.002 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.420 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (38.1 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.250 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (50.8 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.149 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (76.2 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.125 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (2.0 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.075 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.063 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
passing (0.05 mm)	%	1	**NV**	--	--	--	--	--	--	--	--	--	--	--
Metals														
antimony	mg/kg	0.1	**7.5**	<0.10	<0.10	<0.10	0.47	--	<0.10	--	<0.10	--	--	<0.10
arsenic	mg/kg	0.1	**18**	1.68	2.73	1.76	2.15	--	2.02	--	1.73	--	--	0.98
barium	mg/kg	0.5	**390**	195	142	188	89.9	--	122	--	84.2	--	--	61.7
beryllium	mg/kg	0.1	**5**	0.31	0.48	0.34	0.28	--	0.22	--	0.23	--	--	0.15
boron	mg/kg	5	**120**	7.8	<5.0	7.4	<5.0	--	9.1	--	6.7	--	--	7.1
boron, hot water soluble	mg/kg	0.1	**1.5**	0.21	0.12	0.17	0.28	--	0.21	--	0.19	--	--	0.16
cadmium	mg/kg	0.02	**1.2**	0.069	0.142	0.074	0.279	--	0.03	--	0.04	--	--	<0.020
chromium	mg/kg	0.5	**160**	14.8	24	15.4	16.5	--	8.1	--	8.22	--	--	9.39
chromium, hexavalent	mg/kg	0.1	**10**	<0.10	<0.10	<0.10	<0.10	--	<0.10	--	<0.10	--	--	<0.50
cobalt	mg/kg	0.1	**22**	4.64	7.95	4.94	4.59	--	4.38	--	2.99	--	--	1.93
copper	mg/kg	0.5	**180**	<20.0	20.7	<20.0	<20.0	--	<20.0	--	<20.0	--	--	3.86
lead	mg/kg	0.5	**120**	7.21	9.05	7.83	59.6	--	9.63	--	7.53	--	--	5.79
mercury	mg/kg	0.005	**1.8**	0.0178	0.0299	0.018	0.023	--	0.0099	--	0.0074	--	--	0.0102
molybdenum	mg/kg	0.1	**6.9**	0.48	0.62	0.49	0.51	--	0.77	--	0.6	--	--	0.6
nickel	mg/kg	0.5	**130**	10.1	14.7	10.8	14	--	10.1	--	8.75	--	--	6.3
selenium	mg/kg	0.2	**2.4**	<0.20	<0.20	<0.20	<0.20	--	<0.20	--	<0.20	--	--	<0.20
silver	mg/kg	0.1	**25**	<0.10	0.13	<0.10	0.12	--	<0.10	--	<0.10	--	--	<0.10
thallium	mg/kg	0.05	**1**	0.147	0.168	0.152	0.084	--	0.211	--	0.103	--	--	0.066
uranium	mg/kg	0.05	**23**	0.488	0.777	0.504	0.582	--	0.299	--	0.308	--	--	0.386
vanadium	mg/kg	0.2	**86**	24.2	38.6	25.3	22.1	--	12	--	20.9	--	--	7.33
zinc	mg/kg	2	**340**	20.7	42.6	22	46.7	--	10.2	--	12.6	--	--	9.2
Soluable Ions														
calcium, soluble ion content	mg/L	0.5	**NV**	--	--	--	--	--	--	--	--	--	--	--
magnesium, soluble ion content	mg/L	0.5	**NV**	--	--	--	--	--	--	--	--	--	--	--
sodium, soluble ion content	mg/L	0.5	**NV**	--	--	--	--	--	--	--	--	--	--	--
sodium adsorption ratio [SAR]	--	0.1	**5**	--	--	--	--	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)														
Acetone	mg/kg	0.5	**28**	--	--	--	<0.50	--	<0.50	--	--	<0.50	<0.50	<0.50
benzene	mg/kg	0.005	**0.17**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
bromodichloromethane	mg/kg	0.05	**13**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
bromoform	mg/kg	0.05	**0.26**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
bromomethane	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
carbon tetrachloride	mg/kg	0.05	**0.12**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
chlorobenzene	mg/kg	0.05	**2.7**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
chloroform	mg/kg	0.05	**0.17**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dibromochloromethane	mg/kg	0.05	**9.4**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dibromoethane, 1,2-	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichlorobenzene, 1,2-	mg/kg	0.05	**4.3**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichlorobenzene, 1,3-	mg/kg	0.05	**6**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichlorobenzene, 1,4-	mg/kg	0.05	**0.097**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichlorodifluoromethane	mg/kg	0.05	**25**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloroethane, 1,1-	mg/kg	0.05	**11**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloroethane, 1,2-	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloroethylene, 1,1-	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloroethylene, cis-1,2-	mg/kg	0.05	**30**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloroethylene, trans-1,2-	mg/kg	0.05	**0.75**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloromethane	mg/kg	0.045	**0.96**	--	--	--	--	<0.045	--	<0.045	--	<0.045	<0.045	<0.045
dichloropropane, 1,2-	mg/kg	0.05	**0.085**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloropropylene, cis+trans-1,3-	mg/kg	0.05	**0.083**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
dichloropropylene, cis-1,3-	mg/kg	0.03	**NV**	--	--	--	--	<0.030	--	<0.030	--	<0.030	<0.030	<0.030
dichloropropylene, trans-1,3-	mg/kg	0.03	**NV**	--	--	--	--	<0.030	--	<0.030	--	<0.030	<0.030	<0.030
ethylbenzene	mg/kg	0.015	**15**	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
hexane, n-	mg/kg	0.05	**34**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	0.1
methyl ethyl ketone [MEK]	mg/kg	0.5	**44**	--	--	--	--	<0.50	--	<0.50	--	<0.50	<0.50	<0.50
methyl isobutyl ketone [MIBK]	mg/kg	0.5	**4.3**	--	--	--	--	<0.50	--	<0.50	--	<0.50	<0.50	<0.50
methyl-tert-butyl ether [MTBE]	mg/kg	0.04	**1.4**	--	--	--	--	<0.040	--	<0.040	--	<0.040	<0.040	<0.040
styrene	mg/kg	0.05	**2.2**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
tetrachloroethane, 1,1,1,2-	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
tetrachloroethane, 1,1,2,2-	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
tetrachloroethylene	mg/kg	0.05	**2.3**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
toluene	mg/kg	0.05	**6**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trichloroethane, 1,1,1-	mg/kg	0.05	**3.4**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
trichloroethane, 1,1,2-	mg/kg	0.05	**0.05**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
trichloroethylene	mg/kg	0.01	**0.52**	--	--	--	--	<0.010	--	<0.010	--	<0.010	<0.010	<0.010
trichlorofluoromethane	mg/kg	0.05	**5.8**	--	--	--	--	<0.050	--	<0.050	--	<0.050	<0.050	<0.050
vinyl chloride	mg/kg	0.02	**0.022**	--	--	--	--	<0.020	--	<0.020	--	<0.020	<0.020	<0.020
xylene, m+p-	mg/kg	0.03	**NV**	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylene, o-	mg/kg	0.03	**NV**	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylenes, total	mg/kg	0.05	**25**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
BTEX, total	mg/kg	0.1	**NV**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Petroleum Hydrocarbons (PHC)														
F1 (C6-C10)	mg/kg	5.0	**65**	<5.0	<5.0	<5.0	<5.0	--	<5.0	--	<5.0	--	--	13
F2-naphthalene	mg/kg	25	**NV**	--	--	--	--	--	--	--	--	--	--	<25
F3-PAH	mg/kg	50	**NV**	--	--	--	--	--	--	--	--	--	--	132
F1-BTEX	mg/kg	5.0	**65**	<5.0	<5.0	<5.0	<5.0	--	<5.0	--	<5.0	--	--	13
F2 (C10-C16)	mg/kg	10	**150**	<10	<10	<10	<10	--	<20	--	<50	--	--	14
F3 (C16-C34)	mg/kg	50	**1300**	536	70	628	52	--	365	--	1540	--	--	132
F4 (C34-C50)	mg/kg	50	**5600**	1070	101	1290	82	--	1530	--	5020	--	--	149
F4G-sg	mg/kg	250	**5600**	3900	--	4950	--	--	7040	--	18100	--	--	--
hydrocarbons, total (C6-C50)	mg/kg	80	**NV**	1610	171	1920	134	--	1900	--	6560	--	--	308
Polycyclic Aromatic Hydrocarbons (PAH)														
acenaphthene	mg/kg	0.05	**58**	<0.050	<0.050	<0.050	<0.050	--	<0.050	--	<0.050	--	--	<0.050
acenaphthylene	mg/kg	0.05	**0.17**	<0.050	<0.050	<0.050	<0.050	--	<0.050	--	<0.050	--	--	<0.050
anthracene	mg/kg	0.05	**0.74**	<0.050	<0.050	<0.050	<0.050	--	<0.050	--	<0.050	--	--	<0.050
benz(a)anthracene	mg/kg	0.05	**0.63**	<0.050	<0.050	<0.050	0.074	--	<0.050	--	<0.050	--	--	<0.050
benzo(a)pyrene	mg/kg	0.05	**0.3**	<0.050	<0.050	<0.050	0.092	--	<0.050	--	0.072	--	--	<0.050
benzo(b+j)fluoranthene	mg/kg	0.05	**0.78**	<0.050	<0.050	<0.050	0.114	--	<0.050	--	0.081	--	--	<0.050
benzo(g,h,i)perylene	mg/kg	0.05	**7.8**	0.096	<0.050	0.088	0.069	--	<0.050	--	0.177	--	--	<0.050
benzo(k)fluoranthene	mg/kg	0.05	**0.78**	<0.050	<0.050	<0.050	<0.050	--	<0.050	--	<0.050	--	--	<0.050
chrysene	mg/kg	0.05	**7.8**	0.097	<0.050	0.089	0.081	--	<0.050	--	0.198	--	--	<0.050
dibenz(a,h)anthracene	mg/kg	0.05	**0.1**	<0.050	<0.050	<0.050	<0.050	--	<0.050	--	0.05	--	--	<0.050
fluoranthene	mg/kg	0.05	**0.69**	<0.050	<0.050	<0.050	0.081	--	<0.050	--	<0.050	--	--	<0.050
fluorene	mg/kg	0.05	**69**	<0.050	<0.050	<0.050	<0.050	--	<0.050	--	<0.050	--	--	<0.050
indeno(1,2,3-c,d)pyrene	mg/kg	0.05	**0.48**	<0.050	<0.050	<0.050	0.06	--	<0.050	--	0.055	--	--	<0.050
methylnaphthalene, 1+2-	mg/kg	0.05	**3.4**	0.096	<0.050	0.071	<0.050	--	<0.050	--	<0.050	--	--	<0.050
methylnaphthalene, 1-	mg/kg	0.03	**3.4**	0.042	<0.030	0.033	<0.030	--	<0.030	--	<0.030	--	--	<0.030
methylnaphthalene, 2-	mg/kg	0.03	**3.4**	0.054	<0.030	0.038	<0.030	--	<0.030	--	<0.030	--	--	<0.030
naphthalene	mg/kg	0.01	**0.75**	<0.020	<0.010	<0.020	<0.010	--	<0.020	--	<0.020	--	--	<0.010
phenanthrene	mg/kg	0.05	**7.8**	0.071	<0.050	0.057	<0.050	--	<0.050	--	0.053	--	--	<0.050
pyrene	mg/kg	0.05	**78**	<0.050	<0.050	<0.050	0.068	--	<0.050	--	<0.050	--	--	<0.050
PCBs														
Aroclor 1016	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	mg/kg	0.01	**NV**	--	--	--	--	--	--	--	--	--	--	--
PCBs, total	mg/kg	0.03	**0.35**	--	--	--	--	--	--	--	--	--	--	--

Notes:

Table 7 SCS — Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)

MDL — Method Detection Limit

ND (0.00) — Concentration below the MDL

NV — No value specified in Table 3 SCS

BOLD — Concentration exceeds Table 3 SCS

Table 3: Soil Quality Results

			Borehole ID	BH22-19	MW22-20		MW22-21	MW22-22		MW22-23			MW22-24	
			Sample ID	22-19 2-3.5	22-20 0-1	22-20 2-4	22-21 0-0.5	22-22 0-1.25	22-22 2.5-3	22-23 0-1	22-23 1-2	DUP4	22-24 0-1.25	DUP9
			Lab ID	WT2219243-003	WT2219243-004	WT2221344-002	WT2219243-006	WT2219243-008	WT2221344-003	WT2219243-010	WT2221344-004	WT2221344-005	WT2300985-001	WT2300985-002
			Sample Depth (m)	0.6 - 1.1	0 - 0.3	0.6 - 1.2	0 - 0.2	0 - 0.4	0.8 - 0.9	0 - 0.3	0.3 - 0.6	0.3 - 0.6	0 - 0.4	0 - 0.4
			Sample Date (d/m/y)	17-Oct-2022	17-Oct-2022	07-Nov-2022	18-Oct-2022	18-Oct-2022	07-Nov-2022	19-Oct-2022	07-Nov-2022	07-Nov-2022	13-Jan-2023	13-Jan-2023
Parameter	**Units**	**MDL**	**Table 7 SCS**											
Physical Characteristics														
moisture	%	0.25	NV	16.4	16.4	19.4	7.14	9.26	12	19.1	23.1	6.22	23	25.6
pH (1:2 soil:CaCl2-aq)	pH units	0.1	NV	--	--	--	--	--	--	--	--	--	--	--
Particle Size														
passing (0.0312 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (9.5 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.020 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (1.0 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (4.75 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.005 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.841 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (19 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.004 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.50 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (25.4 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.002 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.420 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (38.1 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.250 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (50.8 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.149 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (76.2 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.125 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (2.0 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.075 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.063 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
passing (0.05 mm)	%	1	NV	--	--	--	--	--	--	--	--	--	--	--
Metals														
antimony	mg/kg	0.1	7.5	--	<0.10	--	--	0.39	--	<0.10	--	--	<0.10	<0.10
arsenic	mg/kg	0.1	18	--	1.84	--	--	1.35	--	2.45	--	--	1.62	1.86
barium	mg/kg	0.5	390	--	231	--	--	66.1	--	175	--	--	261	327
beryllium	mg/kg	0.1	5	--	0.65	--	--	0.19	--	0.62	--	--	0.65	0.78
boron	mg/kg	5	120	--	6.9	--	--	5.6	--	5.6	--	--	<5.0	5.2
boron, hot water soluble	mg/kg	0.1	1.5	--	<0.10	--	--	0.18	--	0.26	--	--	<0.10	<0.10
cadmium	mg/kg	0.02	1.2	--	0.073	--	--	0.081	--	0.175	--	--	0.177	0.182
chromium	mg/kg	0.5	160	--	47.8	--	--	15	--	40	--	--	48.7	60.4
chromium, hexavalent	mg/kg	0.1	10	--	<0.50	--	--	<0.50	--	<0.50	--	--	0.3	0.41
cobalt	mg/kg	0.1	22	--	8.54	--	--	3.17	--	9.29	--	--	12.5	14.7
copper	mg/kg	0.5	180	--	19.6	--	--	10.5	--	16.6	--	--	17.4	20.8
lead	mg/kg	0.5	120	--	6.8	--	--	11	--	10.6	--	--	7.38	8.45
mercury	mg/kg	0.005	1.8	--	0.0256	--	--	0.0139	--	0.0315	--	--	0.0246	0.0259
molybdenum	mg/kg	0.1	6.9	--	0.33	--	--	0.56	--	0.62	--	--	0.3	0.35
nickel	mg/kg	0.5	130	--	23.5	--	--	7.1	--	20.7	--	--	25.1	31.3
selenium	mg/kg	0.2	2.4	--	<0.20	--	--	<0.20	--	0.27	--	--	<0.20	0.24
silver	mg/kg	0.1	25	--	0.11	--	--	<0.10	--	0.1	--	--	<0.10	<0.10
thallium	mg/kg	0.05	1	--	0.264	--	--	0.095	--	0.206	--	--	0.224	0.285
uranium	mg/kg	0.05	23	--	0.788	--	--	0.5	--	0.874	--	--	0.67	0.808
vanadium	mg/kg	0.2	86	--	49.7	--	--	18	--	52.4	--	--	63.7	78.2
zinc	mg/kg	2	340	--	62.6	--	--	39	--	77.1	--	--	72.4	88.1
Soluable Ions														
calcium, soluble ion content	mg/L	0.5	NV	--	--	--	--	--	--	--	--	--	--	--
magnesium, soluble ion content	mg/L	0.5	NV	--	--	--	--	--	--	--	--	--	--	--
sodium, soluble ion content	mg/L	0.5	NV	--	--	--	--	--	--	--	--	--	--	--
sodium adsorption ratio [SAR]	--	0.1	5	--	--	--	--	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)														
Acetone	mg/kg	0.5	28	--	--	<0.50	--	--	<0.50	--	<0.50	<0.50	<0.50	<0.50
benzene	mg/kg	0.005	0.17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
bromodichloromethane	mg/kg	0.05	13	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
bromoform	mg/kg	0.05	0.26	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
bromomethane	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
carbon tetrachloride	mg/kg	0.05	0.12	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
chlorobenzene	mg/kg	0.05	2.7	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
chloroform	mg/kg	0.05	0.17	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dibromochloromethane	mg/kg	0.05	9.4	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dibromoethane, 1,2-	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichlorobenzene, 1,2-	mg/kg	0.05	4.3	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichlorobenzene, 1,3-	mg/kg	0.05	6	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichlorobenzene, 1,4-	mg/kg	0.05	0.097	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichlorodifluoromethane	mg/kg	0.05	25	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloroethane, 1,1-	mg/kg	0.05	11	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloroethane, 1,2-	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloroethylene, 1,1-	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloroethylene, cis-1,2-	mg/kg	0.05	30	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloroethylene, trans-1,2-	mg/kg	0.05	0.75	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloromethane	mg/kg	0.045	0.96	--	--	<0.045	--	--	<0.045	--	0.046	<0.045	<0.045	<0.045
dichloropropane, 1,2-	mg/kg	0.05	0.085	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloropropylene, cis+trans-1,3-	mg/kg	0.05	0.083	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
dichloropropylene, cis-1,3-	mg/kg	0.03	NV	--	--	<0.030	--	--	<0.030	--	<0.030	<0.030	<0.030	<0.030
dichloropropylene, trans-1,3-	mg/kg	0.03	NV	--	--	<0.030	--	--	<0.030	--	<0.030	<0.030	<0.030	<0.030
ethylbenzene	mg/kg	0.015	15	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
hexane, n-	mg/kg	0.05	34	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
methyl ethyl ketone [MEK]	mg/kg	0.5	44	--	--	<0.50	--	--	<0.50	--	<0.50	<0.50	<0.50	<0.50
methyl isobutyl ketone [MIBK]	mg/kg	0.5	4.3	--	--	<0.50	--	--	<0.50	--	<0.50	<0.50	<0.50	<0.50
methyl-tert-butyl ether [MTBE]	mg/kg	0.04	1.4	--	--	<0.040	--	--	<0.040	--	<0.040	<0.040	<0.040	<0.040
styrene	mg/kg	0.05	2.2	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
tetrachloroethane, 1,1,1,2-	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
tetrachloroethane, 1,1,2,2-	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
tetrachloroethylene	mg/kg	0.05	2.3	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
toluene	mg/kg	0.05	6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trichloroethane, 1,1,1-	mg/kg	0.05	3.4	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
trichloroethane, 1,1,2-	mg/kg	0.05	0.05	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
trichloroethylene	mg/kg	0.01	0.52	--	--	<0.010	--	--	<0.010	--	<0.010	<0.010	<0.010	<0.010
trichlorofluoromethane	mg/kg	0.05	5.8	--	--	<0.050	--	--	<0.050	--	<0.050	<0.050	<0.050	<0.050
vinyl chloride	mg/kg	0.02	0.022	--	--	<0.020	--	--	<0.020	--	<0.020	<0.020	<0.020	<0.020
xylene, m+p-	mg/kg	0.03	NV	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylene, o-	mg/kg	0.03	NV	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylenes, total	mg/kg	0.05	25	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
BTEX, total	mg/kg	0.1	NV	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Petroleum Hydrocarbons (PHC)														
F1 (C6-C10)	mg/kg	5.0	65	<5.0	<5.0	--	<5.0	<5.0	--	<5.0	--	--	<5.0	<5.0
F2-naphthalene	mg/kg	25	NV	--	<25	--	--	<25	--	<25	--	--	<25	<25
F3-PAH	mg/kg	50	NV	--	64	--	--	63	--	<50	--	--	<50	<50
F1-BTEX	mg/kg	5.0	65	<5.0	<5.0	--	<5.0	<5.0	--	<5.0	--	--	<5.0	<5.0
F2 (C10-C16)	mg/kg	10	150	<10	<10	--	<10	<10	--	<10	--	--	<10	<10
F3 (C16-C34)	mg/kg	50	1300	<50	64	--	123	63	--	<50	--	--	<50	<50
F4 (C34-C50)	mg/kg	50	5600	<50	67	--	285	69	--	<50	--	--	<50	<50
F4G-sg	mg/kg	250	5600	--	--	--	--	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	mg/kg	80	NV	<80	131	--	408	132	--	<80	--	--	<80	<80
Polycyclic Aromatic Hydrocarbons (PAH)														
acenaphthene	mg/kg	0.05	58	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
acenaphthylene	mg/kg	0.05	0.17	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
anthracene	mg/kg	0.05	0.74	--	0.05	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
benz(a)anthracene	mg/kg	0.05	0.63	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
benzo(a)pyrene	mg/kg	0.05	0.3	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
benzo(b+j)fluoranthene	mg/kg	0.05	0.78	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
benzo(g,h,i)perylene	mg/kg	0.05	7.8	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
benzo(k)fluoranthene	mg/kg	0.05	0.78	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
chrysene	mg/kg	0.05	7.8	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
dibenz(a,h)anthracene	mg/kg	0.05	0.1	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
fluoranthene	mg/kg	0.05	0.69	--	0.062	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
fluorene	mg/kg	0.05	69	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
indeno(1,2,3-c,d)pyrene	mg/kg	0.05	0.48	--	<0.050	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
methylnaphthalene, 1+2-	mg/kg	0.05	3.4	--	0.134	--	--	<0.050	--	<0.050	--	--	<0.030	<0.030
methylnaphthalene, 1-	mg/kg	0.03	3.4	--	0.05	--	--	<0.030	--	<0.030	--	--	<0.030	<0.030
methylnaphthalene, 2-	mg/kg	0.03	3.4	--	0.084	--	--	<0.030	--	<0.030	--	--	<0.010	<0.010
naphthalene	mg/kg	0.01	0.75	--	0.086	--	--	<0.010	--	<0.010	--	--	<0.050	<0.050
phenanthrene	mg/kg	0.05	7.8	--	0.126	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
pyrene	mg/kg	0.05	78	--	0.092	--	--	<0.050	--	<0.050	--	--	<0.050	<0.050
PCBs														
Aroclor 1016	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	mg/kg	0.01	NV	<0.010	--	--	--	--	--	--	--	--	--	--
PCBs, total	mg/kg	0.03	0.35	<0.030	--	--	--	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
ND (0.00)	Concentration below the MDL
NV	No value specified in Table 3 SCS
BOLD	Concentration exceeds Table 3 SCS

Table 3: Soil Quality Results

			Borehole ID	BH22-25		MW22-26	MW22-27	MW22-28	MW22-29		MW22-30		MW22-31	
			Sample ID	22-25 3-4.5	22-25 7-8.5	22-26 0-1	22-27 0-1	22-28 0.25-1.5	22-29 0.25-1.5	22-29 2.5-3.75	22-30 0-1.75	DUP1	22-31 0-1	22-31 2.5-3.5
			Lab ID	WT2219243-014	WT2219243-015	WT2219243-016	WT2219243-017	WT2219916-001	WT2219916-002	WT2219916-003	WT2219916-004	WT2219916-005	WT2219916-006	WT2219916-007
			Sample Depth (m)	0.9 - 1.4	2.1 - 2.6	0 - 0.3	0 - 0.3	0.1 - 0.5	0.1 - 0.5	0.8 - 1.1	0 - 0.5	0 - 0.5	0 - 0.3	0.8 - 1.1
			Sample Date (d/m/y)	19-Oct-2022	19-Oct-2022	20-Oct-2022	20-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022	24-Oct-2022	24-Oct-2022
Parameter	**Units**	**MDL**	**Table 7 SCS**											
Physical Characteristics														
moisture	%	0.25	NV	24.1	23.4	18.6	16.3	11.1	8.67	16.4	17.9	17.6	10.2	--
pH (1:2 soil:CaCl2-aq)	pH units	0.1	NV	--	6.92	--	--	--	--	--	--	--	--	7.88
Particle Size														
passing (0.0312 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	35.4
passing (9.5 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	99.2
passing (0.020 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	30.3
passing (1.0 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	90.5
passing (4.75 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	98.6
passing (0.005 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	15.4
passing (0.841 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	89.3
passing (19 mm)	%	1	NV	100	--	--	--	--	--	--	--	--	--	100
passing (0.004 mm)	%	1	NV	98.3	--	--	--	--	--	--	--	--	--	13.7
passing (0.50 mm)	%	1	NV	98	--	--	--	--	--	--	--	--	--	82.9
passing (25.4 mm)	%	1	NV	95.4	--	--	--	--	--	--	--	--	--	100
passing (0.002 mm)	%	1	NV	94.7	--	--	--	--	--	--	--	--	--	9
passing (0.420 mm)	%	1	NV	90.7	--	--	--	--	--	--	--	--	--	81.2
passing (38.1 mm)	%	1	NV	86.2	--	--	--	--	--	--	--	--	--	100
passing (0.250 mm)	%	1	NV	85.3	--	--	--	--	--	--	--	--	--	71.5
passing (50.8 mm)	%	1	NV	83.3	--	--	--	--	--	--	--	--	--	100
passing (0.149 mm)	%	1	NV	74.9	--	--	--	--	--	--	--	--	--	60
passing (76.2 mm)	%	1	NV	65.8	--	--	--	--	--	--	--	--	--	100
passing (0.125 mm)	%	1	NV	56.6	--	--	--	--	--	--	--	--	--	55.8
passing (2.0 mm)	%	1	NV	51.3	--	--	--	--	--	--	--	--	--	97.1
passing (0.075 mm)	%	1	NV	38	--	--	--	--	--	--	--	--	--	47.1
passing (0.063 mm)	%	1	NV	36.6	--	--	--	--	--	--	--	--	--	44.2
passing (0.05 mm)	%	1	NV	32.5	--	--	--	--	--	--	--	--	--	41
Metals														
antimony	mg/kg	0.1	7.5	--	--	<0.10	<0.10	<0.10	<0.10	<0.10	0.2	0.14	<0.10	--
arsenic	mg/kg	0.1	18	--	--	2.16	0.87	1.67	2.51	2.87	2.28	2.07	1.92	--
barium	mg/kg	0.5	390	--	--	170	70.1	70.1	173	120	114	105	103	--
beryllium	mg/kg	0.1	5	--	--	0.63	0.29	0.23	0.33	0.46	0.44	0.4	0.29	--
boron	mg/kg	5	120	--	--	<5.0	<5.0	<5.0	8.5	<5.0	5.2	5	<5.0	--
boron, hot water soluble	mg/kg	0.1	1.5	--	--	0.14	0.14	0.11	0.4	0.16	0.29	0.3	0.14	--
cadmium	mg/kg	0.02	1.2	--	--	0.071	0.071	0.035	0.087	0.143	0.593	0.507	0.112	--
chromium	mg/kg	0.5	160	--	--	40.4	20.1	11.1	13.9	20.3	23.9	22.8	18.2	--
chromium, hexavalent	mg/kg	0.1	10	--	--	<0.50	<0.50	<0.10	<0.10	0.22	<0.10	<0.10	<0.10	--
cobalt	mg/kg	0.1	22	--	--	8.79	4.71	4.46	5.36	7.23	6.3	5.82	5.59	--
copper	mg/kg	0.5	180	--	--	20.4	6.33	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	--
lead	mg/kg	0.5	120	--	--	7.55	3.72	4.18	7.3	8.21	30.2	22.3	8.24	--
mercury	mg/kg	0.005	1.8	--	--	0.0375	0.0172	0.0068	0.0272	0.0445	0.0619	0.0557	0.0137	--
molybdenum	mg/kg	0.1	6.9	--	--	0.41	0.25	0.42	0.55	0.52	0.59	0.52	0.43	--
nickel	mg/kg	0.5	130	--	--	20.4	10.9	7.77	10.1	12.9	12.6	11.5	9.86	--
selenium	mg/kg	0.2	2.4	--	--	0.23	<0.20	<0.20	<0.20	0.24	0.35	0.36	<0.20	--
silver	mg/kg	0.1	25	--	--	<0.10	<0.10	<0.10	<0.10	0.12	0.11	0.11	<0.10	--
thallium	mg/kg	0.05	1	--	--	0.156	0.077	0.101	0.154	0.147	0.127	0.117	0.103	--
uranium	mg/kg	0.05	23	--	--	0.766	0.448	0.477	0.569	0.785	0.858	0.806	0.535	--
vanadium	mg/kg	0.2	86	--	--	49.8	25.4	22.5	21.6	33.8	35.4	33.9	26.9	--
zinc	mg/kg	2	340	--	--	50.3	30.8	15.4	20.4	31.8	106	87.2	29.4	--
Soluable Ions														
calcium, soluble ion content	mg/L	0.5	NV	17.6	--	--	--	--	--	--	--	--	--	--
magnesium, soluble ion content	mg/L	0.5	NV	3.05	--	--	--	--	--	--	--	--	--	--
sodium, soluble ion content	mg/L	0.5	NV	53.1	--	--	--	--	--	--	--	--	--	--
sodium adsorption ratio [SAR]	--	0.1	5	3.07	--	--	--	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)														
Acetone	mg/kg	0.5	28	--	--	<0.50	<0.50	--	--	--	--	--	--	--
benzene	mg/kg	0.005	0.17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
bromodichloromethane	mg/kg	0.05	13	--	--	<0.050	<0.050	--	--	--	--	--	--	--
bromoform	mg/kg	0.05	0.26	--	--	<0.050	<0.050	--	--	--	--	--	--	--
bromomethane	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
carbon tetrachloride	mg/kg	0.05	0.12	--	--	<0.050	<0.050	--	--	--	--	--	--	--
chlorobenzene	mg/kg	0.05	2.7	--	--	<0.050	<0.050	--	--	--	--	--	--	--
chloroform	mg/kg	0.05	0.17	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dibromochloromethane	mg/kg	0.05	9.4	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dibromoethane, 1,2-	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichlorobenzene, 1,2-	mg/kg	0.05	4.3	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichlorobenzene, 1,3-	mg/kg	0.05	6	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichlorobenzene, 1,4-	mg/kg	0.05	0.097	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichlorodifluoromethane	mg/kg	0.05	25	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloroethane, 1,1-	mg/kg	0.05	11	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloroethane, 1,2-	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloroethylene, 1,1-	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloroethylene, cis-1,2-	mg/kg	0.05	30	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloroethylene, trans-1,2-	mg/kg	0.05	0.75	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloromethane	mg/kg	0.045	0.96	--	--	<0.045	<0.045	--	--	--	--	--	--	--
dichloropropane, 1,2-	mg/kg	0.05	0.085	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloropropylene, cis+trans-1,3-	mg/kg	0.05	0.083	--	--	<0.050	<0.050	--	--	--	--	--	--	--
dichloropropylene, cis-1,3-	mg/kg	0.03	NV	--	--	<0.030	<0.030	--	--	--	--	--	--	--
dichloropropylene, trans-1,3-	mg/kg	0.03	NV	--	--	<0.030	<0.030	--	--	--	--	--	--	--
ethylbenzene	mg/kg	0.015	15	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	--
hexane, n-	mg/kg	0.05	34	--	--	<0.050	<0.050	--	--	--	--	--	--	--
methyl ethyl ketone [MEK]	mg/kg	0.5	44	--	--	<0.50	<0.50	--	--	--	--	--	--	--
methyl isobutyl ketone [MIBK]	mg/kg	0.5	4.3	--	--	<0.50	<0.50	--	--	--	--	--	--	--
methyl-tert-butyl ether [MTBE]	mg/kg	0.04	1.4	--	--	<0.040	<0.040	--	--	--	--	--	--	--
styrene	mg/kg	0.05	2.2	--	--	<0.050	<0.050	--	--	--	--	--	--	--
tetrachloroethane, 1,1,1,2-	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
tetrachloroethane, 1,1,2,2-	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
tetrachloroethylene	mg/kg	0.05	2.3	--	--	<0.050	<0.050	--	--	--	--	--	--	--
toluene	mg/kg	0.05	6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
trichloroethane, 1,1,1-	mg/kg	0.05	3.4	--	--	<0.050	<0.050	--	--	--	--	--	--	--
trichloroethane, 1,1,2-	mg/kg	0.05	0.05	--	--	<0.050	<0.050	--	--	--	--	--	--	--
trichloroethylene	mg/kg	0.01	0.52	--	--	<0.010	<0.010	--	--	--	--	--	--	--
trichlorofluoromethane	mg/kg	0.05	5.8	--	--	<0.050	<0.050	--	--	--	--	--	--	--
vinyl chloride	mg/kg	0.02	0.022	--	--	<0.020	<0.020	--	--	--	--	--	--	--
xylene, m+p-	mg/kg	0.03	NV	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	--
xylene, o-	mg/kg	0.03	NV	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	--
xylenes, total	mg/kg	0.05	25	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
BTEX, total	mg/kg	0.1	NV	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	--
Petroleum Hydrocarbons (PHC)														
F1 (C6-C10)	mg/kg	5.0	65	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
F2-naphthalene	mg/kg	25	NV	--	--	--	--	--	--	--	--	--	--	--
F3-PAH	mg/kg	50	NV	--	--	--	--	--	--	--	--	--	--	--
F1-BTEX	mg/kg	5.0	65	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
F2 (C10-C16)	mg/kg	10	150	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--
F3 (C16-C34)	mg/kg	50	1300	<50	<50	<50	<50	<50	58	<50	<50	55	<50	--
F4 (C34-C50)	mg/kg	50	5600	<50	<50	<50	<50	<50	76	<50	<50	53	119	--
F4G-sg	mg/kg	250	5600	--	--	--	--	--	--	--	--	--	720	--
hydrocarbons, total (C6-C50)	mg/kg	80	NV	<80	<80	<80	<80	<80	134	<80	<80	108	119	--
Polycyclic Aromatic Hydrocarbons (PAH)														
acenaphthene	mg/kg	0.05	58	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
acenaphthylene	mg/kg	0.05	0.17	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
anthracene	mg/kg	0.05	0.74	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
benz(a)anthracene	mg/kg	0.05	0.63	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	0.057	--
benzo(a)pyrene	mg/kg	0.05	0.3	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
benzo(b+j)fluoranthene	mg/kg	0.05	0.78	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
benzo(g,h,i)perylene	mg/kg	0.05	7.8	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
benzo(k)fluoranthene	mg/kg	0.05	0.78	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
chrysene	mg/kg	0.05	7.8	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	0.051	--
dibenz(a,h)anthracene	mg/kg	0.05	0.1	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
fluoranthene	mg/kg	0.05	0.69	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	0.112	--
fluorene	mg/kg	0.05	69	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
indeno(1,2,3-c,d)pyrene	mg/kg	0.05	0.48	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
methylnaphthalene, 1+2-	mg/kg	0.05	3.4	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	--
methylnaphthalene, 1-	mg/kg	0.03	3.4	--	--	--	--	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	--
methylnaphthalene, 2-	mg/kg	0.03	3.4	--	--	--	--	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	--
naphthalene	mg/kg	0.01	0.75	--	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--
phenanthrene	mg/kg	0.05	7.8	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	0.105	--
pyrene	mg/kg	0.05	78	--	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	0.083	--
PCBs														
Aroclor 1016	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1221	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1232	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1242	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1248	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1254	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1260	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1262	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
Aroclor 1268	mg/kg	0.01	NV	<0.010	<0.010	--	--	--	--	--	--	--	--	--
PCBs, total	mg/kg	0.03	0.35	<0.030	<0.030	--	--	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
ND (0.00)	Concentration below the MDL
NV	No value specified in Table 3 SCS
BOLD	Concentration exceeds Table 3 SCS

Table 3: Soil Quality Results

			Borehole ID	MW22-35	MW22-36	MW22-37	MW22-38		MW22-39			MW22-40		
			Sample ID	22-35 0-1	22-36 0-0.75	22-37 0-0.5	22-38 0-0.75	22-38 0.75-2	22-39 0.5-1	22-39 2.5-3.5	DUP7	22-40 0-1.5	22-40 2-3	22-41 2.75-4
			Lab ID	WT2220705-001	WT2221344-001	WT2221344-006	WT2221344-007	WT2221344-008	WT2222268-001	WT2222268-002	WT2222268-003	WT2222790-001	WT2222790-002	WT2223434-003
			Sample Depth (m)	0-0.3	0 - 0.2	0 - 0.2	0 - 0.2	0.2 - 0.6	0.2 - 0.3	0.8 - 1.1	0.2 - 0.3	0 - 0.5	0.6 - 0.9	0.8 - 1.2
			Sample Date (d/m/y)	02-Nov-2022	07-Nov-2022	08-Nov-2022	08-Nov-2022	08-Nov-2022	14-Nov-2022	14-Nov-2022	14-Nov-2022	17-Nov-2022	17-Nov-2022	23-Nov-2022
Parameter	**Units**	**MDL**	**Table 7 SCS**											
Physical Characteristics														
moisture	%	0.25	**NV**	10.6	22.2	15.5	9.63	4.57	17	14.3	17.1	17.6	12	12.2
pH (1:2 soil:CaCl2-aq)	pH units	0.1	**NV**	--	--	--	--	--	--	--	--	--	--	--
Particle Size														
passing (0.0312 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (9.5 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (0.020 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (1.0 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (4.75 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (0.005 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (0.841 mm)	%	1	**NV**	--	100	--	--	--	--	--	--	--	--	--
passing (19 mm)	%	1	**NV**	--	99.5	--	--	--	--	--	--	--	--	--
passing (0.004 mm)	%	1	**NV**	--	95.3	--	--	--	--	--	--	--	--	--
passing (0.50 mm)	%	1	**NV**	--	94.5	--	--	--	--	--	--	--	--	--
passing (25.4 mm)	%	1	**NV**	--	87	--	--	--	--	--	--	--	--	--
passing (0.002 mm)	%	1	**NV**	--	85.1	--	--	--	--	--	--	--	--	--
passing (0.420 mm)	%	1	**NV**	--	73.6	--	--	--	--	--	--	--	--	--
passing (38.1 mm)	%	1	**NV**	--	54.9	--	--	--	--	--	--	--	--	--
passing (0.250 mm)	%	1	**NV**	--	50.8	--	--	--	--	--	--	--	--	--
passing (50.8 mm)	%	1	**NV**	--	42.2	--	--	--	--	--	--	--	--	--
passing (0.149 mm)	%	1	**NV**	--	38	--	--	--	--	--	--	--	--	--
passing (76.2 mm)	%	1	**NV**	--	33.3	--	--	--	--	--	--	--	--	--
passing (0.125 mm)	%	1	**NV**	--	26	--	--	--	--	--	--	--	--	--
passing (2.0 mm)	%	1	**NV**	--	20.8	--	--	--	--	--	--	--	--	--
passing (0.075 mm)	%	1	**NV**	--	12.2	--	--	--	--	--	--	--	--	--
passing (0.063 mm)	%	1	**NV**	--	11	--	--	--	--	--	--	--	--	--
passing (0.05 mm)	%	1	**NV**	--	9.1	--	--	--	--	--	--	--	--	--
Metals														
antimony	mg/kg	0.1	**7.5**	0.12	<0.10	<0.10	--	--	--	--	--	--	--	--
arsenic	mg/kg	0.1	**18**	0.93	1.71	1.71	--	--	--	--	--	--	--	--
barium	mg/kg	0.5	**390**	33.9	118	100	--	--	--	--	--	--	--	--
beryllium	mg/kg	0.1	**5**	0.17	0.54	0.33	--	--	--	--	--	--	--	--
boron	mg/kg	5	**120**	<5.0	<5.0	5.9	--	--	--	--	--	--	--	--
boron, hot water soluble	mg/kg	0.1	**1.5**	0.13	0.22	0.38	--	--	--	--	--	--	--	--
cadmium	mg/kg	0.02	**1.2**	0.061	0.186	0.093	--	--	--	--	--	--	--	--
chromium	mg/kg	0.5	**160**	10	33	19.8	--	--	--	--	--	--	--	--
chromium, hexavalent	mg/kg	0.1	**10**	<0.10	<0.10	<0.10	--	--	--	--	--	--	--	--
cobalt	mg/kg	0.1	**22**	1.75	8.38	5.81	--	--	--	--	--	--	--	--
copper	mg/kg	0.5	**180**	12.3	9.63	14.1	--	--	--	--	--	--	--	--
lead	mg/kg	0.5	**120**	6.38	7.69	6.08	--	--	--	--	--	--	--	--
mercury	mg/kg	0.005	**1.8**	0.0133	0.0385	0.0193	--	--	--	--	--	--	--	--
molybdenum	mg/kg	0.1	**6.9**	0.67	0.39	0.43	--	--	--	--	--	--	--	--
nickel	mg/kg	0.5	**130**	4.79	15.7	11.1	--	--	--	--	--	--	--	--
selenium	mg/kg	0.2	**2.4**	<0.20	0.26	<0.20	--	--	--	--	--	--	--	--
silver	mg/kg	0.1	**25**	<0.10	<0.10	<0.10	--	--	--	--	--	--	--	--
thallium	mg/kg	0.05	**1**	<0.050	0.115	0.114	--	--	--	--	--	--	--	--
uranium	mg/kg	0.05	**23**	0.352	0.816	0.645	--	--	--	--	--	--	--	--
vanadium	mg/kg	0.2	**86**	13.5	46.6	31.1	--	--	--	--	--	--	--	--
zinc	mg/kg	2	**340**	19.9	54.6	32	--	--	--	--	--	--	--	--
Soluable Ions														
calcium, soluble ion content	mg/L	0.5	**NV**	--	--	--	--	--	--	--	--	--	--	--
magnesium, soluble ion content	mg/L	0.5	**NV**	--	--	--	--	--	--	--	--	--	--	--
sodium, soluble ion content	mg/L	0.5	**NV**	--	--	--	--	--	--	--	--	--	--	--
sodium adsorption ratio [SAR]	--	0.1	**5**	--	--	--	--	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)														
Acetone	mg/kg	0.5	**28**	<0.50	<0.50	--	--	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
benzene	mg/kg	0.005	**0.17**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
bromodichloromethane	mg/kg	0.05	**13**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
bromoform	mg/kg	0.05	**0.26**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
bromomethane	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
carbon tetrachloride	mg/kg	0.05	**0.12**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
chlorobenzene	mg/kg	0.05	**2.7**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
chloroform	mg/kg	0.05	**0.17**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dibromochloromethane	mg/kg	0.05	**9.4**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dibromoethane, 1,2-	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichlorobenzene, 1,2-	mg/kg	0.05	**4.3**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichlorobenzene, 1,3-	mg/kg	0.05	**6**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichlorobenzene, 1,4-	mg/kg	0.05	**0.097**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichlorodifluoromethane	mg/kg	0.05	**25**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloroethane, 1,1-	mg/kg	0.05	**11**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloroethane, 1,2-	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloroethylene, 1,1-	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloroethylene, cis-1,2-	mg/kg	0.05	**30**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloroethylene, trans-1,2-	mg/kg	0.05	**0.75**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloromethane	mg/kg	0.045	**0.96**	<0.045	<0.045	--	--	--	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
dichloropropane, 1,2-	mg/kg	0.05	**0.085**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloropropylene, cis+trans-1,3-	mg/kg	0.05	**0.083**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
dichloropropylene, cis-1,3-	mg/kg	0.03	**NV**	<0.030	<0.030	--	--	--	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
dichloropropylene, trans-1,3-	mg/kg	0.03	**NV**	<0.030	<0.030	--	--	--	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
ethylbenzene	mg/kg	0.015	**15**	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
hexane, n-	mg/kg	0.05	**34**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
methyl ethyl ketone [MEK]	mg/kg	0.5	**44**	<0.50	<0.50	--	--	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl isobutyl ketone [MIBK]	mg/kg	0.5	**4.3**	<0.50	<0.50	--	--	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl-tert-butyl ether [MTBE]	mg/kg	0.04	**1.4**	<0.040	<0.040	--	--	--	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
styrene	mg/kg	0.05	**2.2**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
tetrachloroethane, 1,1,1,2-	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
tetrachloroethane, 1,1,2,2-	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
tetrachloroethylene	mg/kg	0.05	**2.3**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
toluene	mg/kg	0.05	**6**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trichloroethane, 1,1,1-	mg/kg	0.05	**3.4**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trichloroethane, 1,1,2-	mg/kg	0.05	**0.05**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trichloroethylene	mg/kg	0.01	**0.52**	<0.010	<0.010	--	--	--	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
trichlorofluoromethane	mg/kg	0.05	**5.8**	<0.050	<0.050	--	--	--	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
vinyl chloride	mg/kg	0.02	**0.022**	<0.020	<0.020	--	--	--	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
xylene, m+p-	mg/kg	0.03	**NV**	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylene, o-	mg/kg	0.03	**NV**	<0.030	<0.030	<0.030	<0.141	<0.063	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
xylenes, total	mg/kg	0.05	**25**	<0.050	<0.050	<0.050	<0.144	<0.070	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
BTEX, total	mg/kg	0.1	**NV**	<0.10	<0.10	<0.10	<0.15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Petroleum Hydrocarbons (PHC)														
F1 (C6-C10)	mg/kg	5.0	**65**	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--
F2-naphthalene	mg/kg	25	**NV**	<25	--	<25	--	--	--	--	--	--	--	--
F3-PAH	mg/kg	50	**NV**	62	--	<50	--	--	--	--	--	--	--	--
F1-BTEX	mg/kg	5.0	**65**	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	--	--	--
F2 (C10-C16)	mg/kg	10	**150**	<10	<10	<10	<10	<10	--	--	--	--	--	--
F3 (C16-C34)	mg/kg	50	**1300**	62	<50	<50	<50	<50	--	--	--	--	--	--
F4 (C34-C50)	mg/kg	50	**5600**	75	<50	<50	<50	<50	--	--	--	--	--	--
F4G-sg	mg/kg	250	**5600**	430	--	--	--	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	mg/kg	80	**NV**	137	<80	<80	<80	<80	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)														
acenaphthene	mg/kg	0.05	**58**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
acenaphthylene	mg/kg	0.05	**0.17**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
anthracene	mg/kg	0.05	**0.74**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
benz(a)anthracene	mg/kg	0.05	**0.63**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
benzo(a)pyrene	mg/kg	0.05	**0.3**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	mg/kg	0.05	**0.78**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
benzo(g,h,i)perylene	mg/kg	0.05	**7.8**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
benzo(k)fluoranthene	mg/kg	0.05	**0.78**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
chrysene	mg/kg	0.05	**7.8**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
dibenz(a,h)anthracene	mg/kg	0.05	**0.1**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
fluoranthene	mg/kg	0.05	**0.69**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
fluorene	mg/kg	0.05	**69**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	mg/kg	0.05	**0.48**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	mg/kg	0.05	**3.4**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
methylnaphthalene, 1-	mg/kg	0.03	**3.4**	<0.030	--	<0.030	--	--	--	--	--	--	--	--
methylnaphthalene, 2-	mg/kg	0.03	**3.4**	<0.030	--	<0.030	--	--	--	--	--	--	--	--
naphthalene	mg/kg	0.01	**0.75**	<0.010	--	<0.010	--	--	--	--	--	--	--	--
phenanthrene	mg/kg	0.05	**7.8**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
pyrene	mg/kg	0.05	**78**	<0.050	--	<0.050	--	--	--	--	--	--	--	--
PCBs														
Aroclor 1016	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1221	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1232	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1242	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1248	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1254	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1260	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1262	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
Aroclor 1268	mg/kg	0.01	**NV**	--	--	--	<0.010	<0.010	--	--	--	--	--	--
PCBs, total	mg/kg	0.03	**0.35**	--	--	--	<0.030	<0.030	--	--	--	--	--	--

Notes:

Table 7 SCS — Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)

MDL — Method Detection Limit
ND (0.00) — Concentration below the MDL
NV — No value specified in Table 3 SCS
BOLD — Concentration exceeds Table 3 SCS

Table 3: Soil Quality Results

			Borehole ID	MW22-41	
			Sample ID	22-41 4-4.5	DUP 8
			Lab ID	WT2223434-001	WT2223434-002
			Sample Depth (m)	1.2 - 1.4	0.8 - 1.2
			Sample Date (d/m/y)	23-Nov-2022	23-Nov-2022
Parameter	**Units**	**MDL**	**Table 7 SCS**		
Physical Characteristics					
moisture	%	0.25	NV	13.5	12.3
pH (1:2 soil:CaCl2-aq)	pH units	0.1	NV	--	--
Particle Size					
passing (0.0312 mm)	%	1	NV	--	--
passing (9.5 mm)	%	1	NV	--	--
passing (0.020 mm)	%	1	NV	--	--
passing (1.0 mm)	%	1	NV	--	--
passing (4.75 mm)	%	1	NV	--	--
passing (0.005 mm)	%	1	NV	--	--
passing (0.841 mm)	%	1	NV	--	--
passing (19 mm)	%	1	NV	--	--
passing (0.004 mm)	%	1	NV	--	--
passing (0.50 mm)	%	1	NV	--	--
passing (25.4 mm)	%	1	NV	--	--
passing (0.002 mm)	%	1	NV	--	--
passing (0.420 mm)	%	1	NV	--	--
passing (38.1 mm)	%	1	NV	--	--
passing (0.250 mm)	%	1	NV	--	--
passing (50.8 mm)	%	1	NV	--	--
passing (0.149 mm)	%	1	NV	--	--
passing (76.2 mm)	%	1	NV	--	--
passing (0.125 mm)	%	1	NV	--	--
passing (2.0 mm)	%	1	NV	--	--
passing (0.075 mm)	%	1	NV	--	--
passing (0.063 mm)	%	1	NV	--	--
passing (0.05 mm)	%	1	NV	--	--
Metals					
antimony	mg/kg	0.1	7.5	--	--
arsenic	mg/kg	0.1	18	--	--
barium	mg/kg	0.5	390	--	--
beryllium	mg/kg	0.1	5	--	--
boron	mg/kg	5	120	--	--
boron, hot water soluble	mg/kg	0.1	1.5	--	--
cadmium	mg/kg	0.02	1.2	--	--
chromium	mg/kg	0.5	160	--	--
chromium, hexavalent	mg/kg	0.1	10	--	--
cobalt	mg/kg	0.1	22	--	--
copper	mg/kg	0.5	180	--	--
lead	mg/kg	0.5	120	--	--
mercury	mg/kg	0.005	1.8	--	--
molybdenum	mg/kg	0.1	6.9	--	--
nickel	mg/kg	0.5	130	--	--
selenium	mg/kg	0.2	2.4	--	--
silver	mg/kg	0.1	25	--	--
thallium	mg/kg	0.05	1	--	--
uranium	mg/kg	0.05	23	--	--
vanadium	mg/kg	0.2	86	--	--
zinc	mg/kg	2	340	--	--
Soluable Ions					
calcium, soluble ion content	mg/L	0.5	NV	--	--
magnesium, soluble ion content	mg/L	0.5	NV	--	--
sodium, soluble ion content	mg/L	0.5	NV	--	--
sodium adsorption ratio [SAR]	--	0.1	5	--	--
Volatiles Organic Compounds (VOC)					
Acetone	mg/kg	0.5	28	<0.50	<0.50
benzene	mg/kg	0.005	0.17	<0.0050	<0.0050
bromodichloromethane	mg/kg	0.05	13	<0.050	<0.050
bromoform	mg/kg	0.05	0.26	<0.050	<0.050
bromomethane	mg/kg	0.05	0.05	<0.050	<0.050
carbon tetrachloride	mg/kg	0.05	0.12	<0.050	<0.050
chlorobenzene	mg/kg	0.05	2.7	<0.050	<0.050
chloroform	mg/kg	0.05	0.17	<0.050	<0.050
dibromochloromethane	mg/kg	0.05	9.4	<0.050	<0.050
dibromoethane, 1,2-	mg/kg	0.05	0.05	<0.050	<0.050
dichlorobenzene, 1,2-	mg/kg	0.05	4.3	<0.050	<0.050
dichlorobenzene, 1,3-	mg/kg	0.05	6	<0.050	<0.050
dichlorobenzene, 1,4-	mg/kg	0.05	0.097	<0.050	<0.050
dichlorodifluoromethane	mg/kg	0.05	25	<0.050	<0.050
dichloroethane, 1,1-	mg/kg	0.05	11	<0.050	<0.050
dichloroethane, 1,2-	mg/kg	0.05	0.05	<0.050	<0.050
dichloroethylene, 1,1-	mg/kg	0.05	0.05	<0.050	<0.050
dichloroethylene, cis-1,2-	mg/kg	0.05	30	<0.050	<0.050
dichloroethylene, trans-1,2-	mg/kg	0.05	0.75	<0.050	<0.050
dichloromethane	mg/kg	0.045	0.96	<0.045	<0.045
dichloropropane, 1,2-	mg/kg	0.05	0.085	<0.050	<0.050
dichloropropylene, cis+trans-1,3-	mg/kg	0.05	0.083	<0.050	<0.050
dichloropropylene, cis-1,3-	mg/kg	0.03	NV	<0.030	<0.030
dichloropropylene, trans-1,3-	mg/kg	0.03	NV	<0.030	<0.030
ethylbenzene	mg/kg	0.015	15	<0.015	<0.015
hexane, n-	mg/kg	0.05	34	<0.050	<0.050
methyl ethyl ketone [MEK]	mg/kg	0.5	44	<0.50	<0.50
methyl isobutyl ketone [MIBK]	mg/kg	0.5	4.3	<0.50	<0.50
methyl-tert-butyl ether [MTBE]	mg/kg	0.04	1.4	<0.040	<0.040
styrene	mg/kg	0.05	2.2	<0.050	<0.050
tetrachloroethane, 1,1,1,2-	mg/kg	0.05	0.05	<0.050	<0.050
tetrachloroethane, 1,1,2,2-	mg/kg	0.05	0.05	<0.050	<0.050
tetrachloroethylene	mg/kg	0.05	2.3	<0.050	<0.050
toluene	mg/kg	0.05	6	<0.050	<0.050
trichloroethane, 1,1,1-	mg/kg	0.05	3.4	<0.050	<0.050
trichloroethane, 1,1,2-	mg/kg	0.05	0.05	<0.050	<0.050
trichloroethylene	mg/kg	0.01	0.52	<0.010	<0.010
trichlorofluoromethane	mg/kg	0.05	5.8	<0.050	<0.050
vinyl chloride	mg/kg	0.02	0.022	<0.020	<0.020
xylene, m+p-	mg/kg	0.03	NV	<0.030	<0.030
xylene, o-	mg/kg	0.03	NV	<0.030	<0.030
xylenes, total	mg/kg	0.05	25	<0.050	<0.050
BTEX, total	mg/kg	0.1	NV	<0.10	<0.10
Petroleum Hydrocarbons (PHC)					
F1 (C6-C10)	mg/kg	5.0	65	--	--
F2-naphthalene	mg/kg	25	NV	--	--
F3-PAH	mg/kg	50	NV	--	--
F1-BTEX	mg/kg	5.0	65	--	--
F2 (C10-C16)	mg/kg	10	150	--	--
F3 (C16-C34)	mg/kg	50	1300	--	--
F4 (C34-C50)	mg/kg	50	5600	--	--
F4G-sg	mg/kg	250	5600	--	--
hydrocarbons, total (C6-C50)	mg/kg	80	NV	--	--
Polycyclic Aromatic Hydrocarbons (PAH)					
acenaphthene	mg/kg	0.05	58	--	--
acenaphthylene	mg/kg	0.05	0.17	--	--
anthracene	mg/kg	0.05	0.74	--	--
benz(a)anthracene	mg/kg	0.05	0.63	--	--
benzo(a)pyrene	mg/kg	0.05	0.3	--	--
benzo(b+j)fluoranthene	mg/kg	0.05	0.78	--	--
benzo(g,h,i)perylene	mg/kg	0.05	7.8	--	--
benzo(k)fluoranthene	mg/kg	0.05	0.78	--	--
chrysene	mg/kg	0.05	7.8	--	--
dibenz(a,h)anthracene	mg/kg	0.05	0.1	--	--
fluoranthene	mg/kg	0.05	0.69	--	--
fluorene	mg/kg	0.05	69	--	--
indeno(1,2,3-c,d)pyrene	mg/kg	0.05	0.48	--	--
methylnaphthalene, 1+2-	mg/kg	0.05	3.4	--	--
methylnaphthalene, 1-	mg/kg	0.03	3.4	--	--
methylnaphthalene, 2-	mg/kg	0.03	3.4	--	--
naphthalene	mg/kg	0.01	0.75	--	--
phenanthrene	mg/kg	0.05	7.8	--	--
pyrene	mg/kg	0.05	78	--	--
PCBs					
Aroclor 1016	mg/kg	0.01	NV	--	--
Aroclor 1221	mg/kg	0.01	NV	--	--
Aroclor 1232	mg/kg	0.01	NV	--	--
Aroclor 1242	mg/kg	0.01	NV	--	--
Aroclor 1248	mg/kg	0.01	NV	--	--
Aroclor 1254	mg/kg	0.01	NV	--	--
Aroclor 1260	mg/kg	0.01	NV	--	--
Aroclor 1262	mg/kg	0.01	NV	--	--
Aroclor 1268	mg/kg	0.01	NV	--	--
PCBs, total	mg/kg	0.03	0.35	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
ND (0.00)	Concentration below the MDL
NV	No value specified in Table 3 SCS
BOLD	Concentration exceeds Table 3 SCS

Table 4: Groundwater Quality Results

			Borehole ID	BH4-10	MW21-01A		MW21-01B	MW22-01C	MW21-02A	MW21-02B
			Sample ID	BH4-10-6DEC22	MW21-01A-6DEC22	DUP5-6DEC22	MW21-01B-6DEC22	MW22-01C-6DEC22	MW21-02A-6DEC22	MW21-02B-6DEC22
			Lab ID	WT2224485-021	WT2224485-002	WT2224485-023	WT2224485-003	WT2224485-004	WT2224485-005	WT2224485-006
			Screen Depth (mbgs)	4.57 - 7.62	4.57 - 7.62	4.57 - 7.62	9.14 - 12.19	15.39 - 18.44	4.27 - 7.32	9.14 - 12.19
			Sample Date (y/m/d)	2022-12-06	2022-12-06	2022-12-06	2022-12-06	2022-12-06	2022-12-06	2022-12-06
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	**0.88**	**0.67**	**0.82**	<0.50	**0.84**	**0.65**
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	--	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	--	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	--	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	--	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW21-03A	MW21-03B	MW22-03C	MW21-04A	MW21-04B		MW22-04C
			Sample ID	MW21-03A-5DEC22	MW21-03B-5DEC22	MW22-03C-5DEC22	MW21-04A-5DEC22	MW21-04B-5DEC22	DUP3-5DEC22	MW22-04C-5DEC22
			Lab ID	WT2224326-009	WT2224326-010	WT2224326-011	WT2224326-003	WT2224326-004	WT2224326-014	WT2224326-005
			Screen Depth (mbgs)	4.27 - 7.32	9.14 - 12.19	15.24 - 18.29	5.94 - 8.99	9.75 - 12.80	9.75 - 12.80	15.24 - 18.29
			Sample Date (y/m/d)	2022-12-05	2022-12-05	2022-12-05	2022-12-05	2022-12-05	2022-12-05	2022-12-05
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	0.5	0.63	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	**0.53**	<0.50	<0.50	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	--	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	--	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	--	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	--	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW21-05A	MW21-05B	MW22-05C	MW21-06A	MW22-06B	MW21-07	MW21-08
			Sample ID	MW21-05A-5DEC22	MW21-05B-5DEC22	MW22-05C-5DEC22	MW21-06A-6DEC22	MW22-06B-6DEC22	MW21-07-6DEC22	MW21-08-5DEC22
			Lab ID	WT2224326-006	WT2224326-007	WT2224326-008	WT2224485-007	WT2224485-008	WT2224485-009	WT2224326-002
			Screen Depth (mbgs)	5.03 - 8.08	9.14 - 12.19	15.24 - 18.29	5.03 - 8.08	9.68 - 12.73	3.96 - 7.01	4.27 - 7.32
			Sample Date (y/m/d)	2022-12-05	2022-12-05	2022-12-05	2022-12-06	2022-12-06	2022-12-06	2022-12-05
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	**0.71**	**0.89**
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	<25	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	<100	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	<250	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	<250	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--	<25	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	<370	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW21-13A		MW21-13B	MW21-14A	MW22-14B	MW21-15A	MW22-15B
			Sample ID	MW21-13A-07DEC22	DUP6-07DEC22	MW21-13B-07DEC22	MW21-14A-6DEC22	MW22-14B-6DEC22	MW21-15A-6DEC22	MW22-15B-6DEC22
			Lab ID	WT2224609-001	WT2224609-023	WT2224609-002	WT2224485-010	WT2224485-011	WT2224485-012	WT2224485-013
			Screen Depth (mbgs)	4.57 - 7.62	4.57 - 7.62	9.14 - 12.19	5.18 - 8.23	9.75 - 12.80	4.88 - 7.92	9.75 - 12.80
			Sample Date (y/m/d)	2022-12-07	2022-12-07	2022-12-07	2022-12-06	2022-12-06	2022-12-06	2022-12-06
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	<1.00	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	<1.00	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	176	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	<0.200	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	<100	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	<0.0500	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	<5.00	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	<0.50	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	<1.00	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	5.12	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	<0.500	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	<0.0050	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	1.07	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	6.15	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	1.1	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	<0.100	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	418000	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	0.458	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	12.2	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	<5.00	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	<10.0	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.5**	<0.50	<0.50	**0.65**	<0.50	**0.73**	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	<25	<25	--	<25	--	--	--
F2 (C10-C16)	ug/L	100	**150**	<100	<100	--	<100	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	<100	--	--	--
F3 (C16-C34)	ug/L	250	**500**	<250	<250	--	<250	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	<250	--	--	--
F4 (C34-C50)	ug/L	250	**500**	<250	<250	--	<250	--	--	--
F1-BTEX	ug/L	25	**420**	<25	<25	--	<25	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	<370	<370	--	<370	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	<0.010	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	<0.010	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	<0.010	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	<0.010	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	<0.0050	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	<0.010	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	<0.010	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	<0.010	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	<0.010	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	<0.0050	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	<0.010	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	<0.010	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	<0.010	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	<0.015	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	<0.010	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	<0.010	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	<0.050	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	<0.020	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	<0.010	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW21-16A	MW22-16B	MW21-17A	MW22-17B	MW22-18	MW22-20	MW22-21
			Sample ID	MW21-16A-6DEC22	MW22-16B-6DEC22	MW21-17A-5DEC22	MW22-17B-5DEC22	22-18-01DEC22	22-20-01DEC22	22-21-01DEC22
			Lab ID	WT2224485-014	WT2224485-015	WT2224326-012	WT2224326-013	WT2224015-001	WT2224015-002	WT2224015-003
			Screen Depth (mbgs)	4.57 - 7.62	9.14 - 12.19	4.57 - 7.62	9.30 - 12.34	6.7 - 9.8	5.2 - 8.2	7.6 - 10.7
			Sample Date (y/m/d)	2022-12-06	2022-12-06	2022-12-05	2022-12-05	2022-12-01	2022-12-01	2022-12-01
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	3.73	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	3.46	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	123	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	<0.200	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	<100	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	<0.0500	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	<5.00	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	<0.50	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	45.4	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	<2.00	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	<0.500	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	<0.0050	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	16.4	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	71.9	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	4.58	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	<0.100	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	324000	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	0.556	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	46.8	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	<5.00	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	<10.0	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.97**	<0.50	**1.08**	<0.50	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	--	--	<25	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	--	--	<100	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	<100	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	--	--	<250	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	<250	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	--	--	<250	--
F1-BTEX	ug/L	25	**420**	--	--	--	--	--	<25	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	--	--	<370	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	<0.010	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	<0.010	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	<0.010	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	<0.010	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	<0.0050	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	<0.010	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	<0.010	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	<0.010	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	<0.010	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	<0.0050	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	<0.010	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	<0.010	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	<0.010	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	<0.015	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	<0.010	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	<0.010	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	<0.050	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	<0.020	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	<0.010	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-22	MW22-23	MW22-24		MW22-26		MW22-27
			Sample ID	22-22-01DEC22	22-23-01DEC22	22-24-01DEC22	DUP1-01DEC22	22-26-01DEC22	DUP2-01DEC22	22-27-01DEC22
			Lab ID	WT2224015-004	WT2224015-005	WT2224015-006	WT2224015-012	WT2224015-007	WT2224015-013	WT2224015-008
			Screen Depth (mbgs)	5.8 - 8.8	6.1 - 9.1	6.7 - 9.8	6.7 - 9.8	5.2 - 8.2	5.2 - 8.2	5.2 - 8.2
			Sample Date (y/m/d)	2022-12-01	2022-12-01	2022-12-01	2022-12-01	2022-12-01	2022-12-01	2022-12-01
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	<1.00	--	--	--	<0.10	<0.10	0.12
arsenic, dissolved	ug/L	0.10	**1500**	<1.00	--	--	--	0.12	0.12	0.16
barium, dissolved	ug/L	0.10	**23000**	278	--	--	--	87.5	87.6	62.8
beryllium, dissolved	ug/L	0.020	**53**	<0.200	--	--	--	<0.020	<0.020	<0.020
boron, dissolved	ug/L	10	**36000**	<100	--	--	--	15	15	11
cadmium, dissolved	ug/L	0.0050	**2.1**	<0.0500	--	--	--	<0.0050	<0.0050	0.0189
chromium, dissolved	ug/L	0.50	**640**	<5.00	--	--	--	<0.50	<0.50	0.57
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	<0.50	--	--	--	<0.50	<0.50	<0.50
cobalt, dissolved	ug/L	0.10	**52**	4.53	--	--	--	0.3	0.3	0.31
copper, dissolved	ug/L	0.20	**69**	16.5	--	--	--	4.63	4.57	7.03
lead, dissolved	ug/L	0.050	**20**	<0.500	--	--	--	<0.050	<0.050	0.633
mercury, dissolved	ug/L	0.0050	**0.1**	<0.0050	--	--	--	<0.0050	<0.0050	<0.0050
molybdenum, dissolved	ug/L	0.050	**7300**	6.7	--	--	--	0.701	0.682	1.24
nickel, dissolved	ug/L	0.50	**390**	9.45	--	--	--	1.05	1.07	0.96
selenium, dissolved	ug/L	0.050	**50**	0.95	--	--	--	0.254	0.261	0.581
silver, dissolved	ug/L	0.010	**1.2**	<0.100	--	--	--	0.011	<0.010	<0.010
sodium, dissolved	ug/L	50	**1800000**	514000	--	--	--	147000	144000	194000
thallium, dissolved	ug/L	0.010	**400**	0.106	--	--	--	0.076	0.075	0.053
uranium, dissolved	ug/L	0.010	**330**	13.8	--	--	--	1.48	1.5	1.88
vanadium, dissolved	ug/L	0.50	**200**	<5.00	--	--	--	<0.50	<0.50	<0.50
zinc, dissolved	ug/L	1.0	**890**	<10.0	--	--	--	<1.0	<1.0	1.7
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.99
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	0.71	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	<25	--	--	--	<25	<25	<25
F2 (C10-C16)	ug/L	100	**150**	<100	--	--	--	<100	<100	<100
F2-naphthalene	ug/L	100	**NV**	<100	--	--	--	<100	<100	<100
F3 (C16-C34)	ug/L	250	**500**	<250	--	--	--	<250	<250	<250
F3-PAH	ug/L	250	**NV**	<250	--	--	--	<250	<250	<250
F4 (C34-C50)	ug/L	250	**500**	<250	--	--	--	<250	<250	<250
F1-BTEX	ug/L	25	**420**	<25	--	--	--	<25	<25	<25
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	<370	--	--	--	<370	<370	<370
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	<0.010	--	--	--	<0.010	<0.010	<0.010
acenaphthylene	ug/L	0.010	**1**	<0.010	--	--	--	<0.010	<0.010	<0.010
anthracene	ug/L	0.010	**1**	<0.010	--	--	--	<0.010	<0.010	<0.010
benz(a)anthracene	ug/L	0.010	**1.8**	<0.010	--	--	--	<0.010	<0.010	<0.010
benzo(a)pyrene	ug/L	0.0050	**0.81**	<0.0050	--	--	--	<0.0050	<0.0050	<0.0050
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	<0.010	--	--	--	<0.010	<0.010	<0.010
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	<0.010	--	--	--	<0.010	<0.010	<0.010
benzo(k)fluoranthene	ug/L	0.010	**0.4**	<0.010	--	--	--	<0.010	<0.010	<0.010
chrysene	ug/L	0.010	**0.7**	<0.010	--	--	--	<0.010	<0.010	<0.010
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	<0.0050	--	--	--	<0.0050	<0.0050	<0.0050
fluoranthene	ug/L	0.010	**44**	<0.010	--	--	--	<0.010	<0.010	<0.010
fluorene	ug/L	0.010	**290**	<0.010	--	--	--	<0.010	<0.010	<0.010
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	<0.010	--	--	--	<0.010	<0.010	<0.010
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	<0.015	--	--	--	<0.015	<0.015	<0.015
methylnaphthalene, 1-	ug/L	0.010	**1500**	<0.010	--	--	--	<0.010	<0.010	<0.010
methylnaphthalene, 2-	ug/L	0.010	**1500**	<0.010	--	--	--	<0.010	<0.010	<0.010
naphthalene	ug/L	0.050	**7**	<0.050	--	--	--	<0.050	<0.050	<0.050
phenanthrene	ug/L	0.020	**380**	<0.020	--	--	--	<0.020	<0.020	<0.020
pyrene	ug/L	0.010	**5.7**	<0.010	--	--	--	<0.010	<0.010	<0.010

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-28	MW22-29	MW22-30	MW22-31	MW22-32	MW22-33	
			Sample ID	MW22-28-6DEC22	MW22-29-6DEC22	MW22-30-6DEC22	MW22-31-6DEC22	22-32-01DEC22	22-33-01DEC22	22-33-15DEC22
			Lab ID	WT2224485-016	WT2224485-017	WT2224485-018	WT2224485-019	WT2224015-009	WT2224015-010	WT2225424-001
			Screen Depth (mbgs)	5.03 - 8.08	6.71 - 9.75	6.10 - 9.14	4.57 - 7.62	5.2 - 8.2	5.2 - 8.2	5.2 - 8.2
			Sample Date (y/m/d)	2022-12-06	2022-12-06	2022-12-06	2022-12-06	2022-12-01	2022-12-01	2022-12-15
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	<1.00	<1.00	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	<1.00	<1.00	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	227	95.8	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	<0.200	<0.200	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	<100	<100	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	<0.0500	<0.0500	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	<5.00	<5.00	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	<0.50	<0.50	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	1.22	4.18	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	4.93	2.04	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	<0.500	<0.500	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	<0.0050	<0.0050	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	4.38	0.837	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	8.02	6.36	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	1.12	<0.500	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	<0.100	<0.100	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	388000	317000	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	0.352	0.152	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	14.8	11.7	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	<5.00	<5.00	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	<10.0	<10.0	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	0.64	**2.41**	0.84
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.84**	<0.50	<0.50	**1.37**	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	<25	<25	--	--	--	--	--
F2 (C10-C16)	ug/L	100	**150**	<100	<100	--	--	--	--	--
F2-naphthalene	ug/L	100	**NV**	<100	<100	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	<250	<250	--	--	--	--	--
F3-PAH	ug/L	250	**NV**	<250	<250	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	<250	<250	--	--	--	--	--
F1-BTEX	ug/L	25	**420**	<25	<25	--	--	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	<370	<370	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	<0.010	<0.010	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	<0.010	<0.010	--	--	--	--	--
anthracene	ug/L	0.010	**1**	<0.010	<0.010	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	<0.010	<0.010	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	<0.0050	<0.0050	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	<0.010	<0.010	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	<0.010	<0.010	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	<0.010	<0.010	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	<0.010	<0.010	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	<0.0050	<0.0050	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	<0.010	<0.010	--	--	--	--	--
fluorene	ug/L	0.010	**290**	<0.010	<0.010	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	<0.010	<0.010	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	<0.015	<0.015	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	<0.010	<0.010	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	<0.010	<0.010	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	<0.050	<0.050	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	<0.020	<0.020	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	<0.010	<0.010	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-34	MW22-35	MW22-36		MW22-37	MW22-38	
			Sample ID	MW22-34-5DEC22	MW22-35-6DEC22	22-36-01DEC22	22-36-15DEC22	MW22-37-5DEC22	MW22-38-6DEC22	DUP4-6DEC22
			Lab ID	WT2224485-001	WT2224485-020	WT2224015-011	WT2225424-002	WT2224326-001	WT2224485-024	WT2224485-022
			Screen Depth (mbgs)	4.83 - 7.87	4.98 - 7.87	4.9 - 7.9	4.9 - 7.9	5.72 - 8.76	5.41 - 8.46	5.41 - 8.46
			Sample Date (y/m/d)	2022-12-06	2022-12-06	2022-12-01	2022-12-15	2022-12-05	2022-12-06	2022-12-06
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	0.14	--	0.3	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	0.18	--	0.61	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	92.8	--	233	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	<0.020	--	<0.020	--	--
boron, dissolved	ug/L	10	**36000**	--	--	11	--	27	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	0.0666	--	0.0169	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	<0.50	--	<0.50	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	<0.50	--	<0.50	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	1.82	--	1.68	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	20.5	--	4.57	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	0.88	--	0.104	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	<0.0050	--	<0.0050	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	1.58	--	3.87	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	5.43	--	5.32	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	0.403	--	0.395	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	<0.010	--	<0.010	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	68400	--	177000	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	0.094	--	0.36	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	5.66	--	6.79	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	<0.50	--	<0.50	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	3.5	--	3	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	**3.69**	**2.4**	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**1.07**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	<25	--	<25	<25	<25
F2 (C10-C16)	ug/L	100	**150**	--	--	<100	--	<100	<100	<100
F2-naphthalene	ug/L	100	**NV**	--	--	<100	--	<100	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	<250	--	<250	<250	<250
F3-PAH	ug/L	250	**NV**	--	--	<250	--	<250	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	<250	--	<250	<250	<250
F1-BTEX	ug/L	25	**420**	--	--	<25	--	<25	<25	<25
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	<370	--	<370	<370	<370
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	<0.010	--	<0.010	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	<0.010	--	<0.010	--	--
anthracene	ug/L	0.010	**1**	--	--	<0.010	--	<0.010	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	<0.010	--	<0.010	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	<0.0050	--	<0.0050	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	<0.010	--	<0.010	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	<0.010	--	<0.010	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	<0.010	--	<0.010	--	--
chrysene	ug/L	0.010	**0.7**	--	--	<0.010	--	<0.010	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	<0.0050	--	<0.0050	--	--
fluoranthene	ug/L	0.010	**44**	--	--	<0.010	--	<0.010	--	--
fluorene	ug/L	0.010	**290**	--	--	<0.010	--	<0.010	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	<0.010	--	<0.010	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	<0.015	--	<0.015	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	<0.010	--	<0.010	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	<0.010	--	<0.010	--	--
naphthalene	ug/L	0.050	**7**	--	--	<0.050	--	<0.050	--	--
phenanthrene	ug/L	0.020	**380**	--	--	<0.020	--	<0.020	--	--
pyrene	ug/L	0.010	**5.7**	--	--	<0.010	--	<0.010	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-39 Port 1	MW22-39 Port 3	MW22-39 Port 4	MW22-39 Port 5	MW22-39 Port 6		MW22-39 Port 7
			Sample ID	MW22-39-01-07DEC22	MW22-39-03-07DEC22	MW22-39-04-07DEC22	MW22-39-05-07DEC22	MW22-39-06-07DEC22	DUP7-07DEC22	MW22-39-07-07DEC22
			Lab ID	WT2224609-003	WT2224609-004	WT2224609-005	WT2224609-006	WT2224609-007	WT2224609-024	WT2224609-008
			Screen Depth (mbgs)	7.62 - 9.14	14.33 - 16.15	18.29 - 19.81	21.34 - 22.86	24.38 - 25.91	24.38 - 25.91	27.43 - 30.48
			Sample Date (y/m/d)	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	0.62	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	**1.48**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.7**	<0.50	<0.50	<0.50	**0.81**	**0.64**	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	--	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	--	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	--	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	--	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-40 Port 1	MW22-40 Port 2	MW22-40 Port 3	MW22-40 Port 4	MW22-40 Port 5	MW22-40 Port 6	MW22-40 Port 7
			Sample ID	MW22-40-01-07DEC22	MW22-40-02-07DEC22	MW22-40-03-07DEC22	MW22-40-04-07DEC22	MW22-40-05-07DEC22	MW22-40-06-07DEC22	MW22-40-07-07DEC22
			Lab ID	WT2224609-009	WT2224609-010	WT2224609-011	WT2224609-012	WT2224609-013	WT2224609-014	WT2224609-015
			Screen Depth (mbgs)	6.10 - 9.14	10.67 - 13.72	15.24 - 18.29	20.73 - 23.77	24.38 - 26.52	27.13 - 27.97	28.52 - 30.56
			Sample Date (y/m/d)	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	27	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	1.23	0.98	<0.50	<0.50	0.81	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	0.84	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.53**	<0.50	<0.50	<0.50	**0.66**	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	0.45	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	--	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	--	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	--	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	--	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-41 Port 1		MW22-41 Port 2	MW22-41 Port 3	MW22-41 Port 4	MW22-41 Port 5	MW22-41 Port 6
			Sample ID	MW22-41-01-07DEC22	DUP8-07DEC22	MW22-41-02-07DEC22	MW22-41-03-07DEC22	MW22-41-04-07DEC22	MW22-41-05-07DEC22	MW22-41-06-07DEC22
			Lab ID	WT2224609-016	WT2224609-025	WT2224609-017	WT2224609-018	WT2224609-019	WT2224609-020	WT2224609-021
			Screen Depth (mbgs)	6.10 - 9.14	6.10 - 9.14	13.72 - 16.76	17.68 - 20.73	21.34 - 23.47	24.08 - 25.60	26.21 - 27.74
			Sample Date (y/m/d)	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Metals										
antimony, dissolved	ug/L	0.10	**16000**	--	--	--	--	--	--	--
arsenic, dissolved	ug/L	0.10	**1500**	--	--	--	--	--	--	--
barium, dissolved	ug/L	0.10	**23000**	--	--	--	--	--	--	--
beryllium, dissolved	ug/L	0.020	**53**	--	--	--	--	--	--	--
boron, dissolved	ug/L	10	**36000**	--	--	--	--	--	--	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--	--	--	--	--	--	--
chromium, dissolved	ug/L	0.50	**640**	--	--	--	--	--	--	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--	--	--	--	--	--	--
cobalt, dissolved	ug/L	0.10	**52**	--	--	--	--	--	--	--
copper, dissolved	ug/L	0.20	**69**	--	--	--	--	--	--	--
lead, dissolved	ug/L	0.050	**20**	--	--	--	--	--	--	--
mercury, dissolved	ug/L	0.0050	**0.1**	--	--	--	--	--	--	--
molybdenum, dissolved	ug/L	0.050	**7300**	--	--	--	--	--	--	--
nickel, dissolved	ug/L	0.50	**390**	--	--	--	--	--	--	--
selenium, dissolved	ug/L	0.050	**50**	--	--	--	--	--	--	--
silver, dissolved	ug/L	0.010	**1.2**	--	--	--	--	--	--	--
sodium, dissolved	ug/L	50	**1800000**	--	--	--	--	--	--	--
thallium, dissolved	ug/L	0.010	**400**	--	--	--	--	--	--	--
uranium, dissolved	ug/L	0.010	**330**	--	--	--	--	--	--	--
vanadium, dissolved	ug/L	0.50	**200**	--	--	--	--	--	--	--
zinc, dissolved	ug/L	1.0	**890**	--	--	--	--	--	--	--
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	**10.2**	**8.24**	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	**0.73**	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	--	--	--	--	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--	--	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--	--	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--	--	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--	--	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--	--	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (PAH)										
acenaphthene	ug/L	0.010	**17**	--	--	--	--	--	--	--
acenaphthylene	ug/L	0.010	**1**	--	--	--	--	--	--	--
anthracene	ug/L	0.010	**1**	--	--	--	--	--	--	--
benz(a)anthracene	ug/L	0.010	**1.8**	--	--	--	--	--	--	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--	--	--	--	--	--	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--	--	--	--	--	--	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--	--	--	--	--	--	--
chrysene	ug/L	0.010	**0.7**	--	--	--	--	--	--	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--	--	--	--	--	--	--
fluoranthene	ug/L	0.010	**44**	--	--	--	--	--	--	--
fluorene	ug/L	0.010	**290**	--	--	--	--	--	--	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--	--	--	--	--	--	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--	--	--	--	--	--	--
naphthalene	ug/L	0.050	**7**	--	--	--	--	--	--	--
phenanthrene	ug/L	0.020	**380**	--	--	--	--	--	--	--
pyrene	ug/L	0.010	**5.7**	--	--	--	--	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 4: Groundwater Quality Results

			Borehole ID	MW22-41 Port 7
			Sample ID	MW22-41-07-07DEC22
			Lab ID	WT2224609-022
			Screen Depth (mbgs)	28.35 - 30.51
			Sample Date (y/m/d)	2022-12-07
Parameter	**Units**	**MDL**	**Table 7 SCS**	
Metals				
antimony, dissolved	ug/L	0.10	**16000**	--
arsenic, dissolved	ug/L	0.10	**1500**	--
barium, dissolved	ug/L	0.10	**23000**	--
beryllium, dissolved	ug/L	0.020	**53**	--
boron, dissolved	ug/L	10	**36000**	--
cadmium, dissolved	ug/L	0.0050	**2.1**	--
chromium, dissolved	ug/L	0.50	**640**	--
chromium, hexavalent [Cr VI], dissolved	ug/L	0.50	**110**	--
cobalt, dissolved	ug/L	0.10	**52**	--
copper, dissolved	ug/L	0.20	**69**	--
lead, dissolved	ug/L	0.050	**20**	--
mercury, dissolved	ug/L	0.0050	**0.1**	--
molybdenum, dissolved	ug/L	0.050	**7300**	--
nickel, dissolved	ug/L	0.50	**390**	--
selenium, dissolved	ug/L	0.050	**50**	--
silver, dissolved	ug/L	0.010	**1.2**	--
sodium, dissolved	ug/L	50	**1800000**	--
thallium, dissolved	ug/L	0.010	**400**	--
uranium, dissolved	ug/L	0.010	**330**	--
vanadium, dissolved	ug/L	0.50	**200**	--
zinc, dissolved	ug/L	1.0	**890**	--
Volatiles Organic Compounds (VOC)				
Acetone	ug/L	20	**100000**	<20
benzene	ug/L	0.50	**0.5**	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50
bromoform	ug/L	0.50	**5**	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50
chloroform	ug/L	0.50	**2**	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50
styrene	ug/L	0.50	**43**	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50
toluene	ug/L	0.50	**320**	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0
Petroleum Hydrocarbons (PHC)				
F1 (C6-C10)	ug/L	25	**420**	--
F2 (C10-C16)	ug/L	100	**150**	--
F2-naphthalene	ug/L	100	**NV**	--
F3 (C16-C34)	ug/L	250	**500**	--
F3-PAH	ug/L	250	**NV**	--
F4 (C34-C50)	ug/L	250	**500**	--
F1-BTEX	ug/L	25	**420**	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--
Polycyclic Aromatic Hydrocarbons (PAH)				
acenaphthene	ug/L	0.010	**17**	--
acenaphthylene	ug/L	0.010	**1**	--
anthracene	ug/L	0.010	**1**	--
benz(a)anthracene	ug/L	0.010	**1.8**	--
benzo(a)pyrene	ug/L	0.0050	**0.81**	--
benzo(b+j)fluoranthene	ug/L	0.010	**0.75**	--
benzo(g,h,i)perylene	ug/L	0.010	**0.2**	--
benzo(k)fluoranthene	ug/L	0.010	**0.4**	--
chrysene	ug/L	0.010	**0.7**	--
dibenz(a,h)anthracene	ug/L	0.0050	**0.4**	--
fluoranthene	ug/L	0.010	**44**	--
fluorene	ug/L	0.010	**290**	--
indeno(1,2,3-c,d)pyrene	ug/L	0.010	**0.2**	--
methylnaphthalene, 1+2-	ug/L	0.015	**1500**	--
methylnaphthalene, 1-	ug/L	0.010	**1500**	--
methylnaphthalene, 2-	ug/L	0.010	**1500**	--
naphthalene	ug/L	0.050	**7**	--
phenanthrene	ug/L	0.020	**380**	--
pyrene	ug/L	0.010	**5.7**	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 5: Soil Quality Maximums

			Borehole ID	MW22-13B	
			Sample ID	22-13B 0-2	DUP6
			Lab ID	WT2221612-006	WT2221612-007
			Sample Depth (m)	0 - 0.6	0 - 0.6
			Sample Date (d/m/y)	10-Nov-2022	10-Nov-2022
Parameter	**Units**	**MDL**	**Table 7 SCS**		
Soluable Ions					
sodium adsorption ratio [SAR]	--	0.1	**5**	**8.15**	**9.43**
Petroleum Hydrocarbons (PHC)					
F4G-sg	mg/kg	250	**5600**	**7130**	**7740**

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential/Parkland/Institutional land use with fine grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
ND (0.00)	Concentration below the MDL
NV	No value specified in Table 3 SCS
BOLD	Concentration exceeds Table 3 SCS

Table 6: Groundwater Quality Maximums

			Borehole ID	MW21-01A		MW21-01B	MW21-02A	MW21-02B	MW21-03B	MW21-07
			Sample ID	MW21-01A-6DEC22	DUP5-6DEC22	MW21-01B-6DEC22	MW21-02A-6DEC22	MW21-02B-6DEC22	MW21-03B-5DEC22	MW21-07-6DEC22
			Lab ID	WT2224485-002	WT2224485-023	WT2224485-003	WT2224485-005	WT2224485-006	WT2224326-010	WT2224485-009
			Screen Depth (mbgs)	4.57 - 7.62	4.57 - 7.62	9.14 - 12.19	4.27 - 7.32	9.14 - 12.19	9.14 - 12.19	3.96 - 7.01
			Sample Date (y/m/d)	2022-12-06	2022-12-06	2022-12-06	2022-12-06	2022-12-06	2022-12-05	2022-12-06
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Volatiles Organic Compounds (VOC)										
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.88**	**0.67**	**0.82**	**0.84**	**0.65**	**0.53**	**0.71**

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 6: Groundwater Quality Maximums

			Borehole ID	MW21-08	MW21-13A	MW21-14A	MW21-15A	MW21-16A	MW21-17A	MW22-28
			Sample ID	MW21-08-5DEC22	MW21-13A-07DEC22	MW21-14A-6DEC22	MW21-15A-6DEC22	MW21-16A-6DEC22	MW21-17A-5DEC22	MW22-28-6DEC22
			Lab ID	WT2224326-002	WT2224609-001	WT2224485-010	WT2224485-012	WT2224485-014	WT2224326-012	WT2224485-016
			Screen Depth (mbgs)	4.27 - 7.32	4.57 - 7.62	5.18 - 8.23	4.88 - 7.92	4.57 - 7.62	4.57 - 7.62	5.03 - 8.08
			Sample Date (y/m/d)	2022-12-05	2022-12-07	2022-12-06	2022-12-06	2022-12-06	2022-12-05	2022-12-06
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Volatiles Organic Compounds (VOC)										
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.89**	**0.5**	**0.65**	**0.73**	**0.97**	**1.08**	**0.84**

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SC

Table 6: Groundwater Quality Maximums

			Borehole ID	MW22-31	MW22-33	MW22-34	MW22-36		MW22-39 Port 1	MW22-39 Port 6
			Sample ID	MW22-31-6DEC22	22-33-01DEC22	MW22-34-5DEC22	22-36-01DEC22	22-36-15DEC22	MW22-39-01-07DEC22	MW22-39-06-07DEC22
			Lab ID	WT2224485-019	WT2224015-010	WT2224485-001	WT2224015-011	WT2225424-002	WT2224609-003	WT2224609-007
			Screen Depth (mbgs)	4.57 - 7.62	5.2 - 8.2	4.83 - 7.87	4.9 - 7.9	4.9 - 7.9	7.62 - 9.14	24.38 - 25.91
			Sample Date (y/m/d)	2022-12-06	2022-12-01	2022-12-06	2022-12-01	2022-12-15	2022-12-07	2022-12-07
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Volatiles Organic Compounds (VOC)										
chloroform	ug/L	0.50	**2**	<0.50	**2.41**	<0.50	**3.69**	**2.40**	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	**1.48**	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**1.37**	<0.50	**1.07**	<0.50	<0.50	**0.7**	**0.81**

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SC

Table 6: Groundwater Quality Maximums

			Borehole ID	MW22-39 Port 6	MW22-40 Port 1	MW22-40 Port 5	MW22-41 Port 1		MW22-41 Port 5
			Sample ID	DUP7-07DEC22	MW22-40-01-07DEC22	MW22-40-05-07DEC22	MW22-41-01-07DEC22	DUP8-07DEC22	MW22-41-05-07DEC22
			Lab ID	WT2224609-024	WT2224609-009	WT2224609-013	WT2224609-016	WT2224609-025	WT2224609-020
			Screen Depth (mbgs)	24.38 - 25.91	6.10 - 9.14	24.38 - 26.52	6.10 - 9.14	6.10 - 9.14	24.08 - 25.60
			Sample Date (y/m/d)	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07	2022-12-07
Parameter	**Units**	**MDL**	**Table 7 SCS**						
Volatiles Organic Compounds (VOC)									
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	**10.2**	**8.24**	<0.50
trichloroethylene	ug/L	0.50	**0.5**	**0.64**	**0.53**	**0.66**	<0.50	<0.50	**0.73**

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SC

Table 7: Groundwater QA/QC - Trip Blanks and Field Blanks

				Trip Blanks						
			Sample ID	TB1-1DEC22	TB2-5DEC22	TB3-6DEC22	TB4-07DEC22	TB5-15DEC22	FB1-1DEC22	FB2-5DEC22
			Lab ID	WT2224015-014	WT2224326-015	WT2224485-025	WT2224609-026	WT2225424-004	WT2224015-015	WT2224326-016
			Sample Date (y/m/d)	2022-12-01	2022-12-05	2022-12-06	2022-12-07	2022-12-15	2022-12-01	2022-12-05
Parameter	**Units**	**MDL**	**Table 7 SCS**							
Volatiles Organic Compounds (VOC)										
Acetone	ug/L	20	**100000**	<20	<20	<20	<20	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	2.2	3	<1.5	1.3	<1.0	<1.0	<1.0
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Petroleum Hydrocarbons (PHC)										
F1 (C6-C10)	ug/L	25	**420**	<25	--	<25	<25	--	--	--
F2 (C10-C16)	ug/L	100	**150**	<100	--	--	<100	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--		--	--	--
F3 (C16-C34)	ug/L	250	**500**	<250	--	--	<250	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--		--	--	--
F4 (C34-C50)	ug/L	250	**500**	<250	--	--	<250	--	--	--
F1-BTEX	ug/L	25	**420**	<25	--	<25	<25	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	<370	--	--	<370	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, all land use with coarse grained soil, of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental P 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 7: Groundwater QA/QC - Trip Blanks and Field Blanks

				Field Blanks		
			Sample ID	FB3-6DEC22	FB4-07DEC22	FB5-15DEC22
			Lab ID	WT2224485-026	WT2224609-027	WT2225424-003
			Sample Date (y/m/d)	2022-12-06	2022-12-07	2022-12-15
Parameter	**Units**	**MDL**	**Table 7 SCS**			
Volatiles Organic Compounds (VOC)						
Acetone	ug/L	20	**100000**	<20	<20	<20
benzene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
bromodichloromethane	ug/L	0.50	**67000**	<0.50	<0.50	<0.50
bromoform	ug/L	0.50	**5**	<0.50	<0.50	<0.50
bromomethane	ug/L	0.50	**0.89**	<0.50	<0.50	<0.50
carbon tetrachloride	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20
chlorobenzene	ug/L	0.50	**140**	<0.50	<0.50	<0.50
chloroform	ug/L	0.50	**2**	<0.50	<0.50	<0.50
dibromochloromethane	ug/L	0.50	**65000**	<0.50	<0.50	<0.50
dibromoethane, 1,2-	ug/L	0.20	**0.2**	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	ug/L	0.50	**150**	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	ug/L	0.50	**7600**	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
dichlorodifluoromethane	ug/L	0.50	**3500**	<0.50	<0.50	<0.50
dichloroethane, 1,1-	ug/L	0.50	**11**	<0.50	<0.50	<0.50
dichloroethane, 1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	ug/L	0.50	**1.6**	<0.50	<0.50	<0.50
dichloromethane	ug/L	1.0	**26**	<1.0	<1.0	2.2
dichloropropane, 1,2-	ug/L	0.50	**0.58**	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30
ethylbenzene	ug/L	0.50	**54**	<0.50	<0.50	<0.50
hexane, n-	ug/L	0.50	**5**	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	ug/L	20	**21000**	<20	<20	<20
methyl isobutyl ketone [MIBK]	ug/L	20	**5200**	<20	<20	<20
methyl-tert-butyl ether [MTBE]	ug/L	0.50	**15**	<0.50	<0.50	<0.50
styrene	ug/L	0.50	**43**	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	ug/L	0.50	**1.1**	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
tetrachloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
toluene	ug/L	0.50	**320**	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	ug/L	0.50	**23**	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
trichloroethylene	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
trichlorofluoromethane	ug/L	0.50	**2000**	<0.50	<0.50	<0.50
vinyl chloride	ug/L	0.50	**0.5**	<0.50	<0.50	<0.50
xylene, m+p-	ug/L	0.40	**NV**	<0.40	<0.40	<0.40
xylene, o-	ug/L	0.30	**NV**	<0.30	<0.30	<0.30
xylenes, total	ug/L	0.50	**72**	<0.50	<0.50	<0.50
BTEX, total	ug/L	1.0	**NV**	<1.0	<1.0	<1.0
Petroleum Hydrocarbons (PHC)						
F1 (C6-C10)	ug/L	25	**420**	--	--	--
F2 (C10-C16)	ug/L	100	**150**	--	--	--
F2-naphthalene	ug/L	100	**NV**	--	--	--
F3 (C16-C34)	ug/L	250	**500**	--	--	--
F3-PAH	ug/L	250	**NV**	--	--	--
F4 (C34-C50)	ug/L	250	**500**	--	--	--
F1-BTEX	ug/L	25	**420**	--	--	--
hydrocarbons, total (C6-C50)	ug/L	240	**NV**	--	--	--

Notes:

Table 7 SCS	Table 7: Generic Site Condition StandProtection Act (Ontario Ministry of the Environment, 2011)
MDL	Method Detection Limit
<0.00	Concentration below the MDL
NV	No value specified in Table 7 SCS
BOLD	Concentration exceeds Table 7 SCS

Table 8: Soil QA/QC Results - RPD

			Sample ID	22-30 0-1.75	DUP1	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2219916-004	WT2219916-005		
			Sample Depth (mbgs	0 - 0.5	0 - 0.5		
			Sample Date (d/m/y	21-Oct-2022	21-Oct-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		17.9	17.6	1.7	Y
Metals							
antimony	mg/kg	0.1		0.2	0.14	35.3	Y
arsenic	mg/kg	0.1		2.28	2.07	9.7	Y
barium	mg/kg	0.5		114	105	8.2	Y
beryllium	mg/kg	0.1		0.44	0.4	9.5	Y
boron	mg/kg	5		5.2	5	3.9	Y
boron, hot water soluble	mg/kg	0.1		0.29	0.3	3.4	Y
cadmium	mg/kg	0.02		0.593	0.507	15.6	Y
chromium	mg/kg	0.5		23.9	22.8	4.7	Y
cobalt	mg/kg	0.1		6.3	5.82	7.9	Y
lead	mg/kg	0.5		30.2	22.3	30.1	Y
mercury	mg/kg	0.005		0.0619	0.0557	10.5	Y
molybdenum	mg/kg	0.1		0.59	0.52	12.6	Y
nickel	mg/kg	0.5		12.6	11.5	9.1	Y
selenium	mg/kg	0.2		0.35	0.36	2.8	Y
silver	mg/kg	0.1		0.11	0.11	0.0	Y
thallium	mg/kg	0.05		0.127	0.117	8.2	Y
uranium	mg/kg	0.05		0.858	0.806	6.2	Y
vanadium	mg/kg	0.2		35.4	33.9	4.3	Y
zinc	mg/kg	2		106	87.2	19.5	Y

			Sample ID	22-14B 0-2	DUP2	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2219916-008	WT2219916-010		
			Sample Depth (mbgs	0 - 0.6	0 - 0.6		
			Sample Date (d/m/y	24-Oct-2022	24-Oct-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		9.14	12	27.1	Y
Metals							
arsenic	mg/kg	0.1		1.68	1.76	4.7	Y
barium	mg/kg	0.5		195	188	3.7	Y
beryllium	mg/kg	0.1		0.31	0.34	9.2	Y
boron	mg/kg	5		7.8	7.4	5.3	Y
boron, hot water soluble	mg/kg	0.1		0.21	0.17	21.1	Y
cadmium	mg/kg	0.02		0.069	0.074	7.0	Y
chromium	mg/kg	0.5		14.8	15.4	4.0	Y
cobalt	mg/kg	0.1		4.64	4.94	6.3	Y
lead	mg/kg	0.5		7.21	7.83	8.2	Y
mercury	mg/kg	0.005		0.0178	0.018	1.1	Y
molybdenum	mg/kg	0.1		0.48	0.49	2.1	Y
nickel	mg/kg	0.5		10.1	10.8	6.7	Y
thallium	mg/kg	0.05		0.147	0.152	3.3	Y
uranium	mg/kg	0.05		0.488	0.504	3.2	Y
vanadium	mg/kg	0.2		24.2	25.3	4.4	Y
zinc	mg/kg	2		20.7	22	6.1	Y
Petroleum Hydrocarbons (PHC							
F3 (C16-C34)	mg/kg	50		536	628	15.8	Y
F4 (C34-C50)	mg/kg	50		1070	1290	18.6	Y
F4G-sg	mg/kg	250		3900	4950	23.7	Y
hydrocarbons, total (C6-C50)	mg/kg	80		1610	1920	17.6	Y
Polycyclic Aromatic Hydrocarbons (PAH)							
benzo(g,h,i)perylene	mg/kg	0.05		0.096	0.088	8.7	Y
chrysene	mg/kg	0.05		0.097	0.089	8.6	Y
methylnaphthalene, 1+2-	mg/kg	0.05		0.096	0.071	29.9	Y
methylnaphthalene, 1-	mg/kg	0.03		0.042	0.033	24.0	Y
methylnaphthalene, 2-	mg/kg	0.03		0.054	0.038	34.8	Y
phenanthrene	mg/kg	0.05		0.071	0.057	21.9	Y

			Sample ID	22-17B 2.5-3.6	DUP3	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2219916-016	WT2219916-017		
			Sample Depth (mbgs	0.8 - 1.1	0.8 - 1.1		
			Sample Date (d/m/y	26-Oct-2022	26-Oct-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		10.6	11.2	5.5	Y

			Sample ID	22-23 1-2	DUP4	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2221344-004	WT2221344-005		
			Sample Depth (mbgs	0.3 - 0.6	0.3 - 0.6		
			Sample Date (d/m/y	07-Nov-2022	07-Nov-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		23.1	6.22	115.1	N

			Sample ID	22-06B 0.75-1.75	DUP5	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2221612-001	WT2221612-003		
			Sample Depth (mbgs	0.2 - 0.5	0.2 - 0.5		
			Sample Date (d/m/y	09-Nov-2022	09-Nov-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		18.2	18	1.1	Y

			Sample ID	22-13B 0-2	DUP6	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2221612-006	WT2221612-007		
			Sample Depth (mbgs	0 - 0.6	0 - 0.6		
			Sample Date (d/m/y	10-Nov-2022	10-Nov-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		3.91	4.45	12.9	Y
pH (1:2 soil:CaCl2-aq)	pH units	0.1		8.14	8.13	0.1	Y
Metals							
arsenic	mg/kg	0.1		1.16	1.1	5.3	Y
barium	mg/kg	0.5		66.5	67.7	1.8	Y
beryllium	mg/kg	0.1		0.18	0.16	11.8	Y
boron	mg/kg	5		8.7	6.6	27.5	Y
boron, hot water soluble	mg/kg	0.1		0.23	0.27	16.0	Y
cadmium	mg/kg	0.02		0.03	0.03	0.0	Y
chromium	mg/kg	0.5		9.91	7.3	30.3	Y
cobalt	mg/kg	0.1		2.77	2.52	9.5	Y
copper	mg/kg	0.5		9.25	6.13	40.6	Y
lead	mg/kg	0.5		7.69	7.6	1.2	Y
mercury	mg/kg	0.005		0.0073	0.0074	1.4	Y
molybdenum	mg/kg	0.1		0.63	0.56	11.8	Y
nickel	mg/kg	0.5		7.69	6.88	11.1	Y
thallium	mg/kg	0.05		0.099	0.096	3.1	Y
uranium	mg/kg	0.05		0.293	0.25	15.8	Y
vanadium	mg/kg	0.2		16.4	14.7	10.9	Y
zinc	mg/kg	2		19.6	16.7	16.0	Y
Soluable Ions							
calcium, soluble ion content	mg/L	0.5		12.2	8.14	39.9	Y
magnesium, soluble ion content	mg/L	0.5		1.13	0.77	37.9	Y
sodium, soluble ion content	mg/L	0.5		111	105	5.6	Y
sodium adsorption ratio [SAR]	--	0.1		8.15	9.43	14.6	Y
Petroleum Hydrocarbons (PHC							
F3-PAH	mg/kg	50		1230	1090	12.1	Y
F3 (C16-C34)	mg/kg	50		1230	1090	12.1	Y
F4 (C34-C50)	mg/kg	50		2450	2360	3.7	Y
F4G-sg	mg/kg	250		7130	7740	8.2	Y
hydrocarbons, total (C6-C50)	mg/kg	80		3700	3470	6.4	Y
Polycyclic Aromatic Hydrocarbons (PAH)							
benzo(b+j)fluoranthene	mg/kg	0.05		0.056	0.053	5.5	Y
benzo(g,h,i)perylene	mg/kg	0.05		0.08	0.057	33.6	Y

			Sample ID	22-39 0.5-1	DUP7	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2222265-001	WT2222265-003		
			Sample Depth (mbgs	0.2 - 0.3	0.2 - 0.3		
			Sample Date (d/m/y	14-Nov-2022	14-Nov-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		17	17.1	0.6	Y

			Sample ID	22-41 2.75-4	DUP8	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2223434-003	WT2223434-002		
			Sample Depth (mbgs	0.8 - 1.2	0.8 - 1.2		
			Sample Date (d/m/y	23-Nov-2022	23-Nov-2022		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		12.2	12.3	0.8	Y

			Sample ID	22-24 0-1.25	DUP9	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2300985-001	WT2300985-002		
			Sample Depth (mbgs	0 - 0.4	0 - 0.4		
			Sample Date (d/m/y	13-Jan-2023	13-Jan-2023		
Parameter	Units	MDL					
Physical Characteristics							
Moisture	%	0.25		23	25.6	10.7	Y
Metals							
arsenic	mg/kg	0.1		1.62	1.86	13.8	Y
barium	mg/kg	0.5		261	327	22.4	Y
beryllium	mg/kg	0.1		0.65	0.78	18.2	Y
cadmium	mg/kg	0.02		0.177	0.182	2.8	Y
chromium	mg/kg	0.5		48.7	60.4	21.4	Y
chromium, hexavalent	mg/kg	0.1		0.3	0.41	31.0	Y
cobalt	mg/kg	0.1		12.5	14.7	16.2	Y
copper	mg/kg	0.5		17.4	20.8	17.8	Y
lead	mg/kg	0.5		7.38	8.45	13.5	Y
mercury	mg/kg	0.005		0.0246	0.0259	5.1	Y
molybdenum	mg/kg	0.1		0.3	0.35	15.4	Y
nickel	mg/kg	0.5		25.1	31.3	22.0	Y
thallium	mg/kg	0.05		0.224	0.285	24.0	Y
uranium	mg/kg	0.05		0.67	0.808	18.7	Y
vanadium	mg/kg	0.2		63.7	78.2	20.4	Y
zinc	mg/kg	2		72.4	88.1	19.6	Y

Notes:

RPD	Relative percent difference
MDL	Method Detection Limit
CCME (2016) Guideline	60% RPD for solids used as QA/QC acceptance criteria. For concentrations less than 5 times the MDL it is recommended that the difference between duplicate sample concentrations should be less than 2 times the MDL.
BOLD	RPD does not meet CCME (2016) Guideline

Table 8: Groundwater QA/QC Results - RPD

			Sample ID	22-26-01DEC22	DUP2-01DEC22	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2224015-007	WT2224015-013		
			Screen Depth (mbgs)	5.2 - 8.2	5.2 - 8.2		
			Sample Date (d/m/y)	2022-12-01	2022-12-01		
Parameter	**Units**	**MDL**					
Metals							
arsenic, dissolved	ug/L	0.10		0.12	0.12	0.00	Y
barium, dissolved	ug/L	0.10		87.5	87.6	0.11	Y
boron, dissolved	ug/L	10		15	15	0.00	Y
cobalt, dissolved	ug/L	0.10		0.3	0.3	0.00	Y
copper, dissolved	ug/L	0.20		4.63	4.57	1.30	Y
molybdenum, dissolved	ug/L	0.050		0.701	0.682	2.75	Y
nickel, dissolved	ug/L	0.50		1.05	1.07	1.89	Y
selenium, dissolved	ug/L	0.050		0.254	0.261	2.72	Y
sodium, dissolved	ug/L	50		147000	144000	2.06	Y
thallium, dissolved	ug/L	0.010		0.076	0.075	1.32	Y
uranium, dissolved	ug/L	0.010		1.48	1.5	1.34	Y

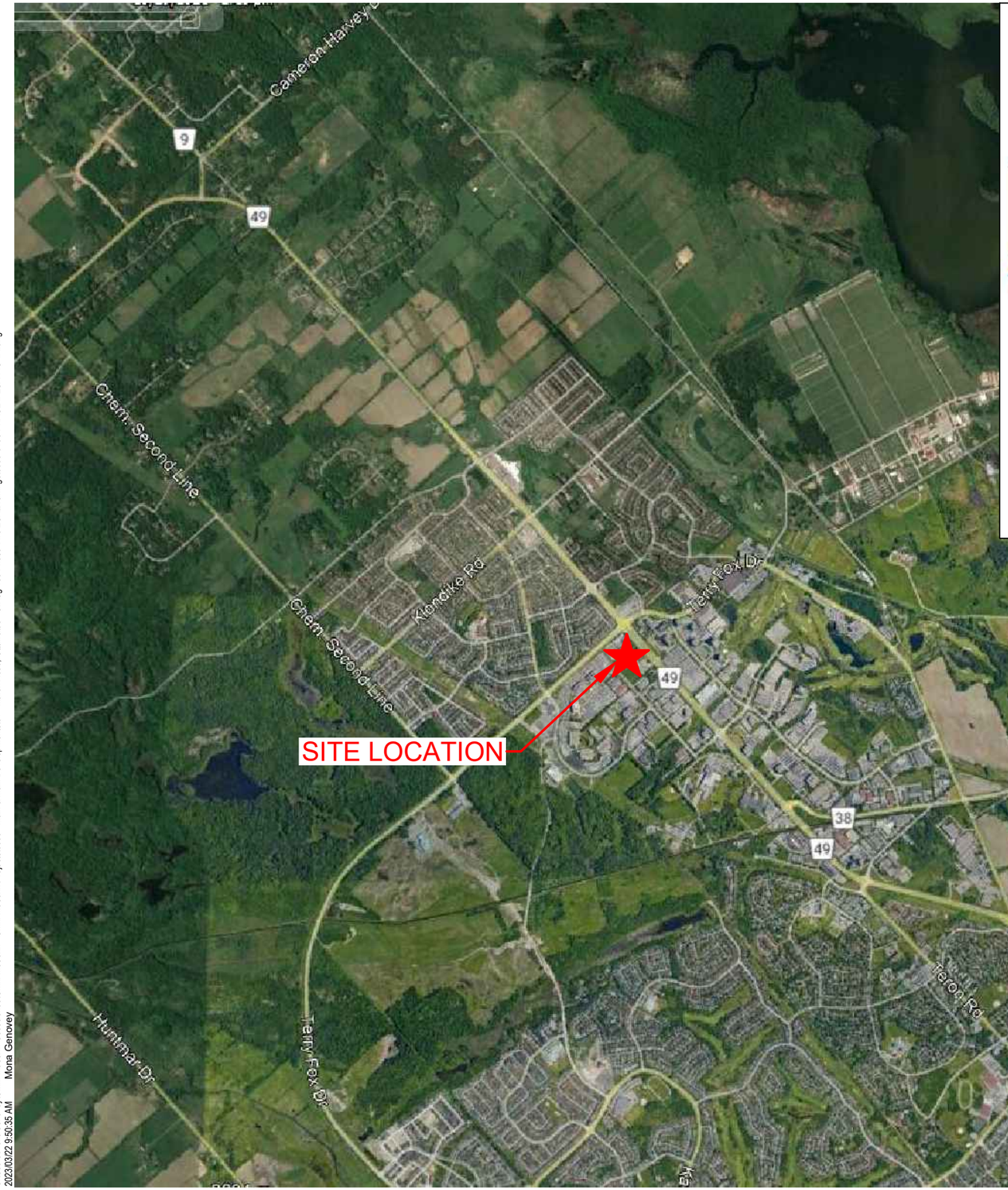
			Sample ID	MW21-01A-6DEC22	DUP5-6DEC22	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2224485-002	WT2224485-023		
			Screen Depth (mbgs)	4.57 - 7.62	4.57 - 7.62		
			Sample Date (d/m/y)	2022-12-06	2022-12-06		
Parameter	**Units**	**MDL**					
Volatiles Organic Compounds (VOC)							
trichloroethylene	ug/L	0.50		0.88	0.67	27.10	Y

			Sample ID	MW22-39-06-07DEC22	DUP7-07DEC22	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2224609-007	WT2224609-024		
			Screen Depth (mbgs)	24.38 - 25.91	24.38 - 25.91		
			Sample Date (d/m/y)	2022-12-07	2022-12-07		
Parameter	**Units**	**MDL**					
Volatiles Organic Compounds (VOC)							
trichloroethylene	ug/L	0.50		0.81	0.64	26.56	Y

			Sample ID	MW22-41-01-07DEC22	DUP8-07DEC22	RPD	RPD Meets CCME (2016) Guideline
			Lab ID	WT2224609-016	WT2224609-025		
			Screen Depth (mbgs)	6.10 - 9.14	6.10 - 9.14		
			Sample Date (d/m/y)	2022-12-07	2022-12-07		
Parameter	**Units**	**MDL**					
Volatiles Organic Compounds (VOC)							
tetrachloroethylene	ug/L	0.50		10.2	8.24	21.26	Y

Notes:

RPD	Relative percent difference
MDL	Method Detection Limit
CCME (2016) Guideline	40% RPD for liquids used as QA/QC acceptance criteria. For concentrations less than 5 times the MDL it is recommended that the difference between duplicate sample concentrations should be less than 2 times the MDL
BOLD	RPD does not meet CCME (2016) Guideline



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 100 500 1000 2000

Legend

SITE LOCATION

FIGURE 1A
SITE LOCATION

Omni-McCann

C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 1A.dwg
2023/03/22 9:50:35 AM Mona Genovey

MAIN AND MARCH DEVELOPMENTS INC

PROJECT NO. 0006-01-03

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 20 40 60 80 100 150

1:2,000

Legend

- PHASE ONE SITE BOUNDARY
- TOPOGRAPHIC CONTOURS
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- APEC A-FORMER ELECTONICS MANUFACTURING
- APEC B-FORMER DRY CLEANER
- APEC C-FORMER ELECTRONICS MANUFACTURING
- APEC D-STORAGE HYDRAULIC OIL
- APEC E-TRANSFORMER USE
- APEC F-OFF-SITE PCAs
- APEC G-FILL OF UNKNOWN QUALITY
- APEC H-FORMER MARCH LANDFILL RISK MANAGEMENT AREA
- INFERRED DIRECTION OF REGIONAL (DEEP) GROUNDWATER FLOW
- INFERRED DIRECTION OF SURFACE RUNOFF

FIGURE 1B

PHASE ONE ESA - CONCEPTUAL SITE MODEL

Omni-McCann

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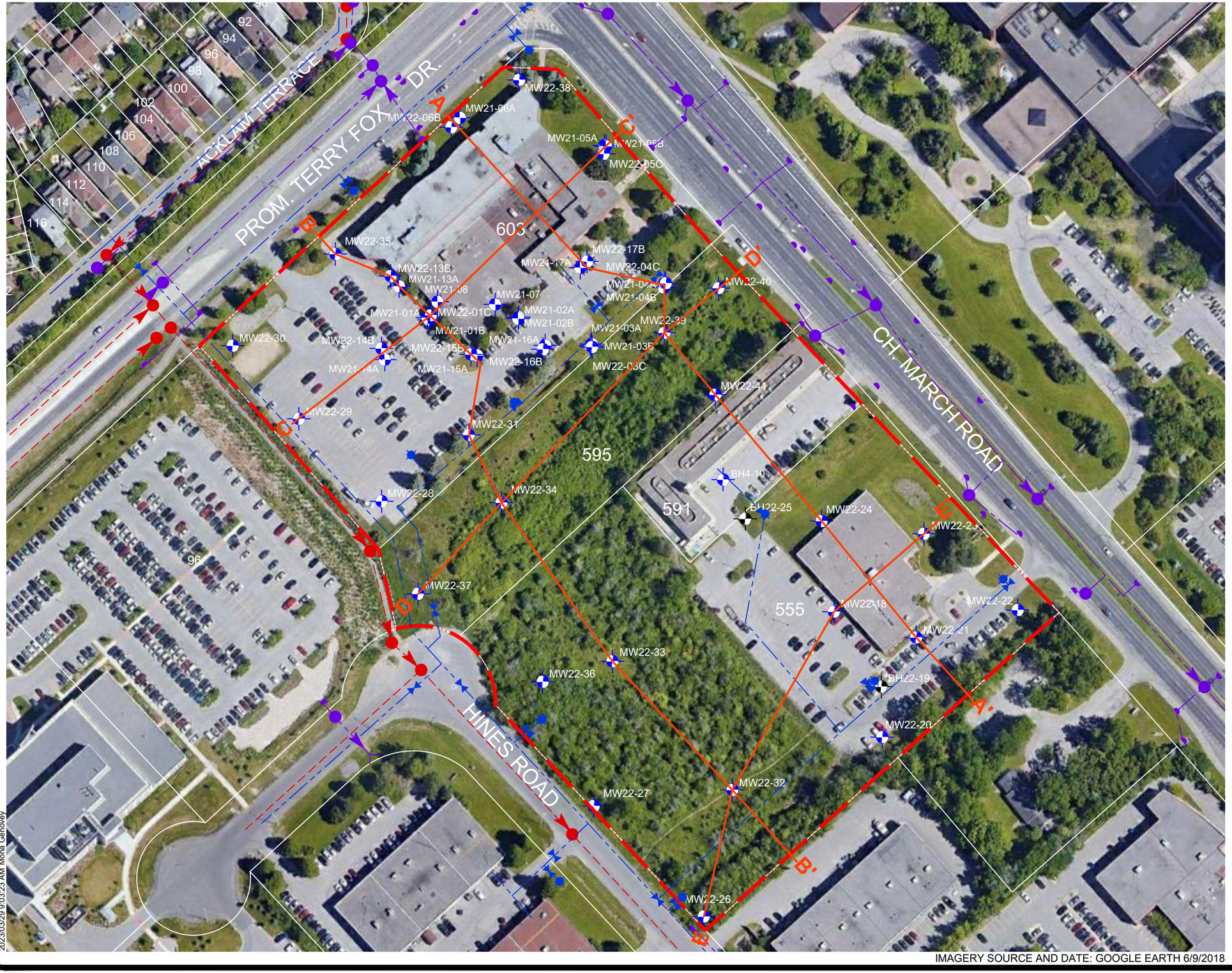
2023/03/23 3:55:55 PM Mona Genovey



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C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 1C.dwg
2023/03/29 9:03:23 AM Mona Genovey

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH22-19 — BOREHOLE LOCATION
- MW21-16 — MONITORING WELL LOCATION
- A' — CROSS-SECTION DESIGNATION

FIGURE 1C
SITE LAYOUT

Omni-McCann

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2023/03/23 3:57:05 PM Mona Genovey

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 20 40 60 80 100 150 200 300

1:4,000

Legend

PHASE TWO SITE BOUNDARY

STUDY AREA (250m)

FIGURE 2

AREAS OF NATURAL SIGNIFIGANCE AND WATER BODIES

Omni-McCann

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APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH22-19 — BOREHOLE LOCATION
- MW21-16 — MONITORING WELL LOCATION
- MW21-16 78.379 — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- 94.0 — INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

FIGURE 3A

GROUNDWATER ELEVATIONS AND INTERPRETED FLOW BETWEEN 4.0 AND 10.7 mbgs

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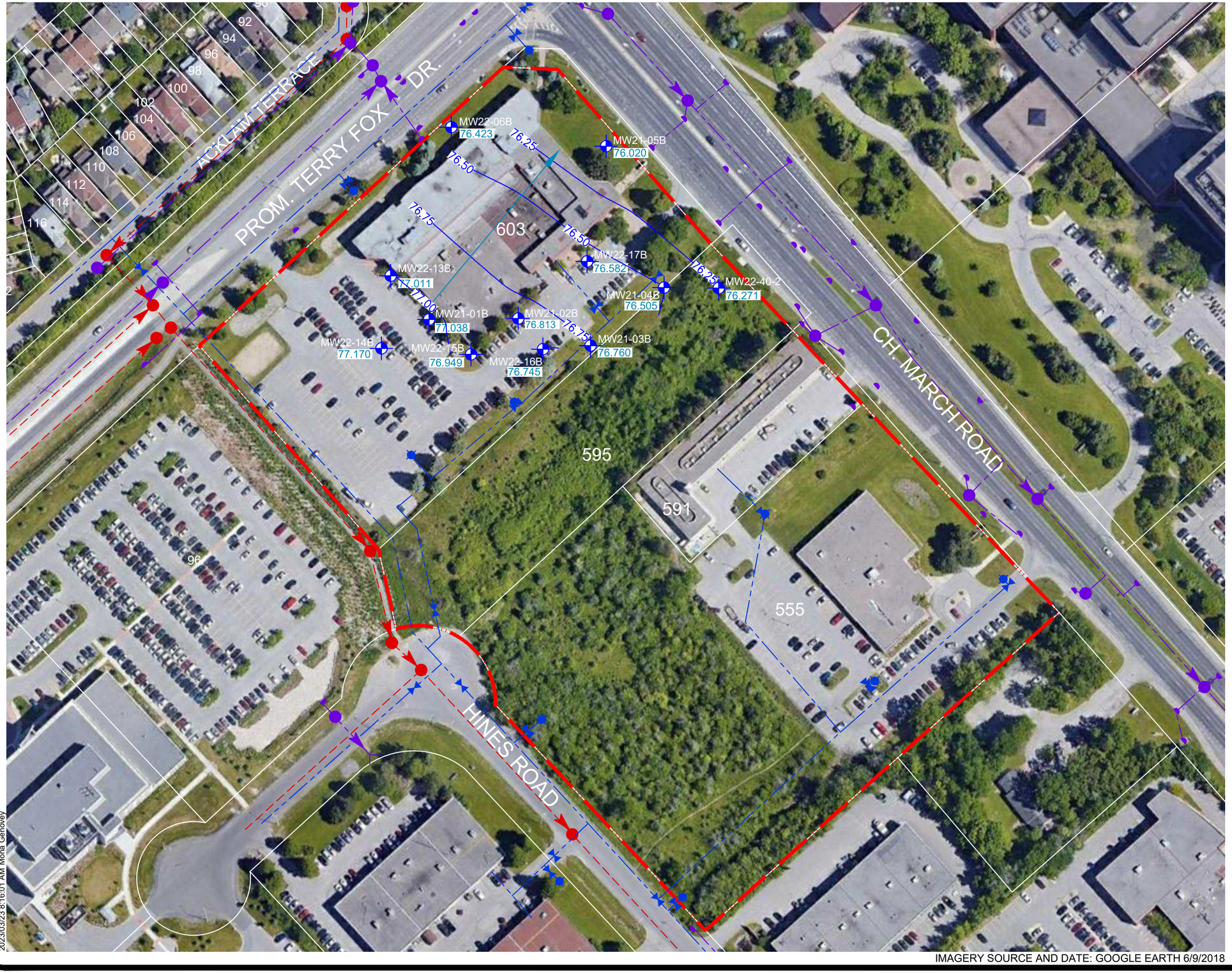

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

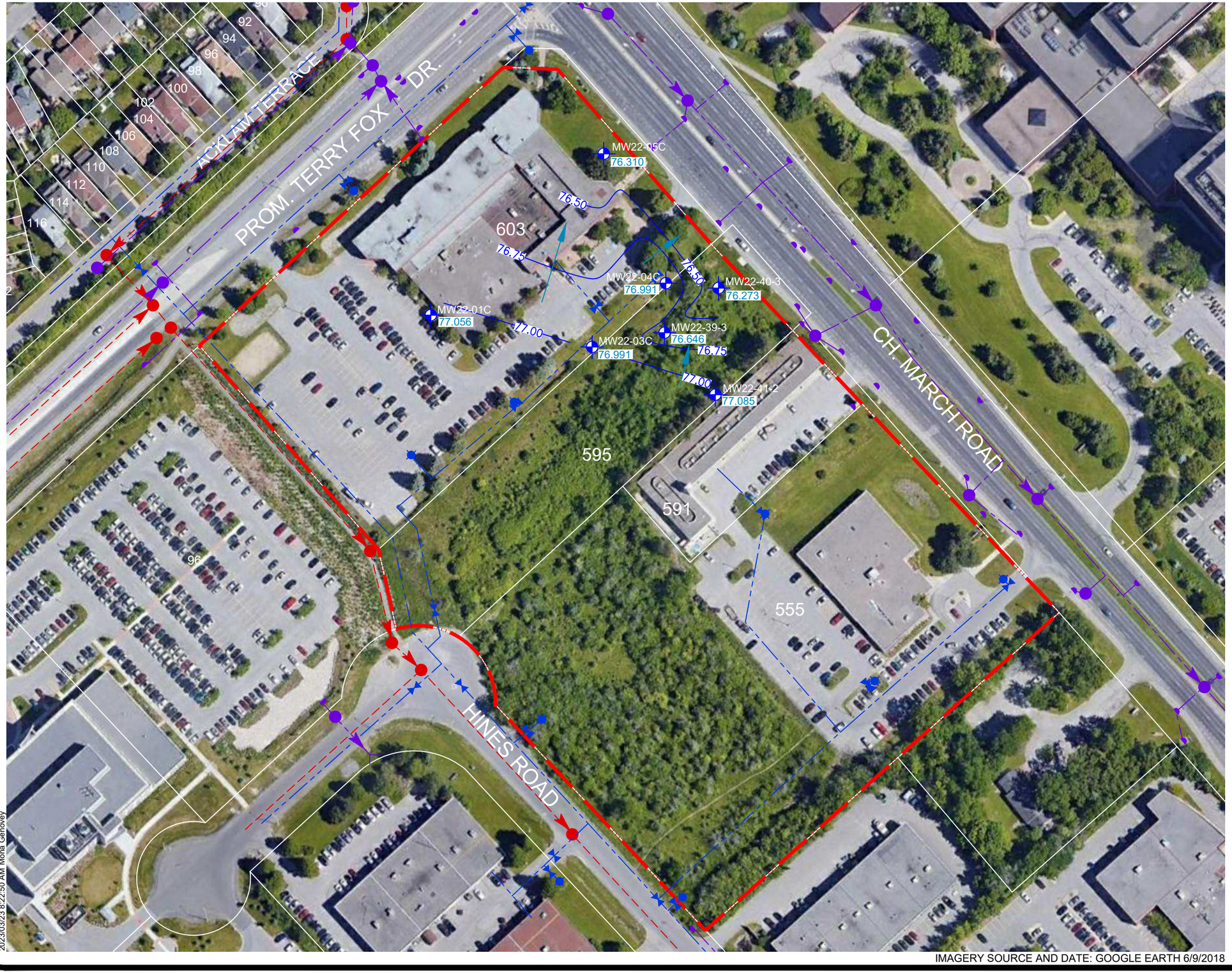
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 / 77.038 — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

FIGURE 3B

GROUNDWATER ELEVATIONS AND INTERPRETED FLOW BETWEEN 9.1 AND 13.7 mbgs

Omni-McCann



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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW22-01C 77.056 — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

FIGURE 3C

GROUNDWATER ELEVATIONS AND INTERPRETED FLOW BETWEEN 13.7 AND 18.4 mbgs

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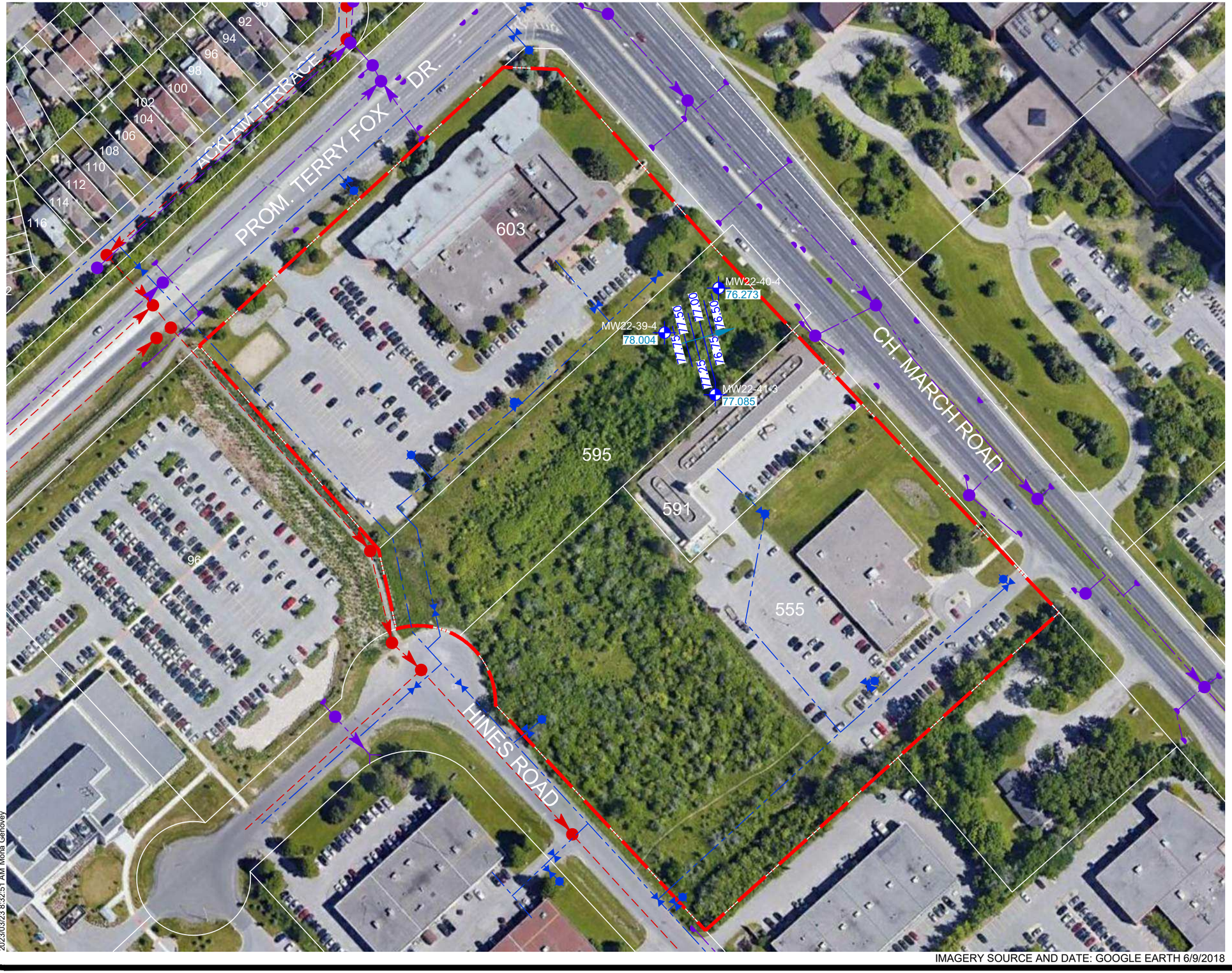
2023/03/23 8:22:50 AM Mona Genovey



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

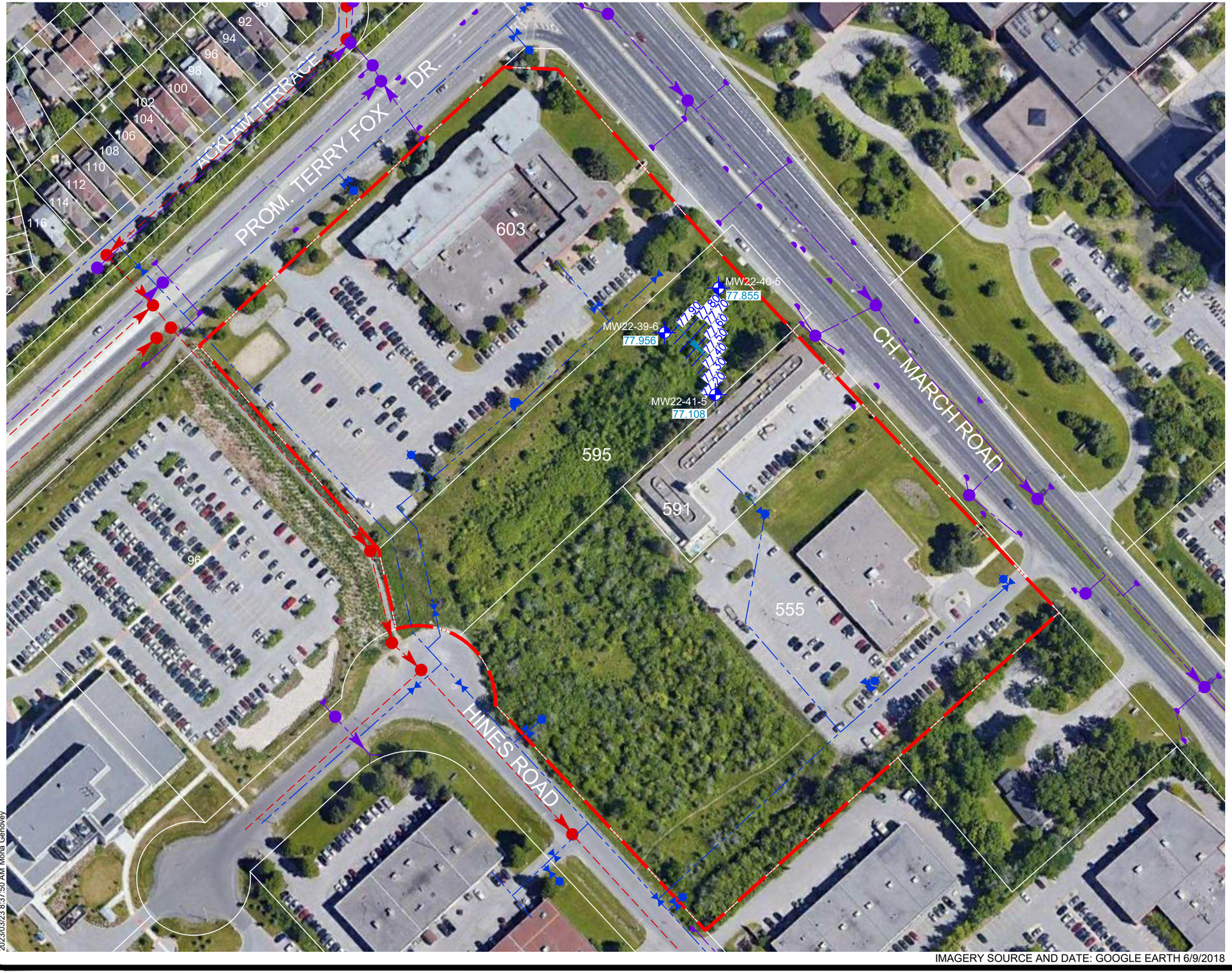
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW22-40-4 / 77.056 — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- 77.0 — INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

FIGURE 3D

GROUNDWATER ELEVATIONS AND INTERPRETED FLOW BETWEEN 18.3 AND 23.8 mbgs

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

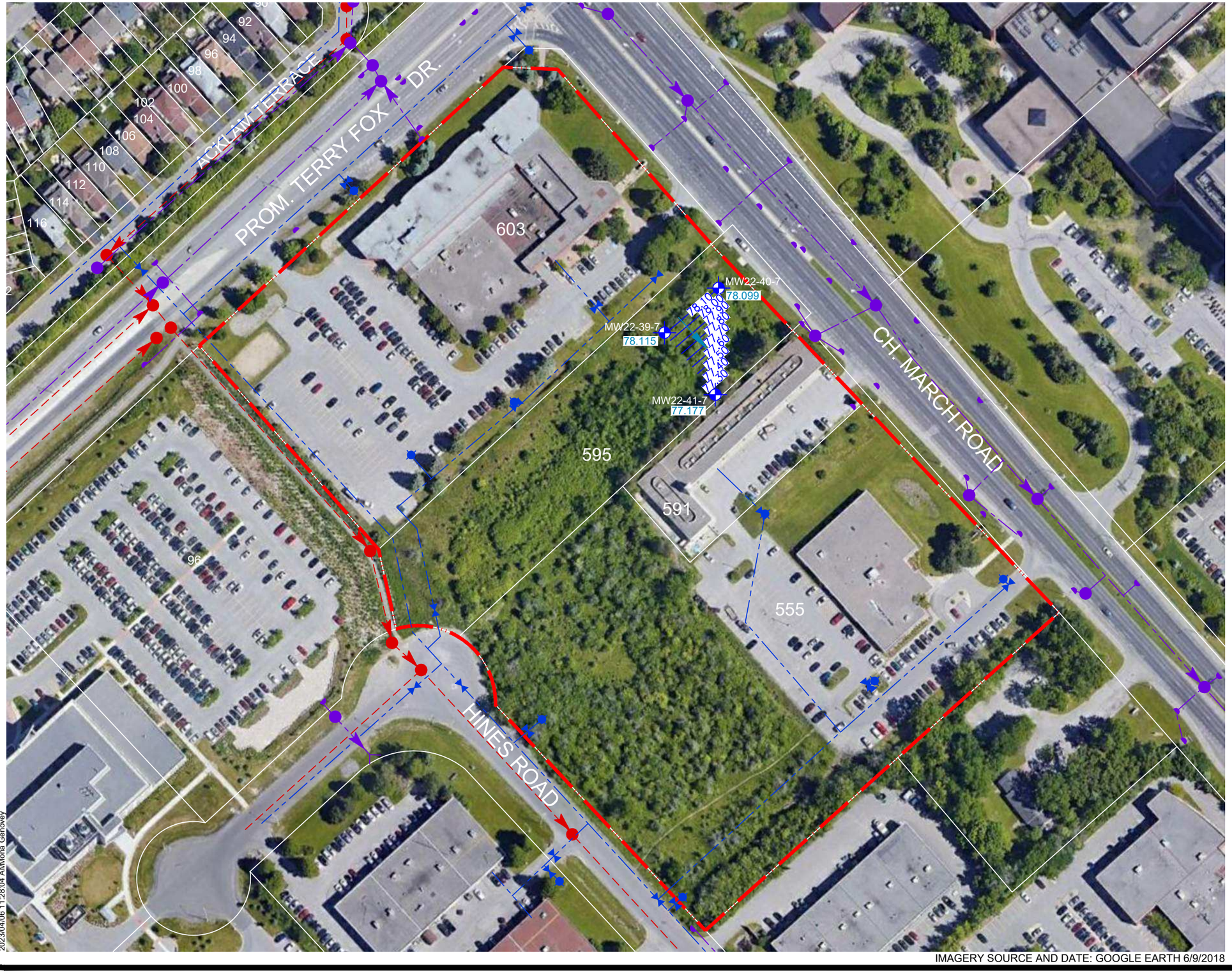
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW22-01C 77.056 — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- 77.0 — INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

FIGURE 3E

GROUNDWATER ELEVATIONS AND INTERPRETED FLOW BETWEEN 24.1 AND 26.5 mbgs

Omni-McCann



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2023/04/06 11:28:04 AM Mona Genovey

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PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

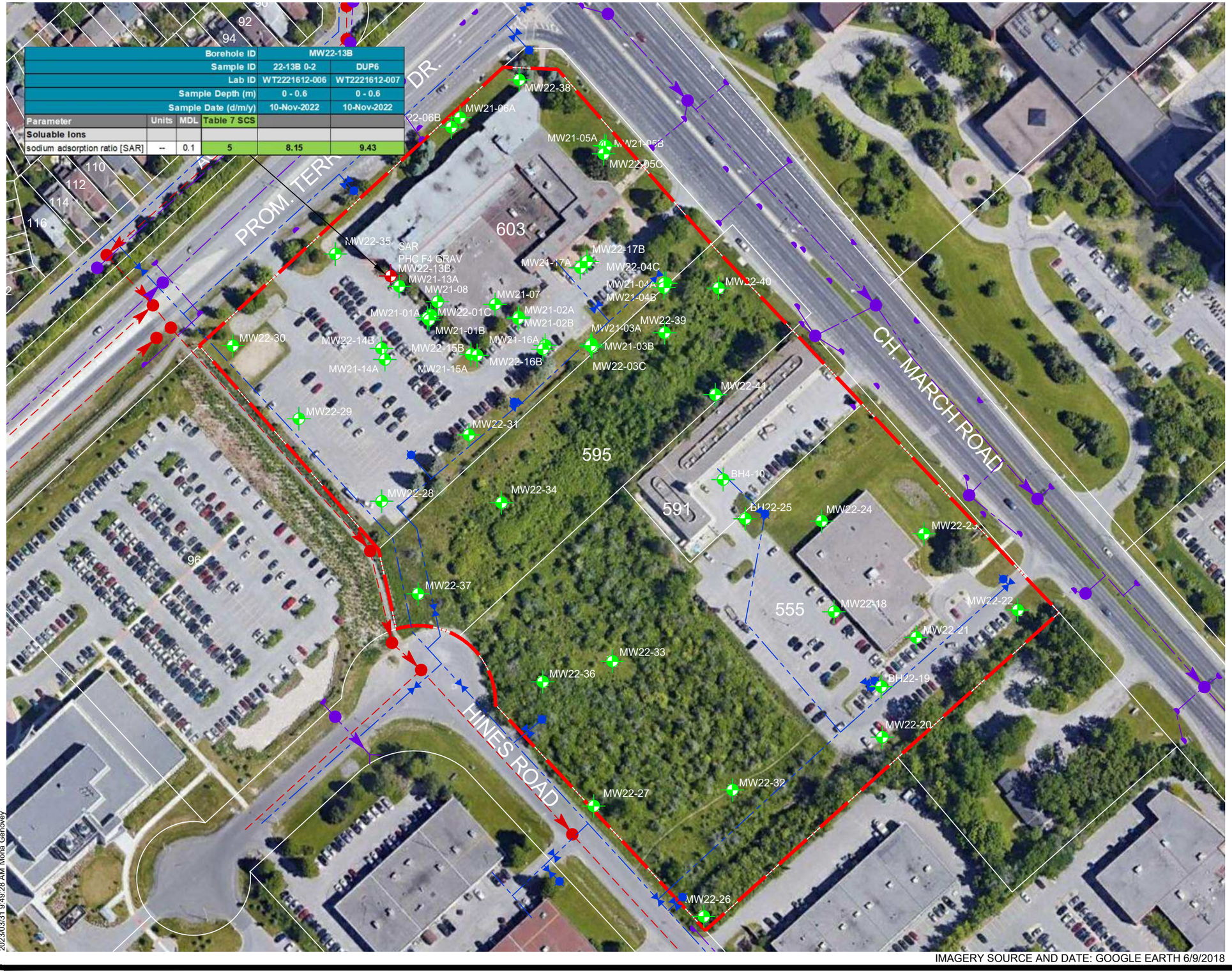
- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW22-01C 77.056 — MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- 77.0 — INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

FIGURE 3F

GROUNDWATER ELEVATIONS AND INTERPRETED FLOW BETWEEN 27.4 AND 30.5 mbgs

Omni-McCann

	Borehole ID	MW22-13B	
	Sample ID	22-13B 0-2	DUP6
	Lab ID	WT2221612-006	WT2221612-007
	Sample Depth (m)	0 - 0.6	0 - 0.6
	Sample Date (d/m/y)	10-Nov-2022	10-Nov-2022
Parameter	Units / MDL / Table 7 SCS		
Soluable Ions			
sodium adsorption ratio [SAR]	-- / 0.1 / 5	8.15	9.43



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/31 9:49:28 AM Mona Genovey

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PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

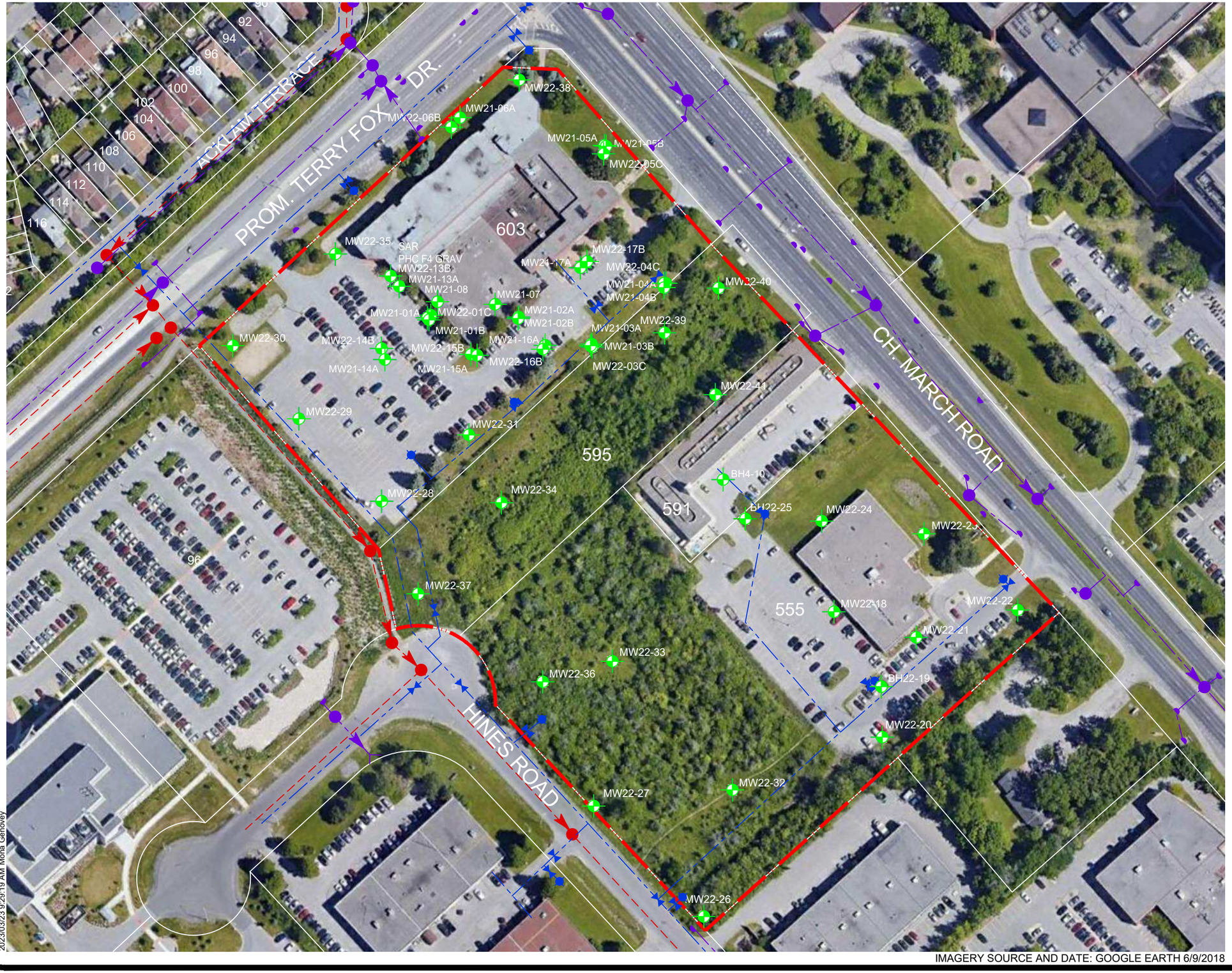
- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH21-02 — BOREHOLE LOCATION MEETING APPLIED GUIDELINES
- BH21-02 — BOREHOLE LOCATION EXCEEDING APPLIED GUIDELINES

FIGURE 4A

SOIL QUALITY RESULTS

METALS

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/23 9:29:19 AM Mona Genovey

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PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH21-02 — BOREHOLE LOCATION MEETING APPLIED GUIDELINES
- BH21-02 — BOREHOLE LOCATION EXCEEDING APPLIED GUIDELINES

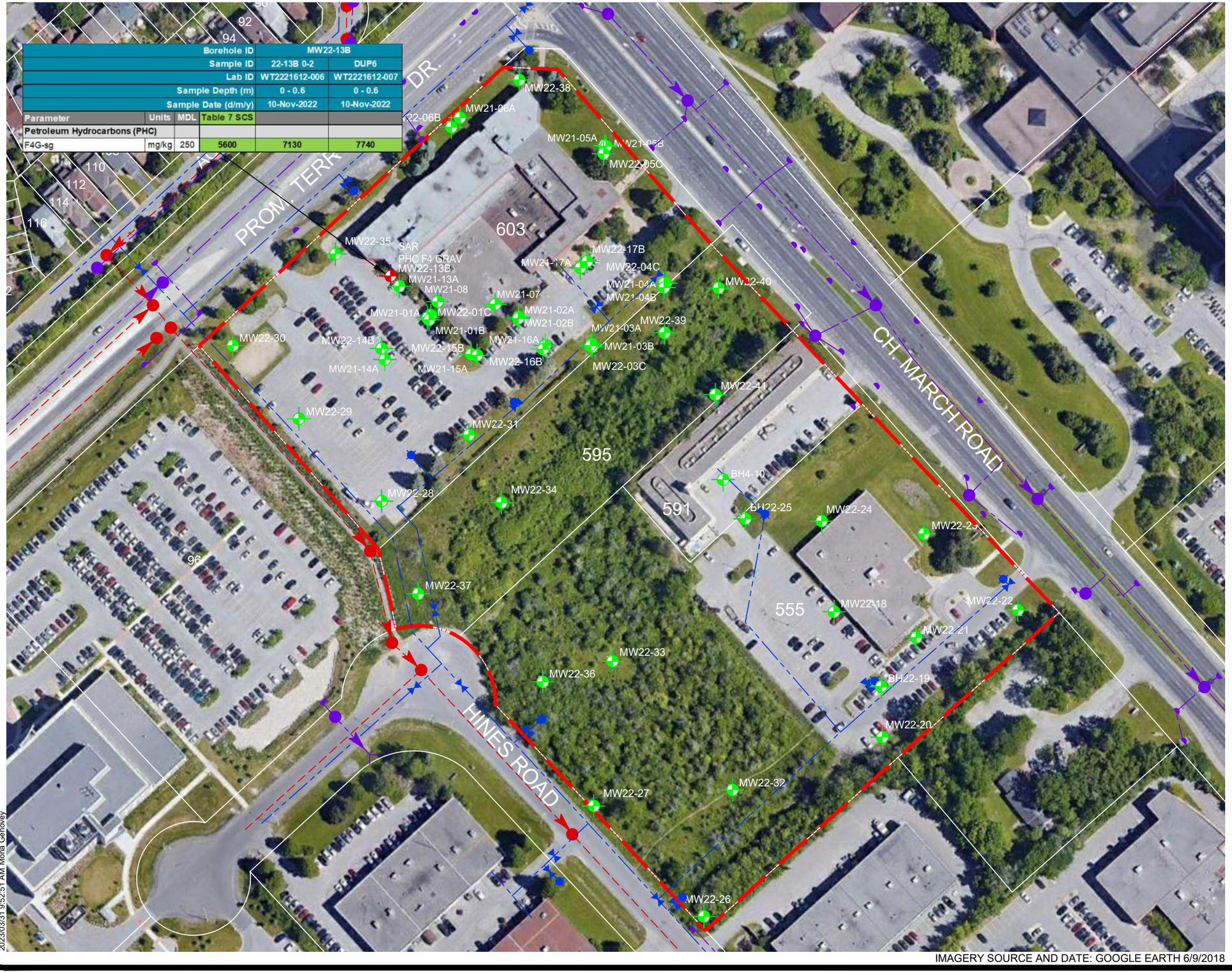
FIGURE 4B

SOIL QUALITY RESULTS

VOC

Omni-McCann

			Borehole ID	MW22-13B	
			Sample ID	22-13B 0-2	DUP6
			Lab ID	WT2221612-006	WT2221612-007
			Sample Depth (m)	0 - 0.6	0 - 0.6
			Sample Date (d/m/y)	10-Nov-2022	10-Nov-2022
Parameter	Units	MDL	Table 7 SCS		
Petroleum Hydrocarbons (PHC)					
F4G-sg	mg/kg	250	5600	7130	7740



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/31 9:52:51 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

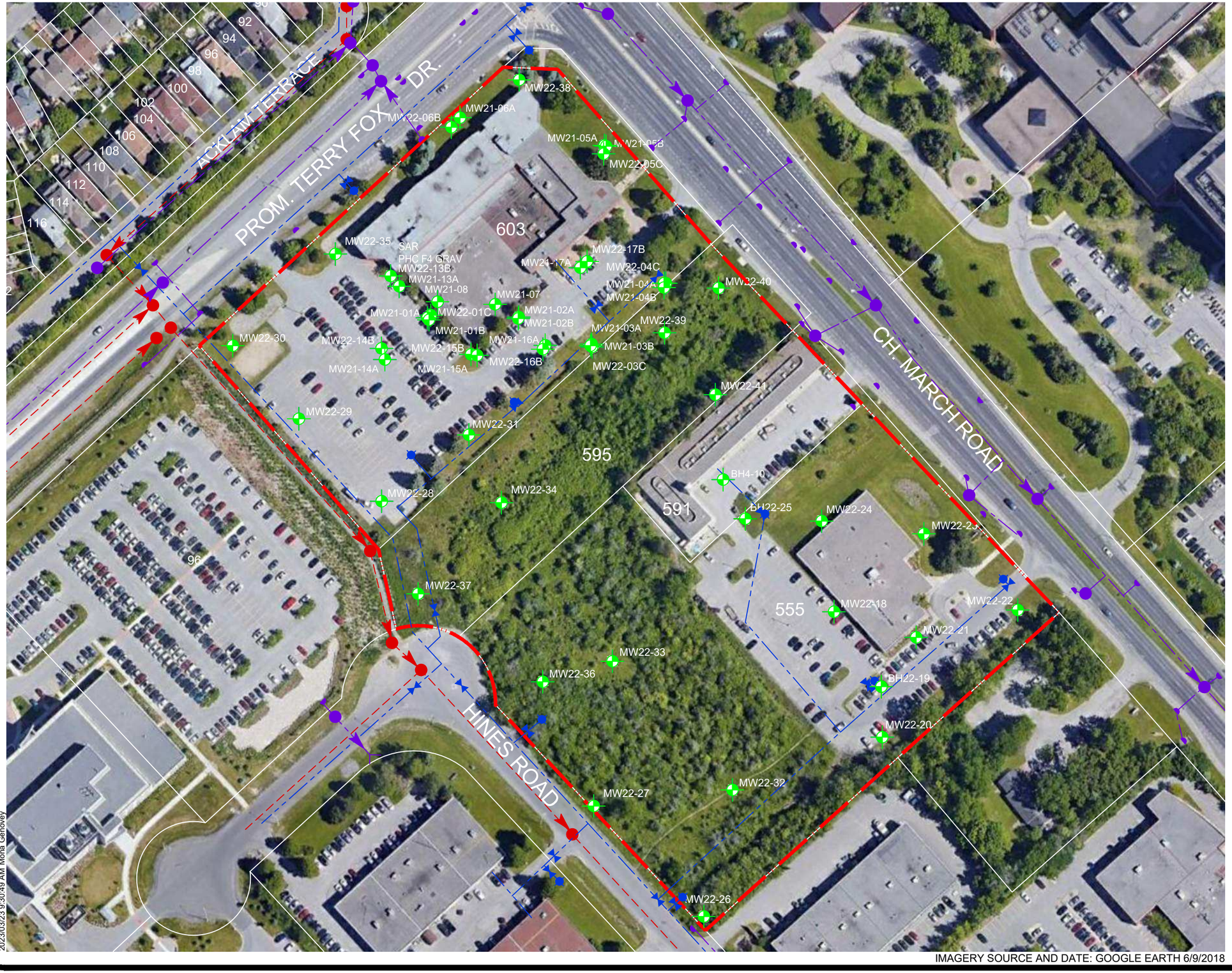
- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH21-02 — BOREHOLE LOCATION MEETING APPLIED GUIDELINES
- BH21-02 — BOREHOLE LOCATION EXCEEDING APPLIED GUIDELINES

FIGURE 4C

SOIL QUALITY RESULTS

PHC

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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PROJECT NO. 0006-0103

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

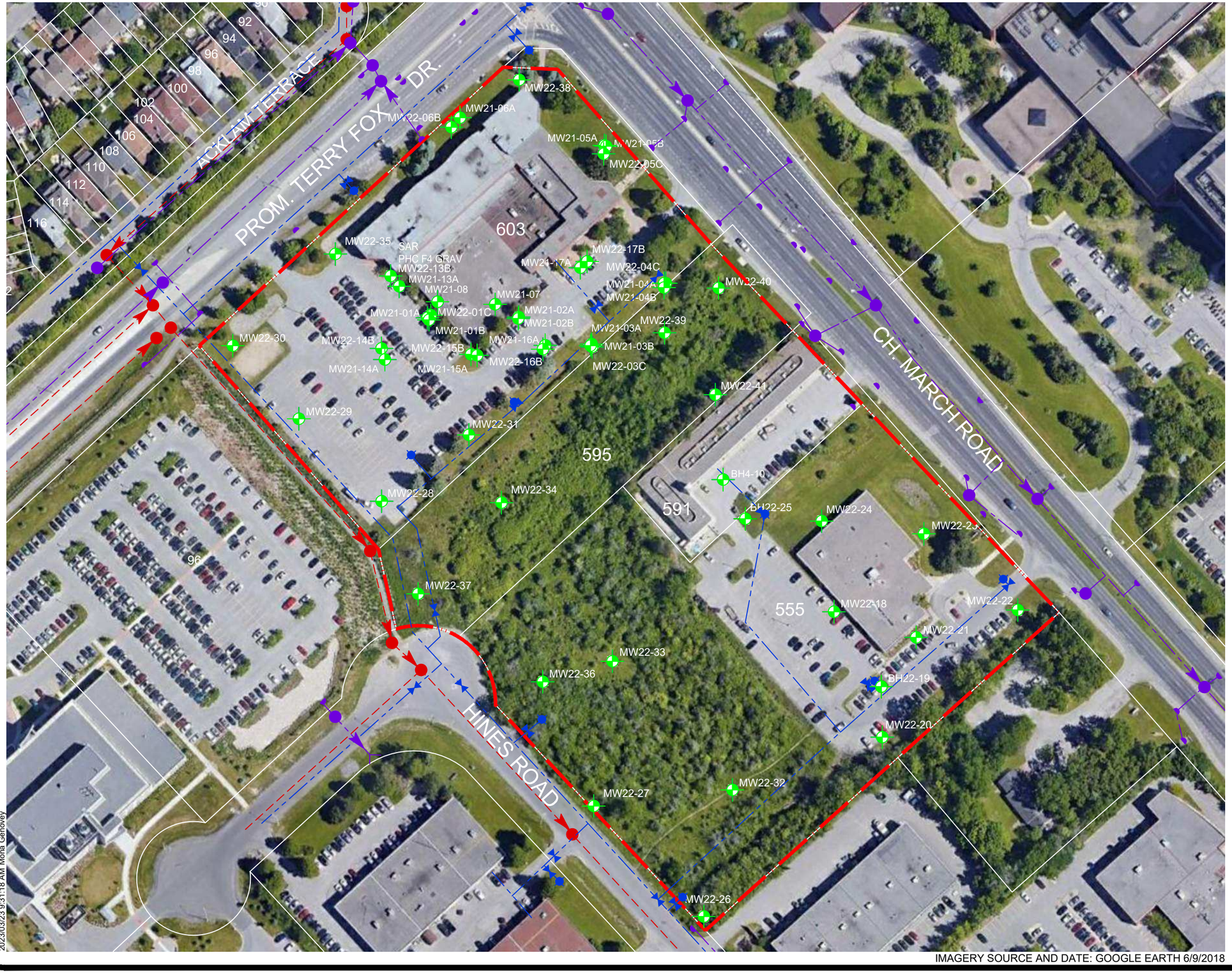
- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH21-02 — BOREHOLE LOCATION MEETING APPLIED GUIDELINES
- BH21-02 — BOREHOLE LOCATION EXCEEDING APPLIED GUIDELINES

FIGURE 4D

SOIL QUALITY RESULTS

PAH

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 4E.dwg
2023/03/23 9:31:18 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

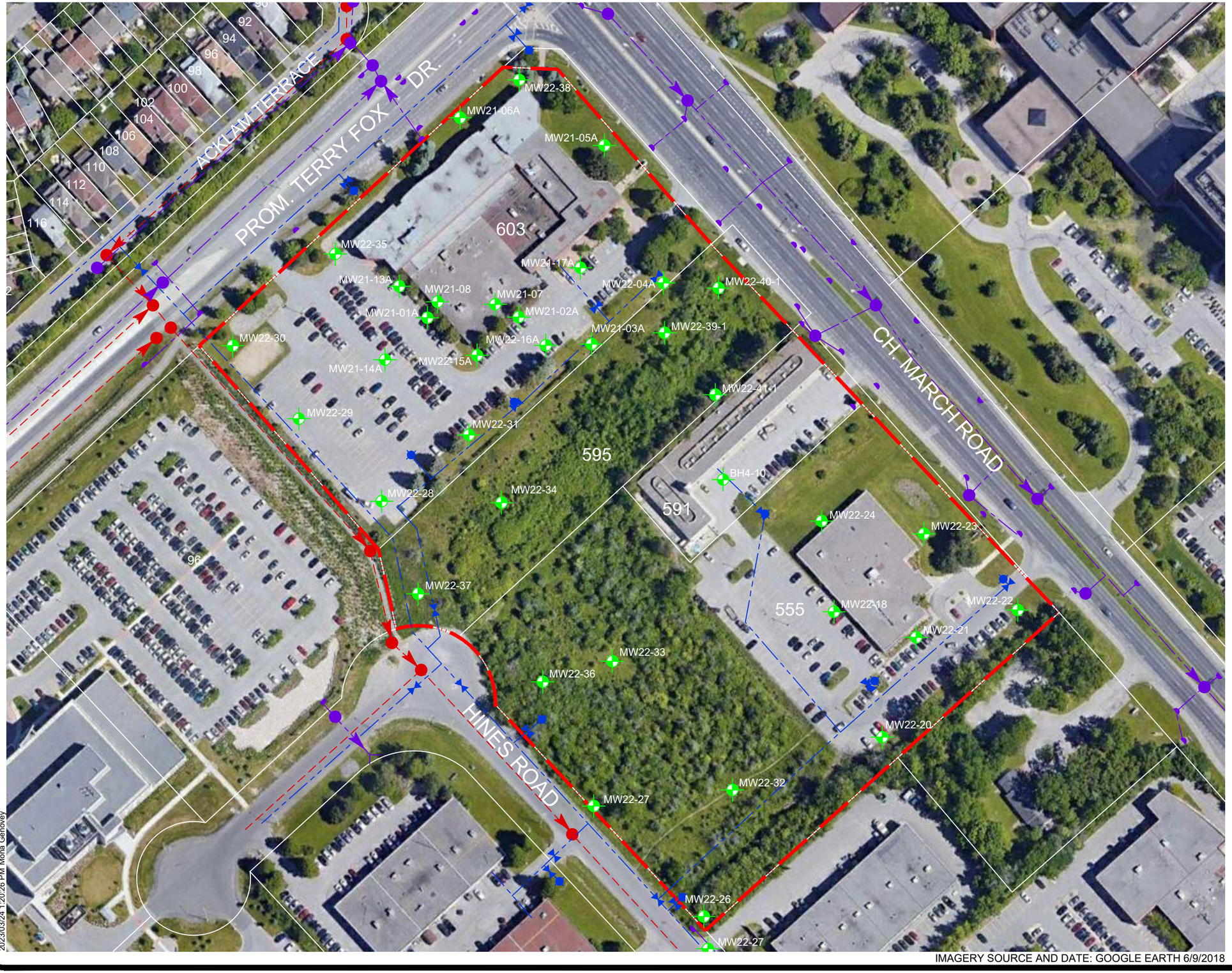
- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- BH21-02 — BOREHOLE LOCATION MEETING APPLIED GUIDELINES
- BH21-02 — BOREHOLE LOCATION EXCEEDING APPLIED GUIDELINES

FIGURE 4E

SOIL QUALITY RESULTS

PCB

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/24 1:20:26 PM Mona Genovey

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

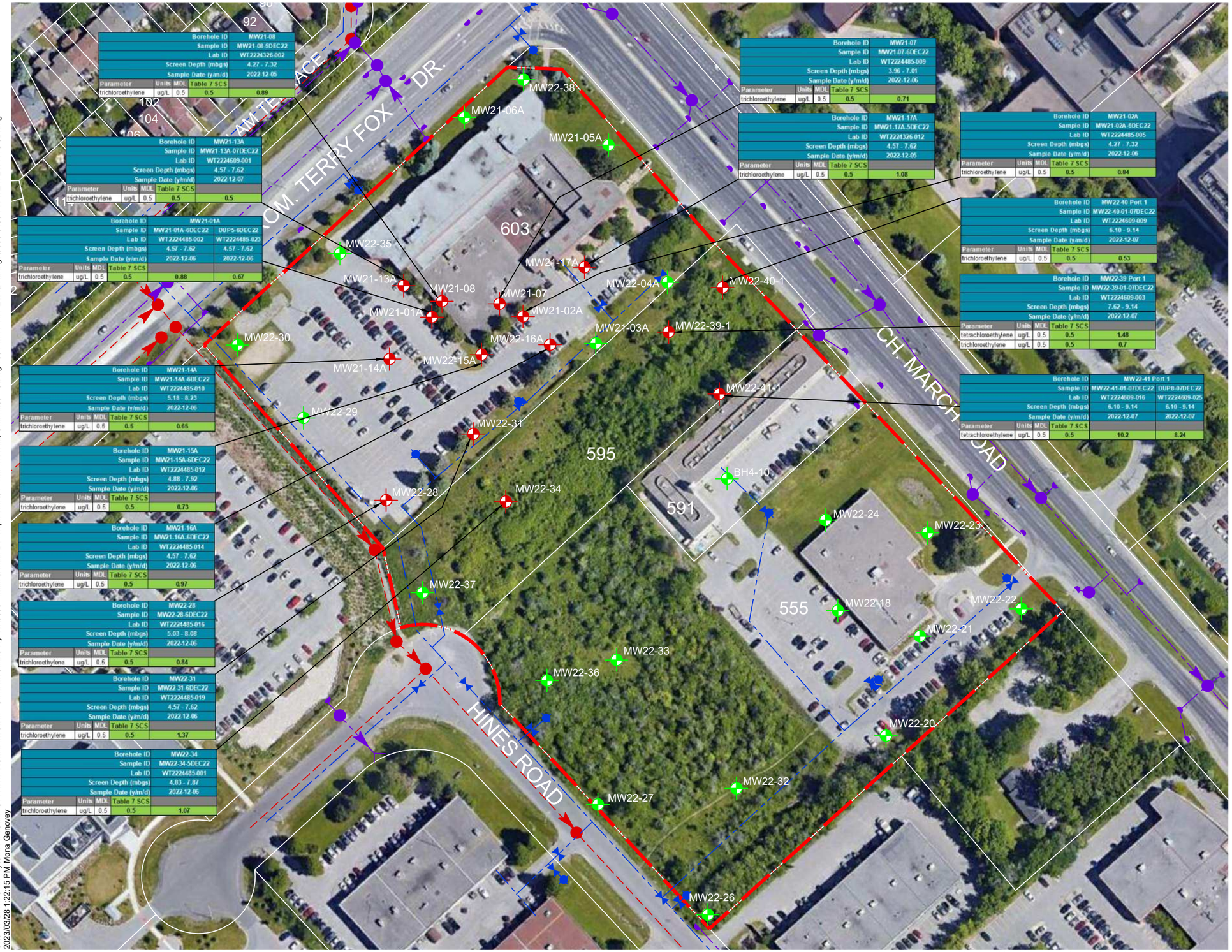
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5A

SHALLOW GROUNDWATER QUALITY METALS

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/28 1:22:15 PM Mona Genovey

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PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

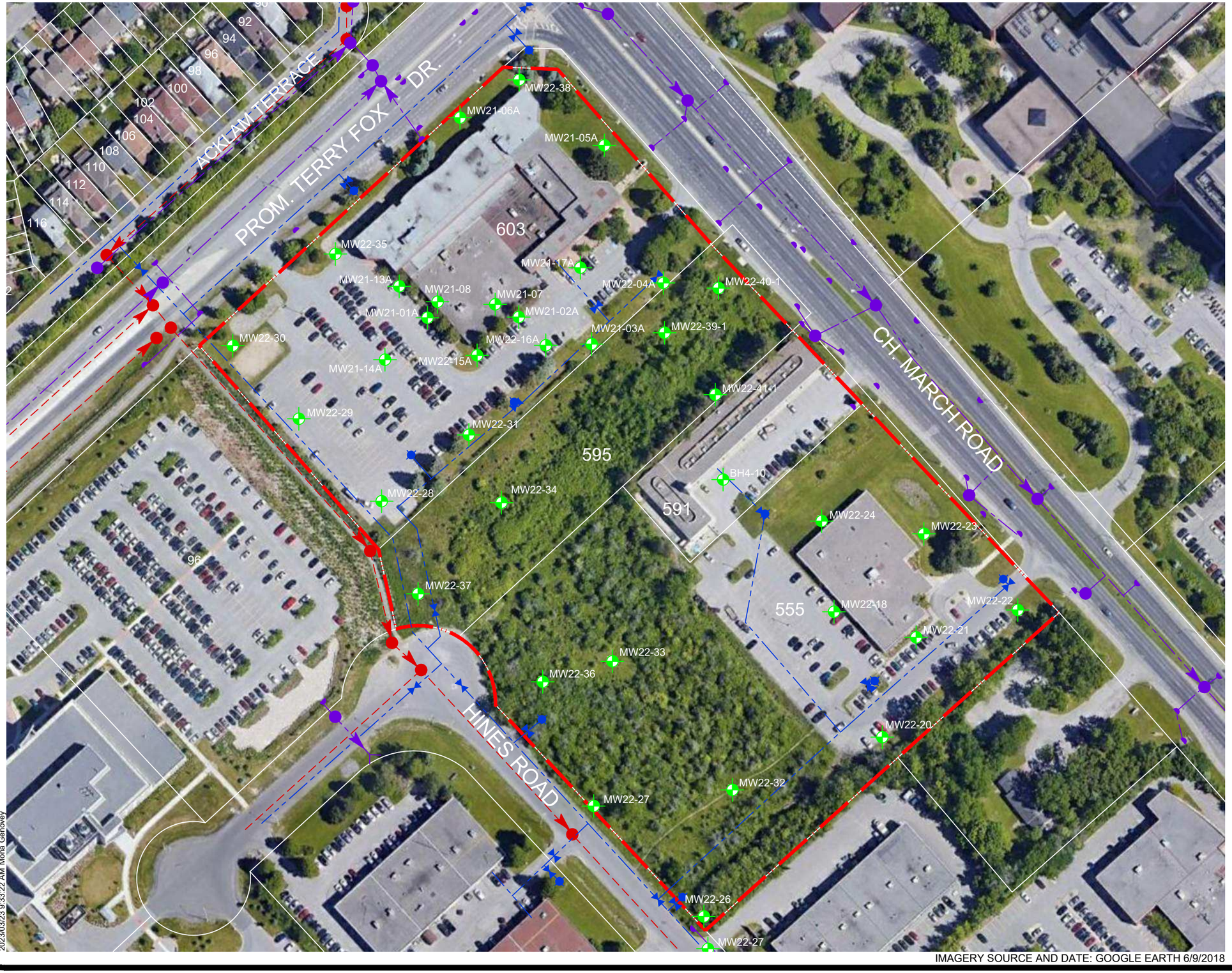
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5B

SHALLOW GROUNDWATER QUALITY VOC

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/23 9:33:22 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

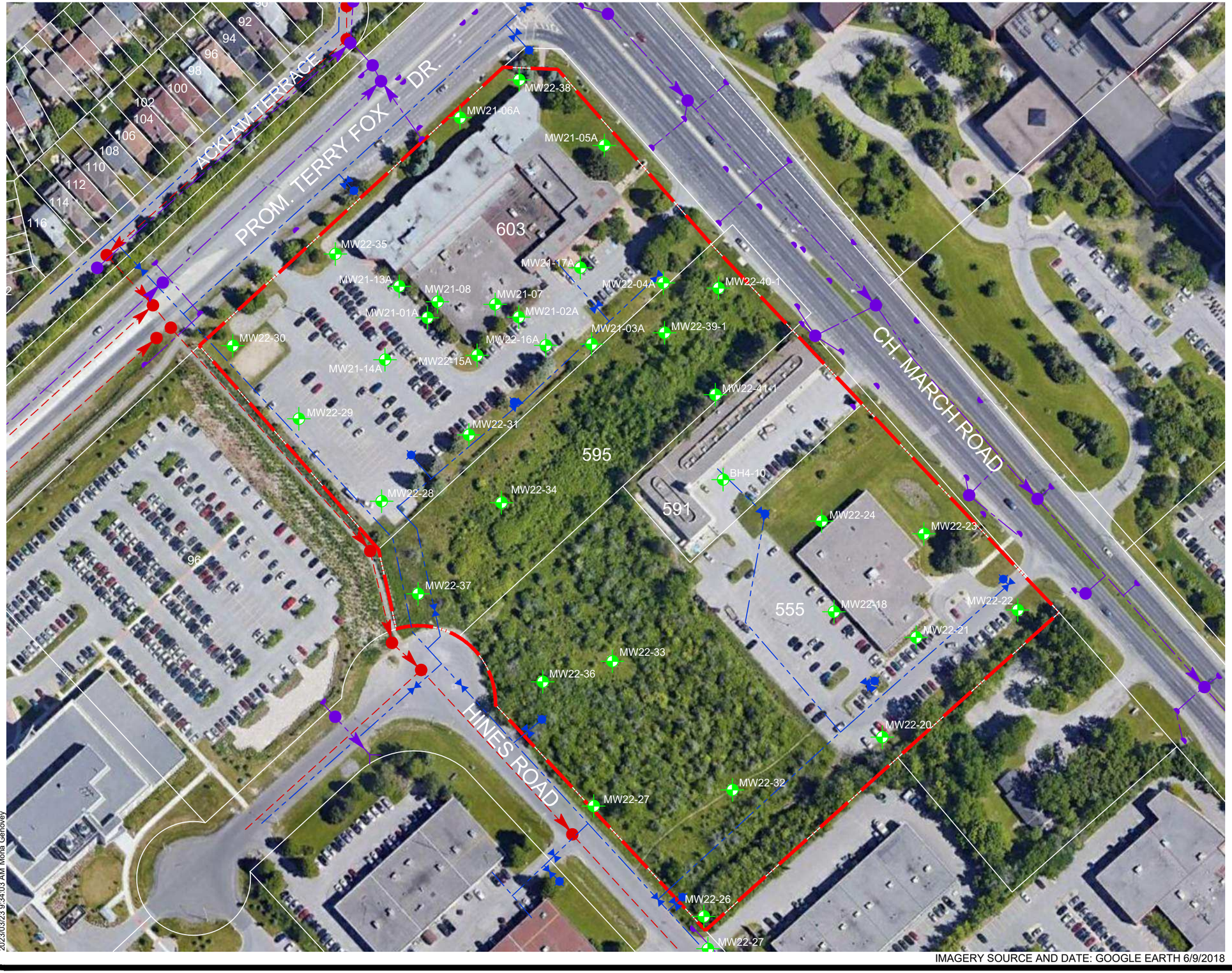
- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5C

SHALLOW GROUNDWATER QUALITY

PHC

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5D

SHALLOW GROUNDWATER QUALITY

PAH

Omni-McCann

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2023/03/23 9:34:03 AM Mona Genovey

Borehole ID	MW21-01B
Sample ID	MW21-01B-6DEC22
Lab ID	WT2224485-003
Screen Depth (mbgs)	9.14 - 12.19
Sample Date (y/m/d)	2022-12-06

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.82

Borehole ID	MW21-02B
Sample ID	MW21-02B-6DEC22
Lab ID	WT2224485-006
Screen Depth (mbgs)	9.14 - 12.19
Sample Date (y/m/d)	2022-12-06

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.65

Borehole ID	MW21-03B
Sample ID	MW21-03B-5DEC22
Lab ID	WT2224326-010
Screen Depth (mbgs)	9.14 - 12.19
Sample Date (y/m/d)	2022-12-05

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.53

IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

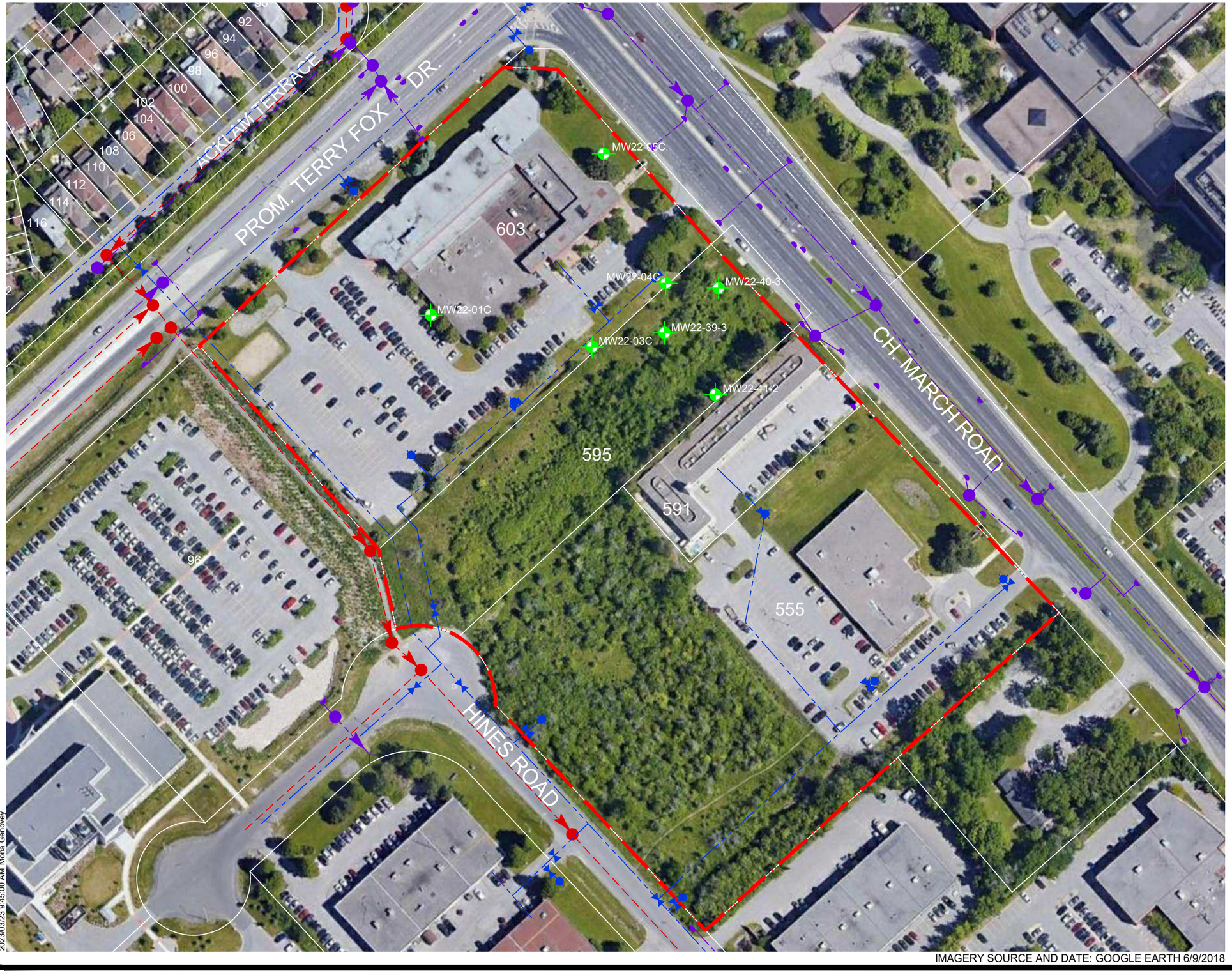
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5E

GROUNDWATER QUALITY RESULTS BETWEEN 9.1 AND 13.7 mbgs: VOC

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/23 9:45:00 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

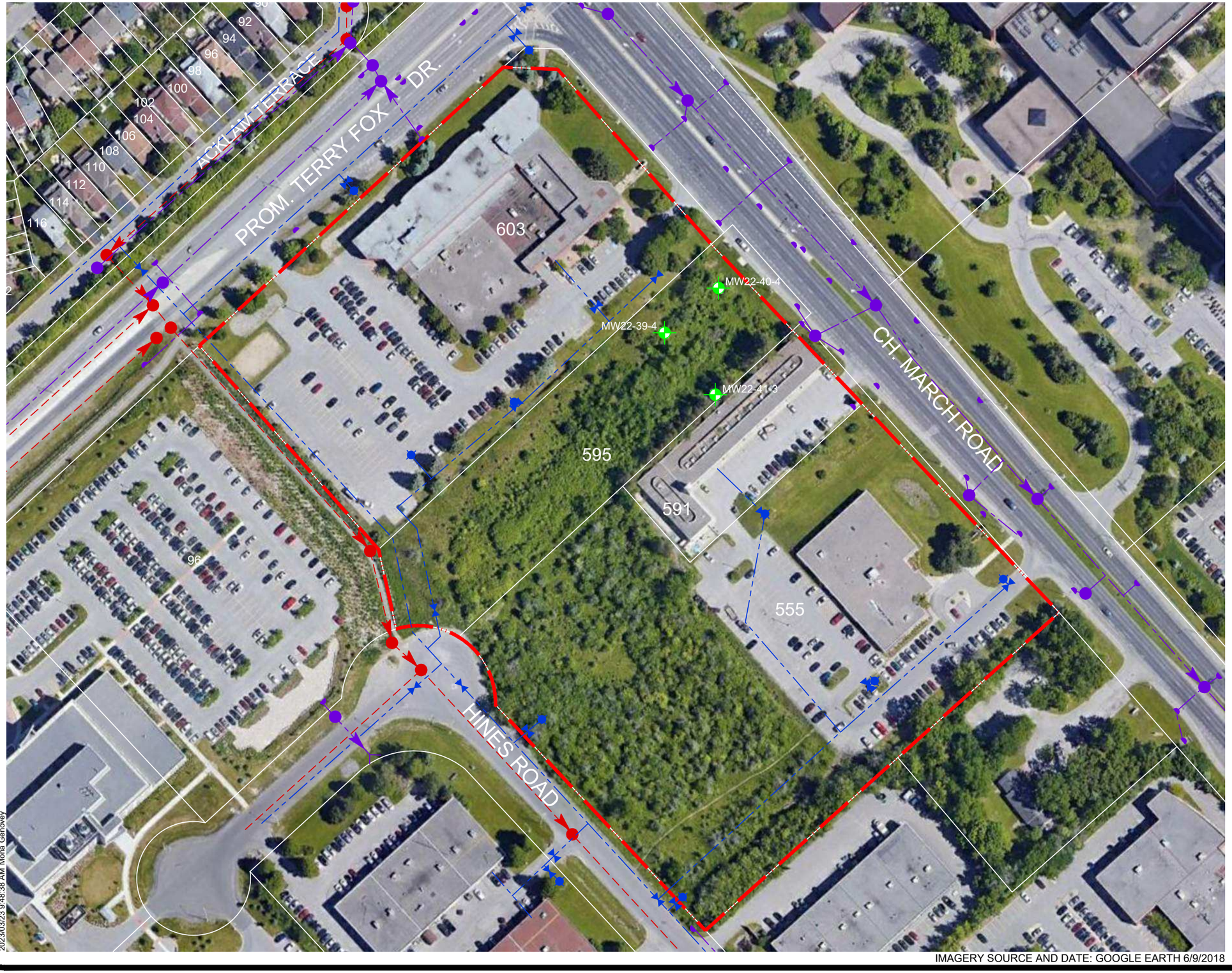
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5F

GROUNDWATER QUALITY RESULTS BETWEEN 13.7 AND 18.4 mbgs: VOC

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/23 9:48:36 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5G

GROUNDWATER QUALITY RESULTS BETWEEN 18.3 AND 23.8 mbgs: VOC

Omni-McCann

	Borehole ID	MW22-40 Port 5
	Sample ID	MW22-40-05-07DEC22
	Lab ID	WT2224609-013
	Screen Depth (mbgs)	24.38 - 26.52
	Sample Date (y/m/d)	2022-12-07
Parameter	Units / MDL / Table 7 SCS	
trichloroethylene	ug/L / 0.5 / 0.5	0.66

	Borehole ID	MW22-39 Port 6	
	Sample ID	MW22-39-06-07DEC22	DUP7-07DEC22
	Lab ID	WT2224609-007	WT2224609-024
	Screen Depth (mbgs)	24.38 - 25.91	24.38 - 25.91
	Sample Date (y/m/d)	2022-12-07	2022-12-07
Parameter	Units / MDL / Table 7 SCS		
trichloroethylene	ug/L / 0.5 / 0.5	0.81	0.64

	Borehole ID	MW22-41 Port 5
	Sample ID	MW22-41-05-07DEC22
	Lab ID	WT2224609-020
	Screen Depth (mbgs)	24.08 - 25.60
	Sample Date (y/m/d)	2022-12-07
Parameter	Units / MDL / Table 7 SCS	
trichloroethylene	ug/L / 0.5 / 0.5	0.73

IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/04/06 11:12:41 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

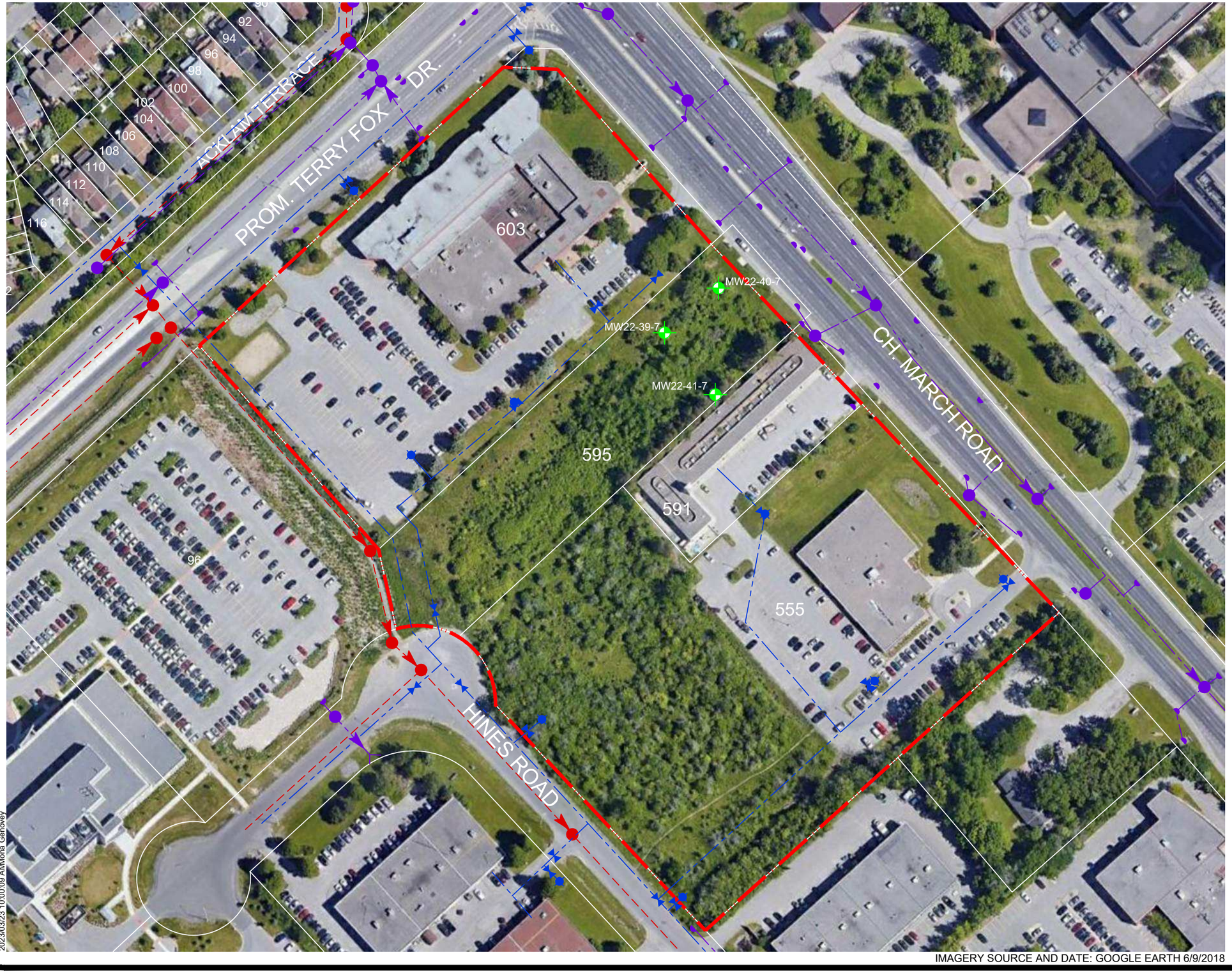
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5H

GROUNDWATER QUALITY RESULTS BETWEEN 24.1 AND 26.5 mbgs: VOC

Omni-McCann



IMAGERY SOURCE AND DATE: GOOGLE EARTH 6/9/2018

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2023/03/23 10:00:09 AM Mona Genovey

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555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

METRES

0 10 20 30 40 50 100

1:1,500

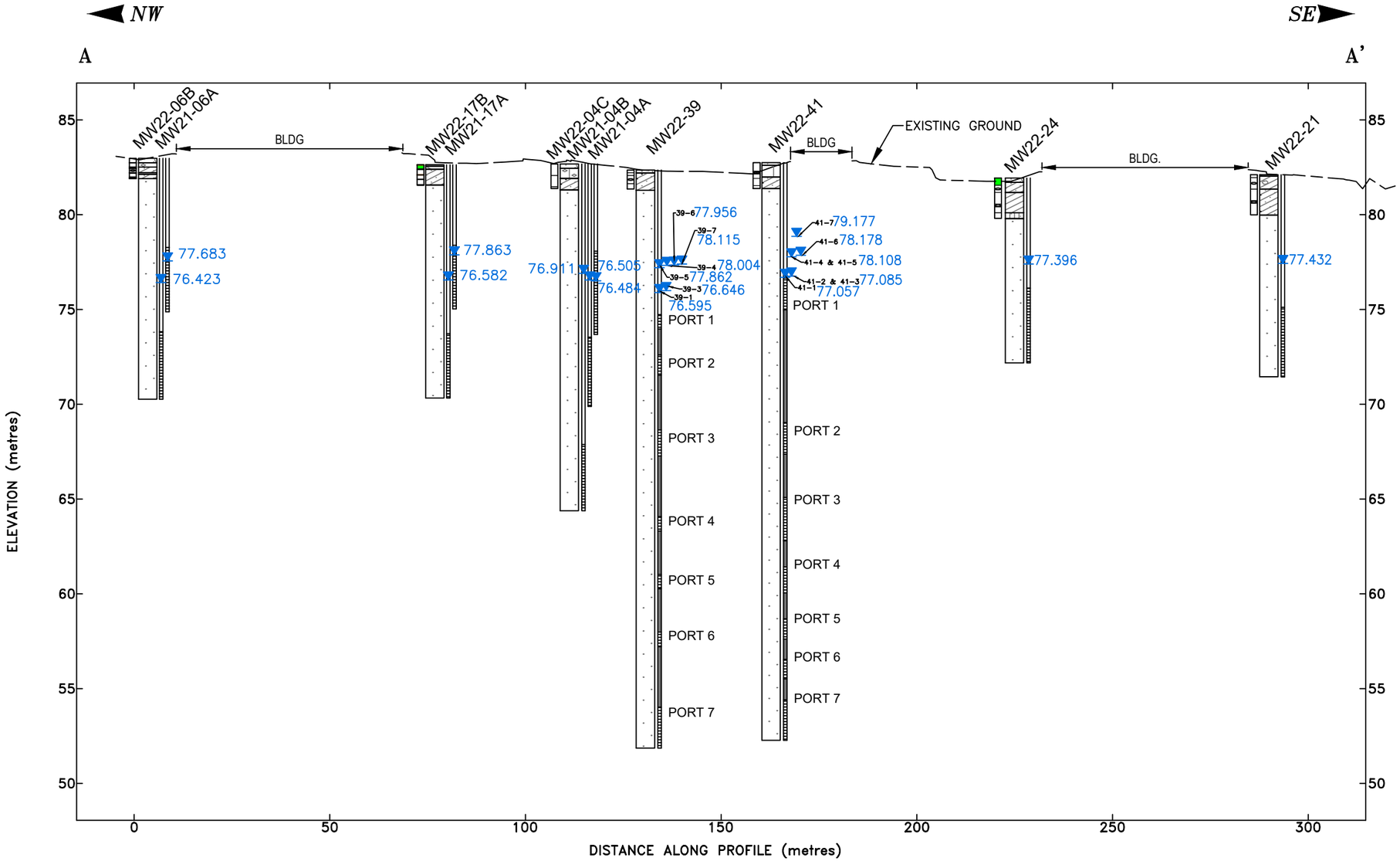
Legend

- PHASE TWO SITE BOUNDARY
- UNDERGROUND WATER LINE HYDRANT AND VALVE
- UNDERGROUND SANITARY SEWER AND MH
- UNDERGROUND STORM SEWER AND MH AND CB
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINE
- MW21-16 — MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINE

FIGURE 5 I

GROUNDWATER QUALITY RESULTS BETWEEN 27.4 AND 30.5 mbgs: VOC

Omni-McCann



MARCH AND MAIN DEVELOPMENTS INC.

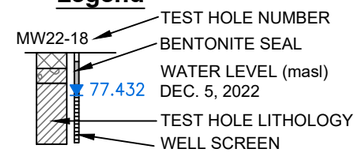
PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend



LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 6A

CROSS SECTION A-A'
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH METALS ANALYTICAL RESULTS

Omni-McCann

NW

SE

A

A'

MW22-06B
MW21-06A
MW22-17B
MW21-17A
MW22-04C
MW21-04B
MW21-04A
MW22-39
MW22-41
MW22-24
MW22-21

BLDG
BLDG
EXISTING GROUND
BLDG.

77.683
76.423
77.863
76.582
76.911
76.505
76.484
77.956
78.115
78.004
77.862
76.646
76.595
79.177
78.178
78.108
77.085
77.057
77.396
77.432

PORT 1
PORT 2
PORT 3
PORT 4
PORT 5
PORT 6
PORT 7

Borehole ID	MW21-17A
Sample ID	MW21-17A-5DEC22
Lab ID	WT2224326-012
Screen Depth (mbgs)	4.57 - 7.62
Sample Date (y/m/d)	2022-12-05

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	1.08

Borehole ID	MW22-39 Port 1	
Sample ID	MW22-39-01-07DEC22	
Lab ID	WT2224609-003	
Screen Depth (mbgs)	7.62 - 9.14	
Sample Date (y/m/d)	2022-12-07	
Parameter	Units	MDL	Table 7 SCS	
tetrachloroethylene	ug/L	0.5	0.5	1.48
trichloroethylene	ug/L	0.5	0.5	0.7

Borehole ID	MW22-39 Port 6	
Sample ID	MW22-39-06-07DEC22	DUP7-07DEC22
Lab ID	WT2224609-007	WT2224609-024
Screen Depth (mbgs)	24.38 - 25.91	24.38 - 25.91
Sample Date (y/m/d)	2022-12-07	2022-12-07
Parameter	Units	MDL	Table 7 SCS		
trichloroethylene	ug/L	0.5	0.5	0.81	0.64

Borehole ID	MW22-41 Port 1	
Sample ID	MW22-41-01-07DEC22	DUP8-07DEC22
Lab ID	WT2224609-016	WT2224609-025
Screen Depth (mbgs)	6.10 - 9.14	6.10 - 9.14
Sample Date (y/m/d)	2022-12-07	2022-12-07
Parameter	Units	MDL	Table 7 SCS		
tetrachloroethylene	ug/L	0.5	0.5	10.2	8.24

Borehole ID	MW22-41 Port 5
Sample ID	MW22-41-05-07DEC22
Lab ID	WT2224609-020
Screen Depth (mbgs)	24.08 - 25.60
Sample Date (y/m/d)	2022-12-07

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.73

ELEVATION (metres)

85 80 75 70 65 60 55 50

0 50 100 150 200 250 300

DISTANCE ALONG PROFILE (metres)

C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 6B.dwg
2023/04/04 9:44:52 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend

MW22-18 — TEST HOLE NUMBER
BENTONITE SEAL
77.432 — WATER LEVEL (masl) DEC. 5, 2022
TEST HOLE LITHOLOGY
WELL SCREEN

LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 6B

CROSS SECTION A-A'
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH VOC ANALYTICAL RESULTS

Omni-McCann

NW

SE

A

A'

MW22-06B
MW21-06A
MW22-17B
MW21-17A
MW22-04C
MW21-04B
MW21-04A
MW22-39
MW22-41
MW22-24
MW22-21

BLDG
BLDG
EXISTING GROUND
BLDG.

77.683
76.423
77.863
76.582
76.911
76.505
76.484
39-6 77.956
39-7 78.115
39-4 78.004
39-5 77.862
39-3 76.646
39-1 76.595
41-7 79.177
41-6 78.178
41-4 & 41-5 78.108
41-2 & 41-3 77.085
41-1 77.057
77.396
77.432

PORT 1
PORT 2
PORT 3
PORT 4
PORT 5
PORT 6
PORT 7

ELEVATION (metres)

85
80
75
70
65
60
55
50

0
50
100
150
200
250
300

DISTANCE ALONG PROFILE (metres)

C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 6C.dwg
2023/04/04 9:45:32 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend

MW22-18 — TEST HOLE NUMBER
BENTONITE SEAL
77.432 — WATER LEVEL (masl) DEC. 5, 2022
TEST HOLE LITHOLOGY
WELL SCREEN

LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 6C

CROSS SECTION A-A'
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PHC ANALYTICAL RESULTS

Omni-McCann

NW

SE

A

A'

MW22-06B
MW21-06A
MW22-17B
MW21-17A
MW22-04C
MW21-04B
MW21-04A
MW22-39
MW22-41
MW22-24
MW22-21

BLDG
BLDG
EXISTING GROUND
BLDG.

77.683
76.423
77.863
76.582
76.911
76.505
76.484
39-6 77.956
39-7 78.115
39-4 78.004
39-5 77.862
39-3 76.646
39-1 76.595
41-7 79.177
41-6 78.178
41-4 & 41-5 78.108
41-2 & 41-3 77.085
41-1 77.057
77.396
77.432

PORT 1
PORT 2
PORT 3
PORT 4
PORT 5
PORT 6
PORT 7

ELEVATION (metres)

85
80
75
70
65
60
55
50

0
50
100
150
200
250
300

DISTANCE ALONG PROFILE (metres)

C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 6D.dwg
2023/04/06 11:10:03 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend

MW22-18 — TEST HOLE NUMBER
BENTONITE SEAL
77.432 — WATER LEVEL (masl) DEC. 5, 2022
TEST HOLE LITHOLOGY
WELL SCREEN

LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 6D

CROSS SECTION A-A'
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PAH ANALYTICAL RESULTS

Omni-McCann

NW

SE

A

A'

MW22-06B
MW21-06A
MW22-17B
MW21-17A
MW22-04C
MW21-04B
MW21-04A
MW22-39
MW22-41
MW22-24
MW22-21

BLDG
BLDG
EXISTING GROUND
BLDG.

77.683
76.423
77.863
76.582
76.911
76.505
76.484
39-6 77.956
39-7 78.115
39-4 78.004
39-5 77.862
39-3 76.646
39-1 76.595
41-7 79.177
41-6 78.178
41-4 & 41-5 78.108
41-2 & 41-3 77.085
41-1 77.057
77.396
77.432

PORT 1
PORT 2
PORT 3
PORT 4
PORT 5
PORT 6
PORT 7

ELEVATION (metres)

85
80
75
70
65
60
55
50

0
50
100
150
200
250
300

DISTANCE ALONG PROFILE (metres)

C:\Users\MonaGenovey\Omni-McCann Geoscience\Omni-McCann - Omni-McCann\Projects\0006 - Main & Main Developments\01 - March Road, Ottawa\03 - O.Reg 153 Phase Two ESA\Drawings\0006-0103-PHASE II ESA-FIG 6E.dwg
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MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend

MW22-18 — TEST HOLE NUMBER
BENTONITE SEAL
77.432 — WATER LEVEL (masl) DEC. 5, 2022
TEST HOLE LITHOLOGY
WELL SCREEN

LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 6E

CROSS SECTION A-A'
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PCB ANALYTICAL RESULTS

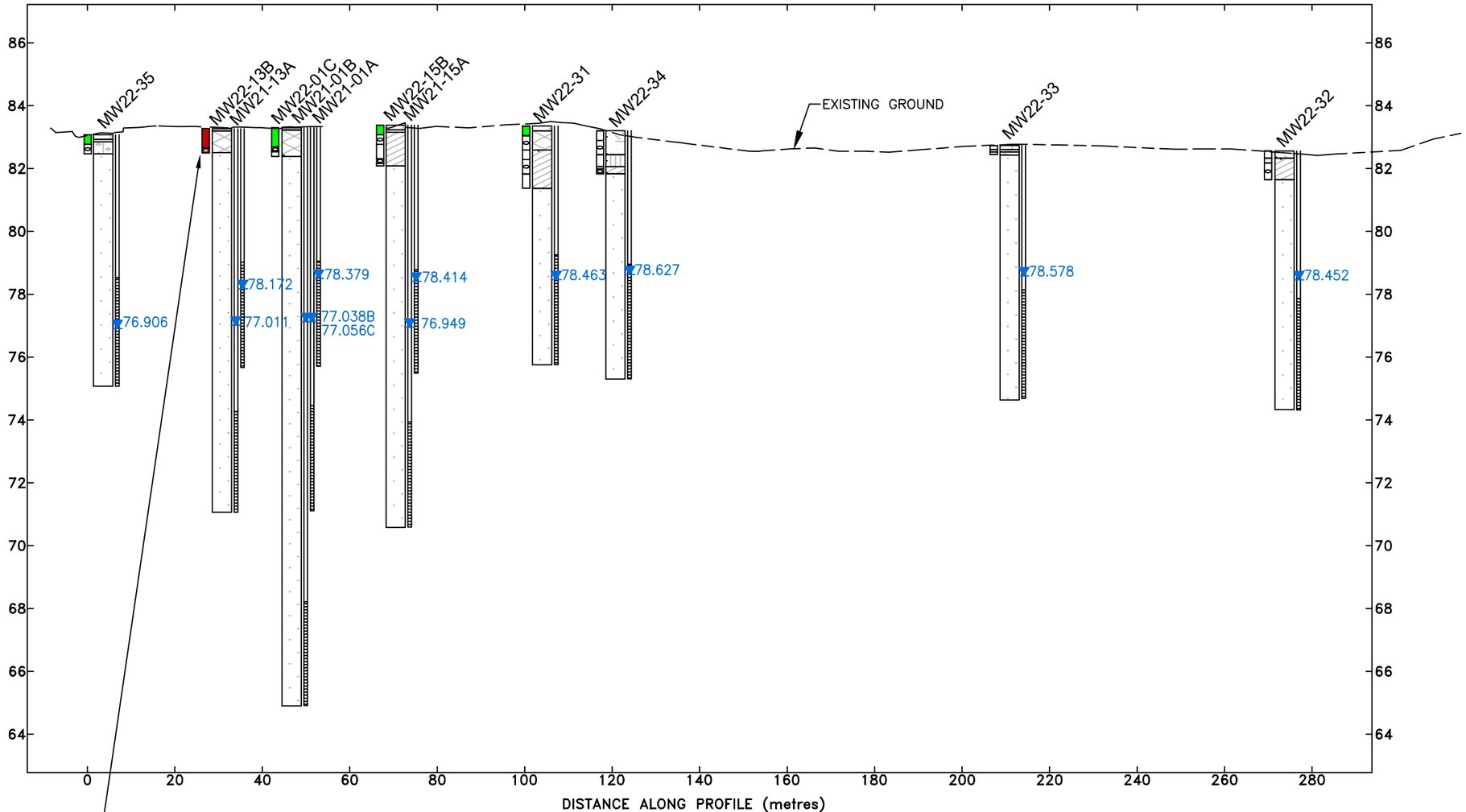
Omni-McCann

NW

SE

B

B'



Borehole ID			MW22-13B	
Sample ID			22-13B 0-2	DUP6
Lab ID			WT2221612-006	WT2221612-007
Sample Depth (m)			0 - 0.6	0 - 0.6
Sample Date (d/m/y)			10-Nov-2022	10-Nov-2022
Parameter	Units	MDL	Table 7 SCS	
Soluable Ions				
sodium adsorption ratio [SAR]	--	0.1	5	8.15	9.43

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

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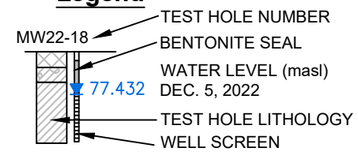
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend



LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

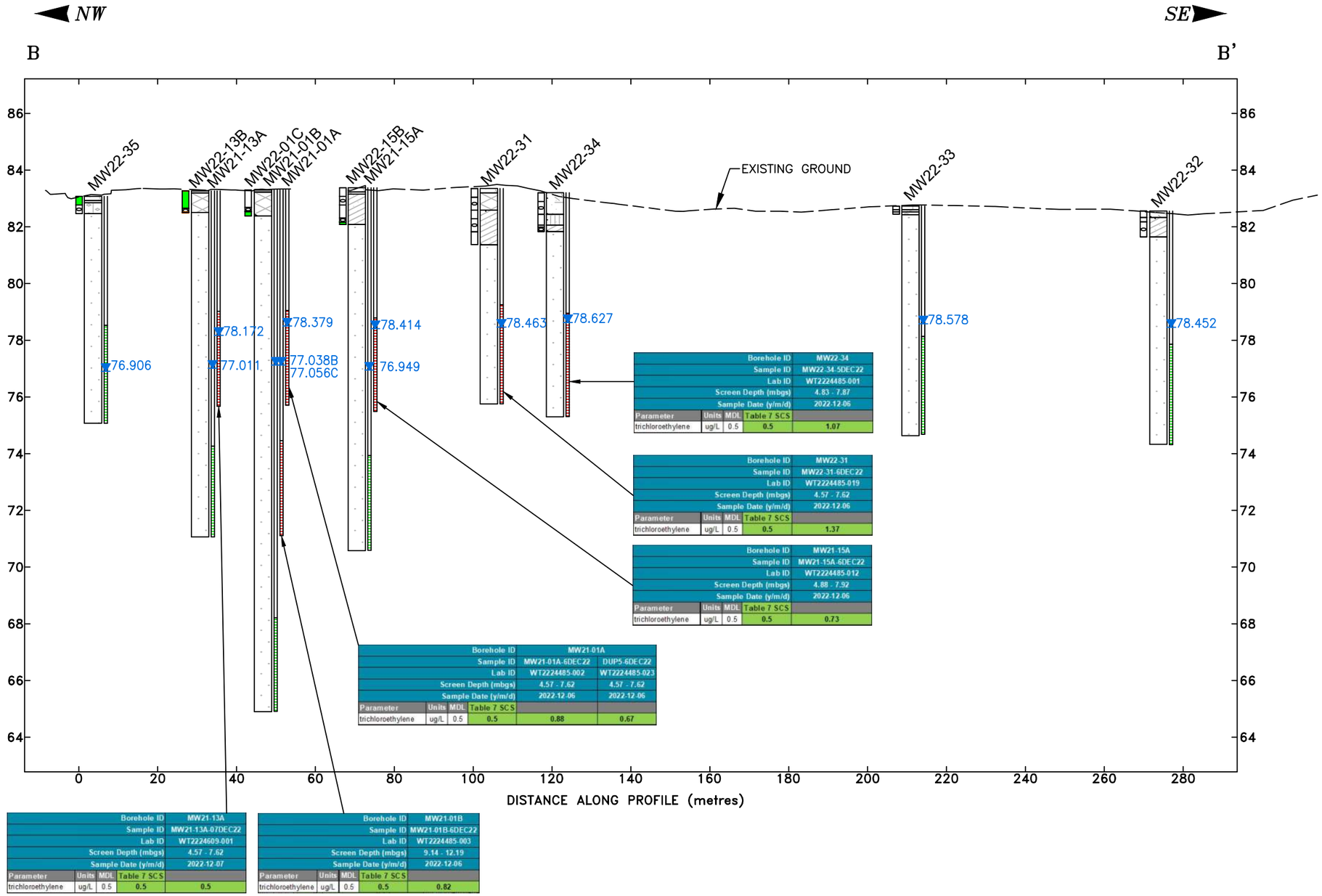
ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 7A

CROSS SECTION B-B
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH METALS ANALYTICAL RESULTS

Omni-McCann



MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

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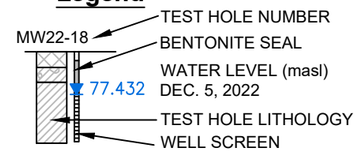


LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

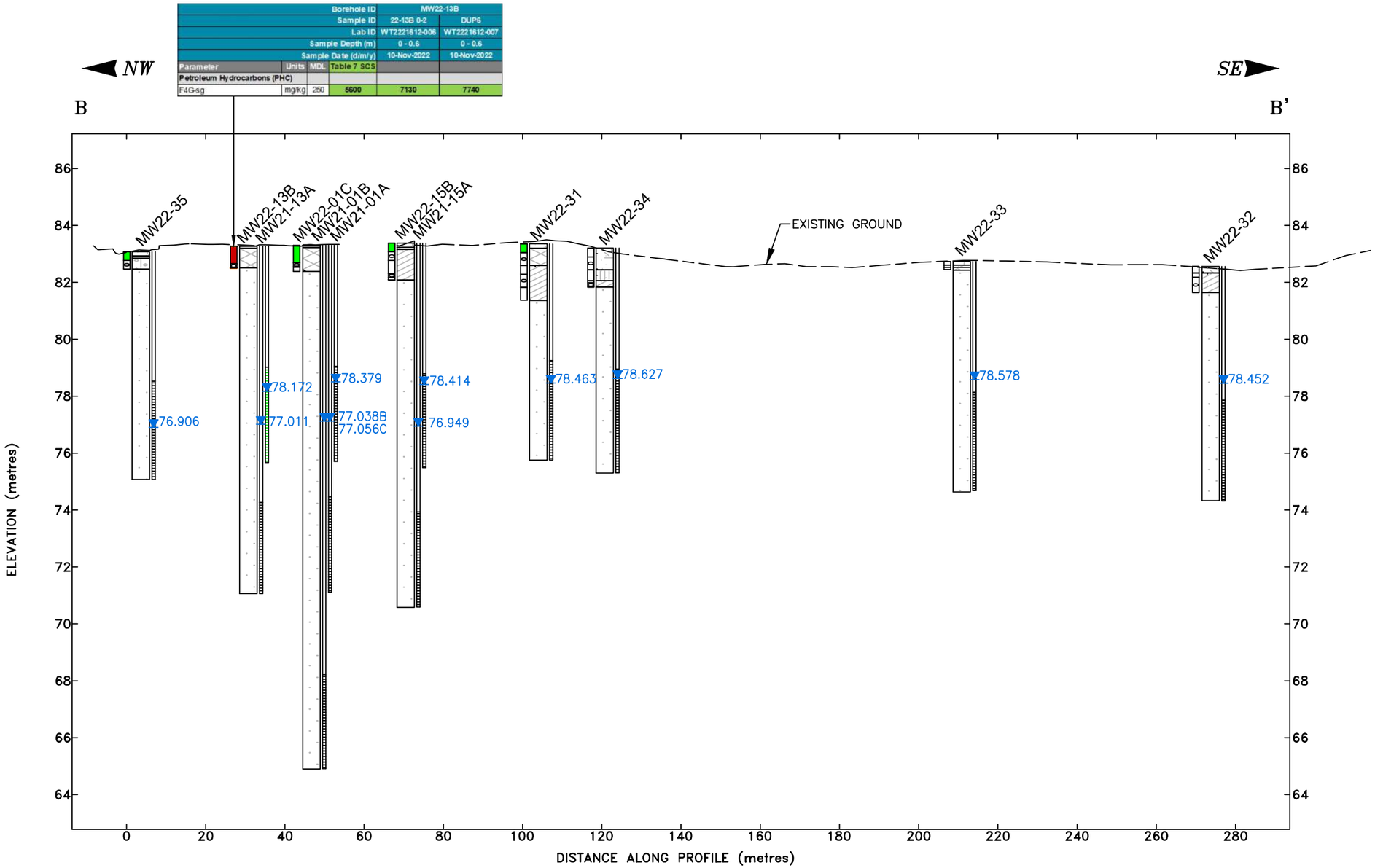
FIGURE 7B

CROSS SECTION B-B

INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH VOC ANALYTICAL RESULTS

Omni-McCann

Borehole ID				MW22-13B	
Sample ID				22-13B 0-2	DUP6
Lab ID				WT2221612-006	WT2221612-007
Sample Depth (m)				0 - 0.6	0 - 0.6
Sample Date (d/m/y)				10-Nov-2022	10-Nov-2022
Parameter	Units	MDL	Table 7 SCS		
Petroleum Hydrocarbons (PHC)					
F4G-sg	mg/kg	250	5600	7130	7740



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2023/04/06 11:07:46 AM Mona Genovey

MARCH AND MAIN DEVELOPMENTS INC.

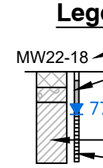
PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend



TEST HOLE NUMBER
BENTONITE SEAL
WATER LEVEL (masl) DEC. 5, 2022
TEST HOLE LITHOLOGY
WELL SCREEN

LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 7C

CROSS SECTION B-B
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PHC ANALYTICAL RESULTS

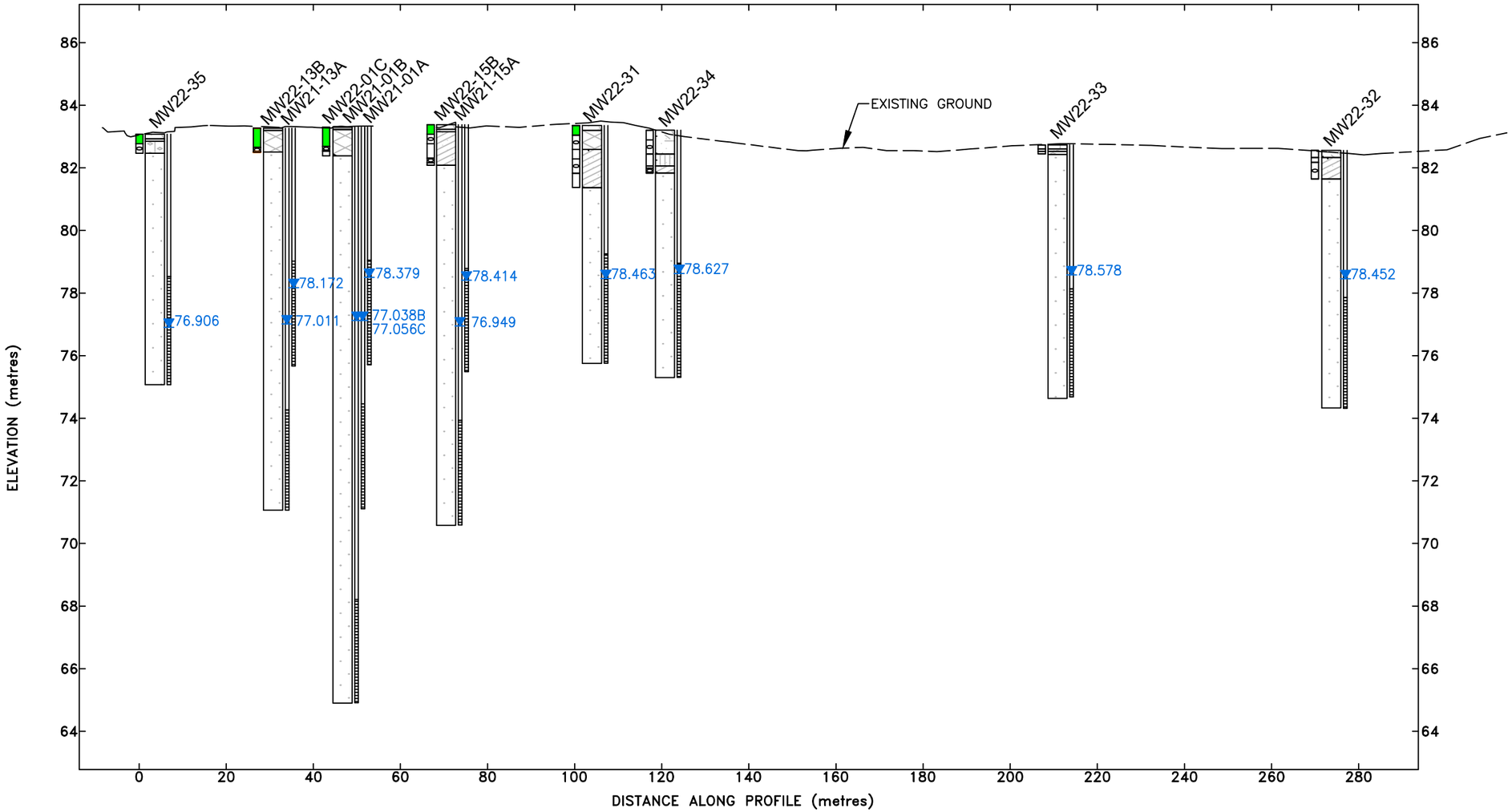
Omni-McCann

NW

SE

B

B'



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MARCH AND MAIN DEVELOPMENTS INC.

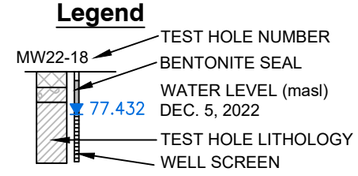
PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend



LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- WELL-GRADED SAND WITH SILT
- SILT CLAYEY

ANALYTICAL RESULTS

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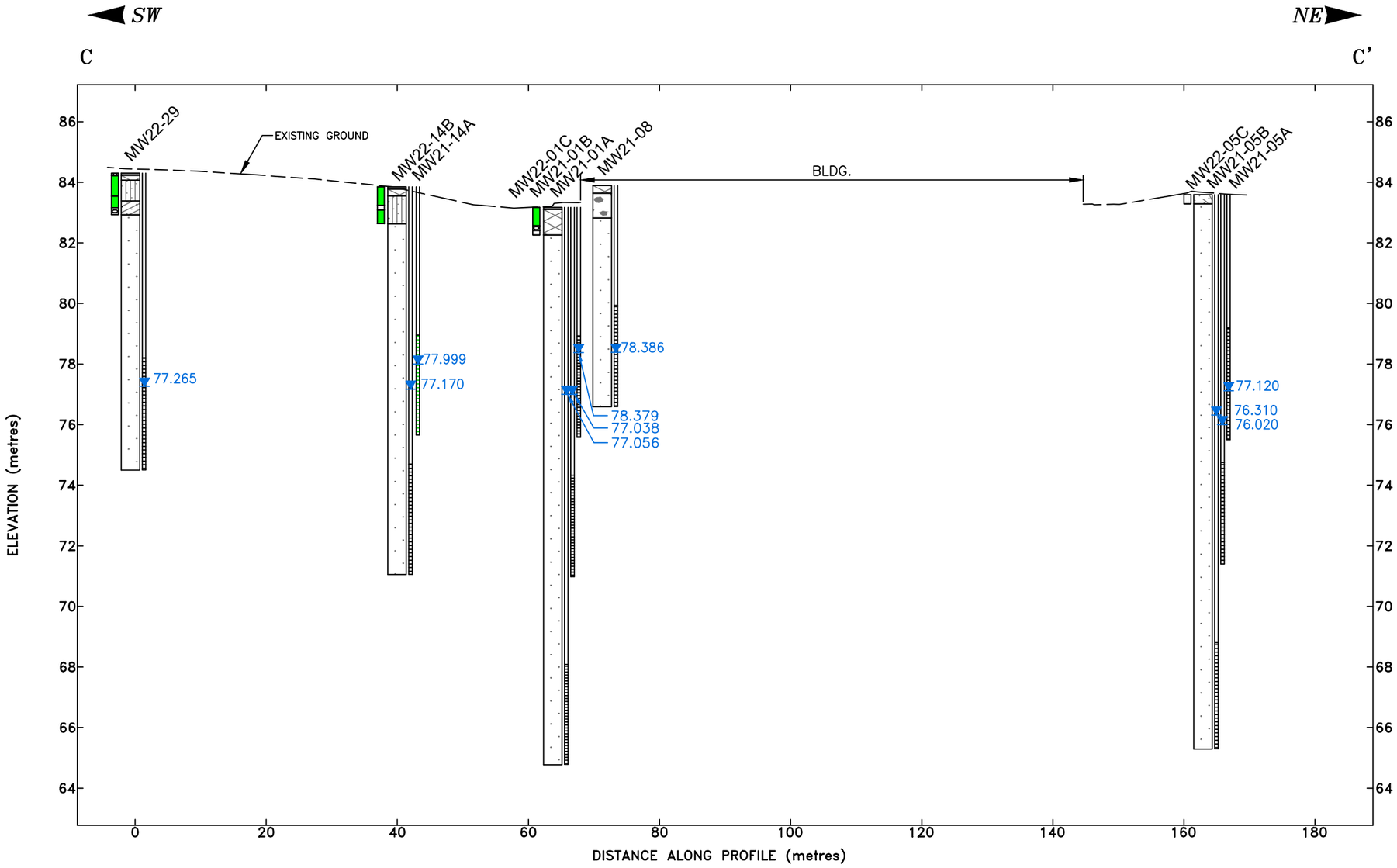
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 7D

CROSS SECTION B-B
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PAH ANALYTICAL RESULTS

Omni-McCann



MARCH AND MAIN DEVELOPMENTS INC.

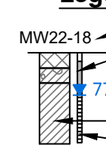
PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend



LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- POORLY-GRADED GRAVEL
- SILT CLAYEY

ANALYTICAL RESULTS

- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 8A

CROSS SECTION C-C

INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH METALS ANALYTICAL RESULTS

Omni-McCann

SW

NE

C

C'

MW22-29

EXISTING GROUND

MW22-14B
MW21-14A

MW22-01C
MW21-01B
MW21-01A
MW21-08

BLDG.

MW22-05C
MW21-05B
MW21-05A

77.265

77.999

77.170

78.386

78.379

77.038

77.056

77.120

76.310

76.020

Borehole ID	MW21-08
Sample ID	MW21-08-5DEC22
Lab ID	WT2224326-002
Screen Depth (mbgs)	4.27 - 7.32
Sample Date (y/m/d)	2022-12-05

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.89

Borehole ID	MW21-01A	
Sample ID	MW21-01A-6DEC22	DUP5-6DEC22
Lab ID	WT2224485-002	WT2224485-023
Screen Depth (mbgs)	4.57 - 7.62	4.57 - 7.62
Sample Date (y/m/d)	2022-12-06	2022-12-06

Parameter	Units	MDL	Table 7 SCS		
trichloroethylene	ug/L	0.5	0.5	0.88	0.67

Borehole ID	MW21-01B
Sample ID	MW21-01B-6DEC22
Lab ID	WT2224485-003
Screen Depth (mbgs)	9.14 - 12.19
Sample Date (y/m/d)	2022-12-06

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.82

Borehole ID	MW21-14A
Sample ID	MW21-14A-6DEC22
Lab ID	WT2224485-010
Screen Depth (mbgs)	5.18 - 8.23
Sample Date (y/m/d)	2022-12-06

Parameter	Units	MDL	Table 7 SCS	
trichloroethylene	ug/L	0.5	0.5	0.65

ELEVATION (metres)

86 84 82 80 78 76 74 72 70 68 66 64

DISTANCE ALONG PROFILE (metres)

0 20 40 60 80 100 120 140 160 180

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MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend

MW22-18 — TEST HOLE NUMBER

BENTONITE SEAL

77.432 — WATER LEVEL (masl) DEC. 5, 2022

TEST HOLE LITHOLOGY

WELL SCREEN

LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
- ASPHALT
- SANDY SILT
- LOW PLASTICITY GRAVELLY CLAY
- LOW PLASTICITY SANDY CLAY
- LOW PLASTIC CLAY
- WELL-GRADED SAND
- POORLY-GRADED GRAVEL
- SILT CLAYEY

ANALYTICAL RESULTS

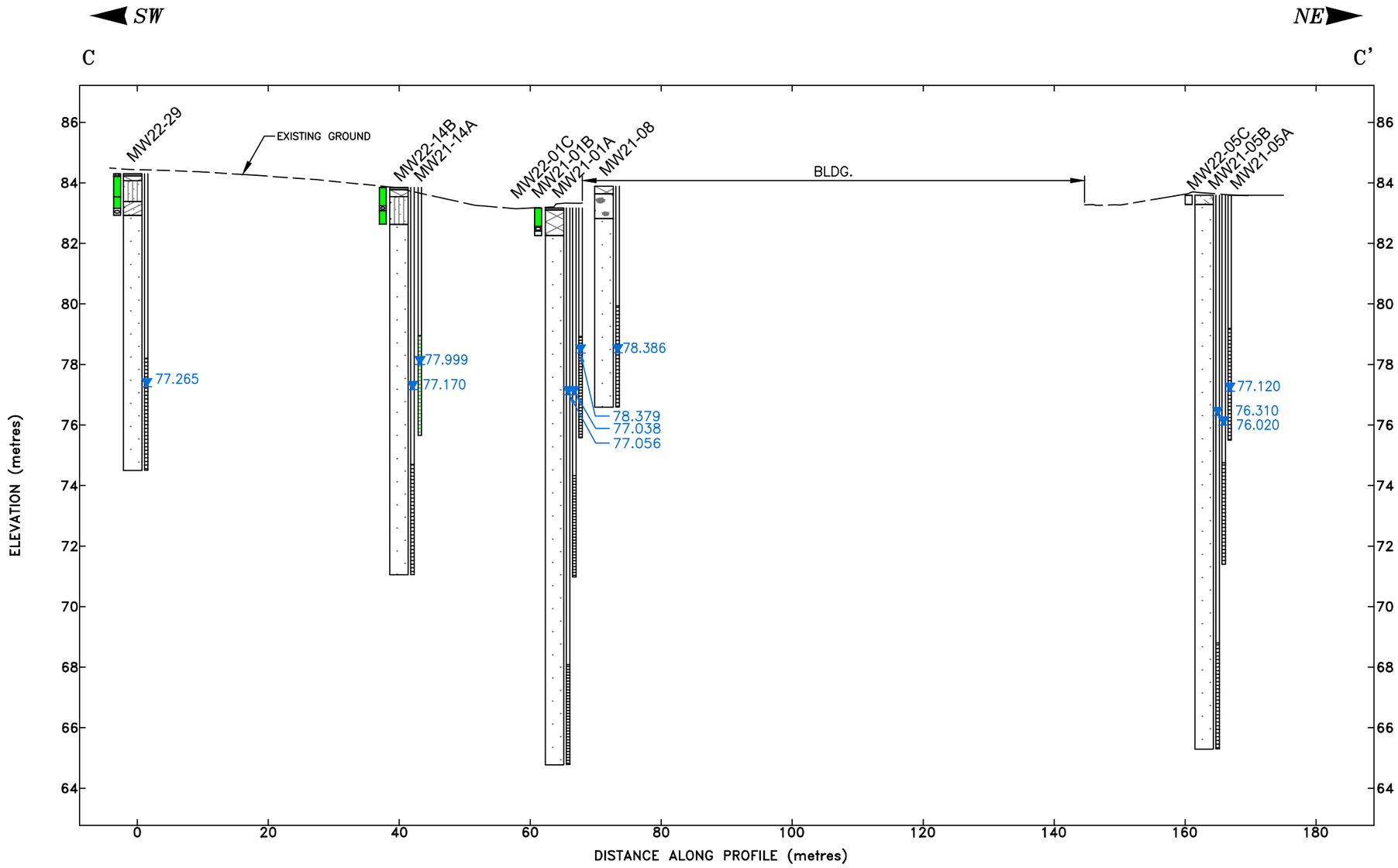
- SOIL ANALYTICAL RESULTS EXCEEDING APPLICABLE GUIDELINES
- SOIL ANALYTICAL RESULTS MEETING APPLICABLE GUIDELINES
- SOIL SAMPLE NOT ANALYZED FOR PARAMETER SET
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS BELOW APPLIED GUIDELINES
- MONITORING WELL LOCATION WITH GROUNDWATER PARAMETERS ABOVE APPLIED GUIDELINES
- GROUNDWATER SAMPLE NOT ANALYZED FOR PARAMETER SET

FIGURE 8B

CROSS SECTION C-C

INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH VOC ANALYTICAL RESULTS

Omni-McCann



MARCH AND MAIN DEVELOPMENTS INC.

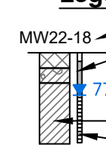
PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

Legend



LITHOLOGY GRAPHICS

- FILL
- TOPSOIL
- SANDSTONE
- BEDROCK
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- LOW PLASTICITY GRAVELLY CLAY
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- SILT CLAYEY

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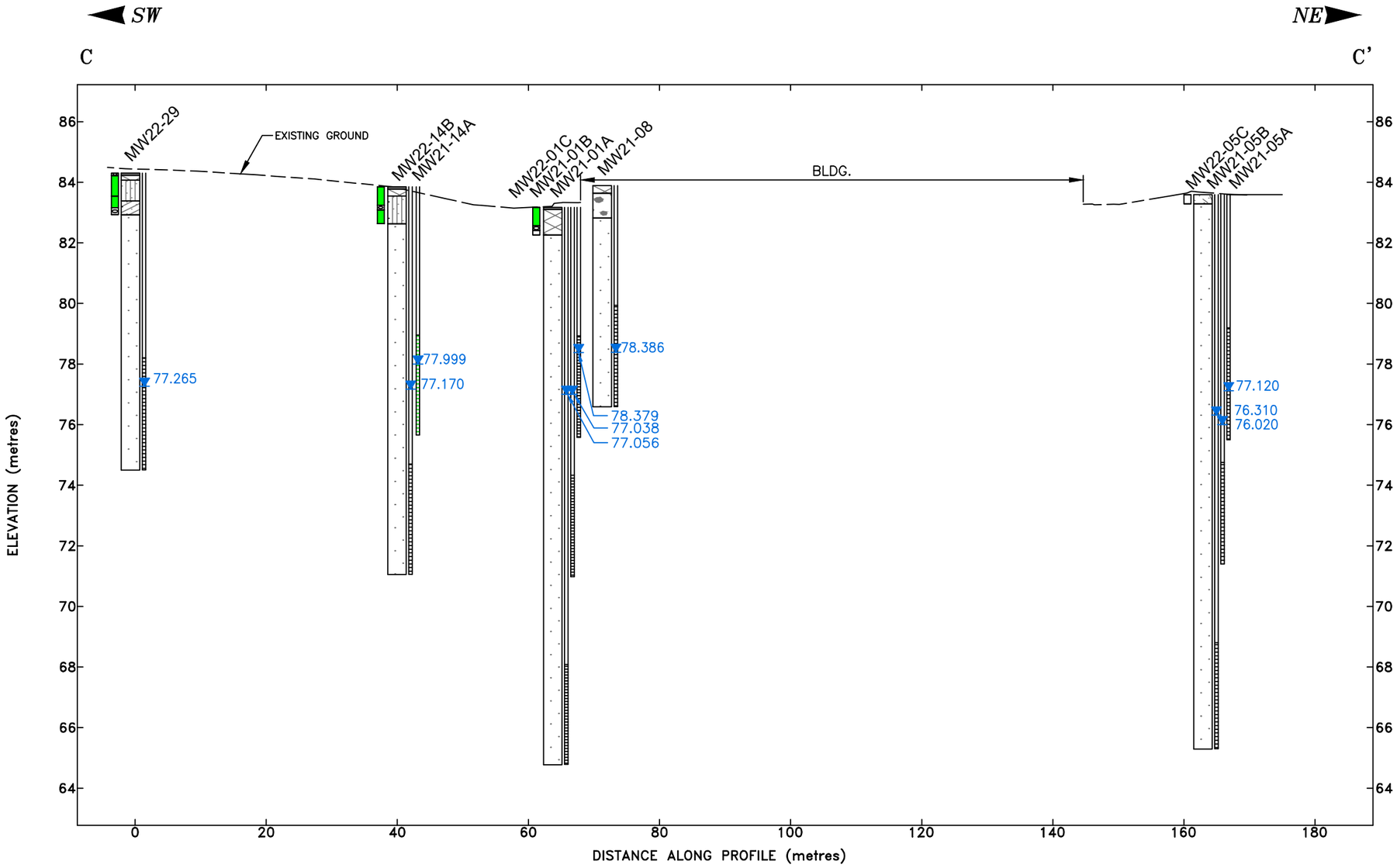
FIGURE 8C

CROSS SECTION C-C

INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PHC ANALYTICAL RESULTS

Omni-McCann



MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

555, 591, 595 AND 603 MARCH ROAD, KANATA, ONT.

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

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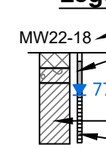

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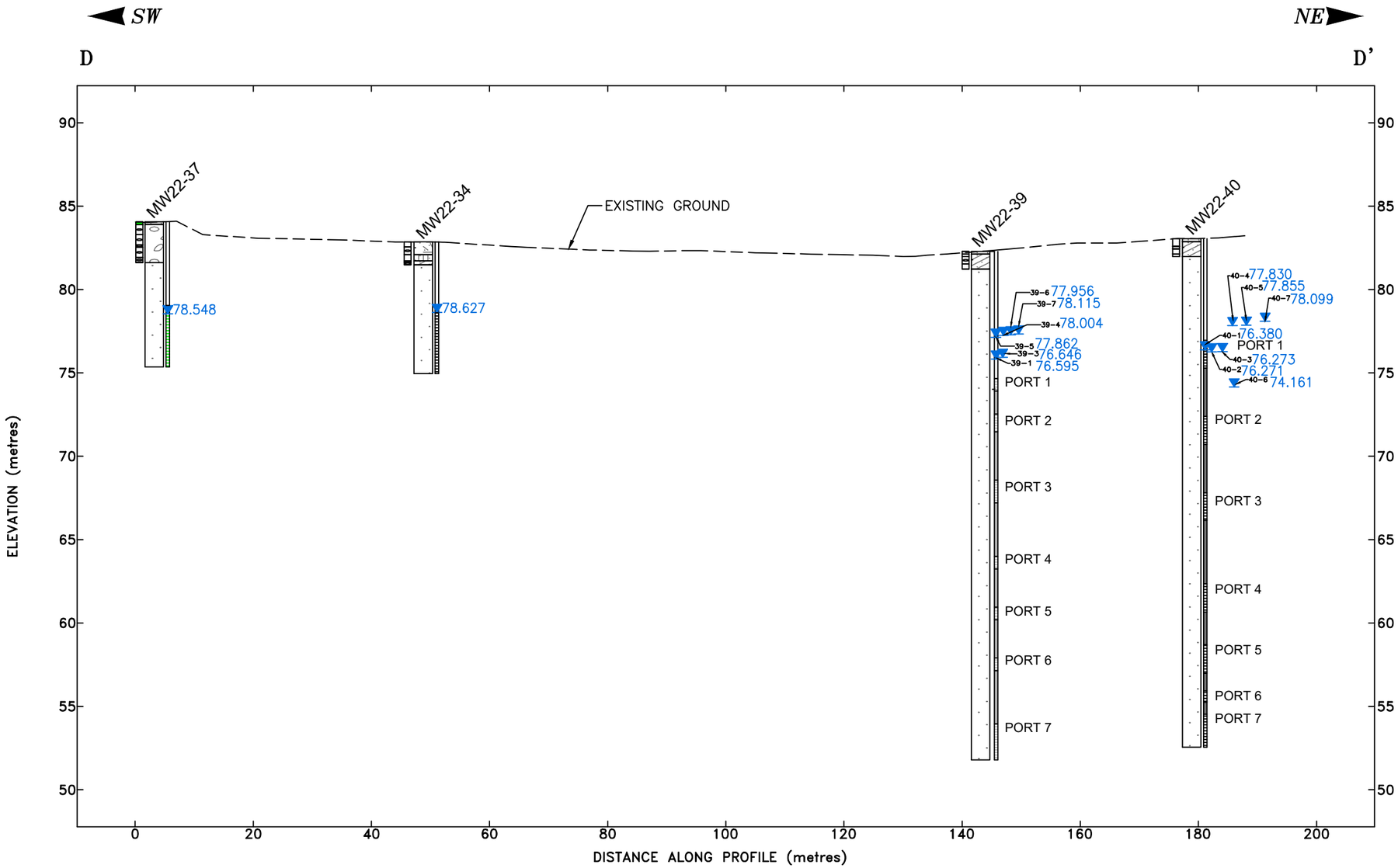
FIGURE 8D

CROSS SECTION C-C

INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH PAH ANALYTICAL RESULTS

Omni-McCann



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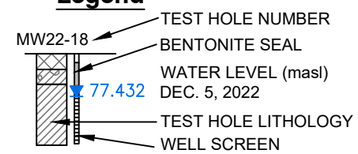

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FIGURE 9A

CROSS SECTION D-D
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH METALS ANALYTICAL RESULTS

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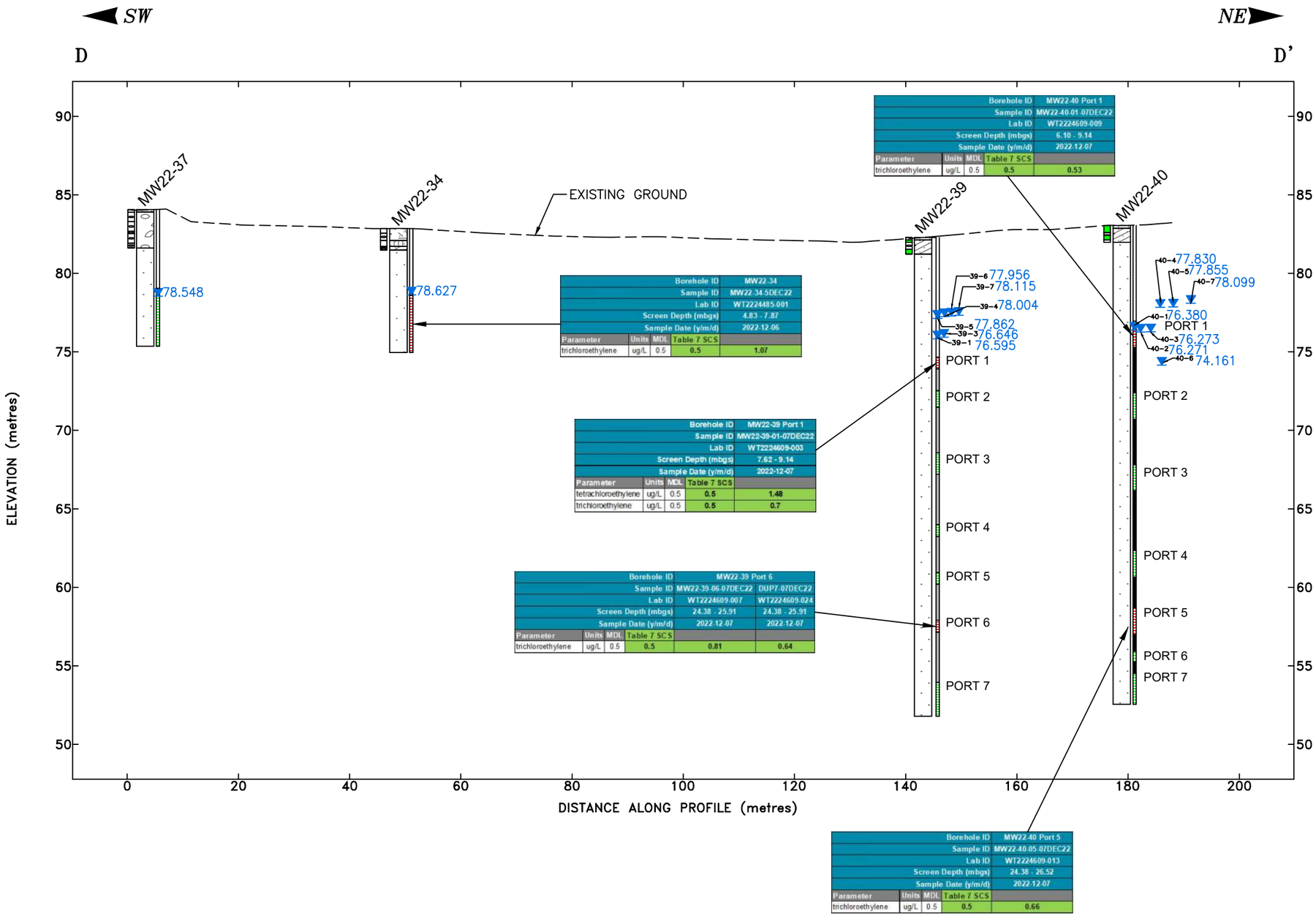

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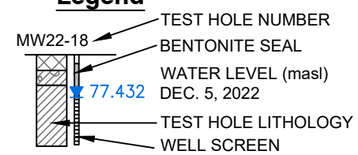

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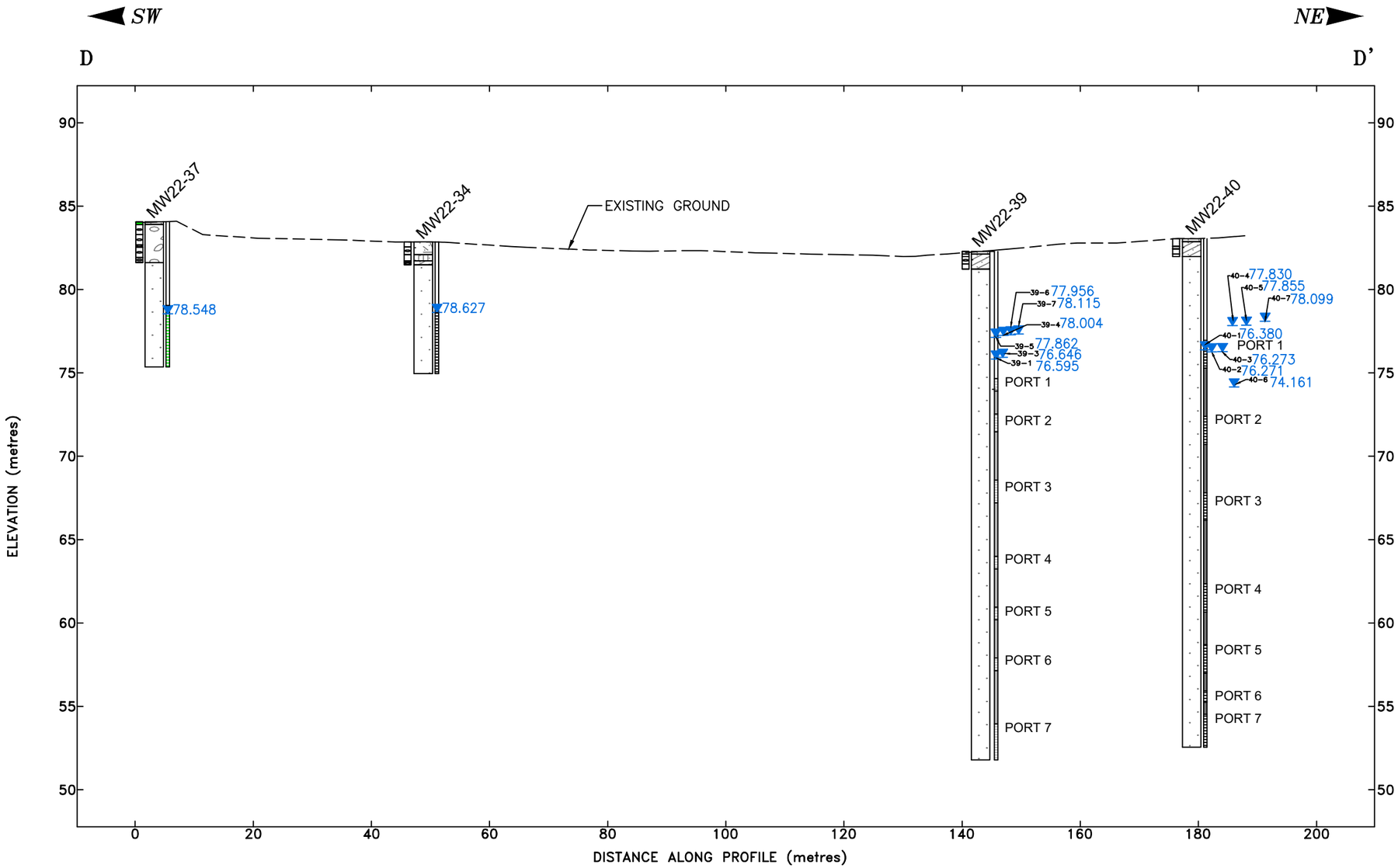
FIGURE 9B

CROSS SECTION D-D
INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH VOC ANALYTICAL RESULTS

Omni-McCann



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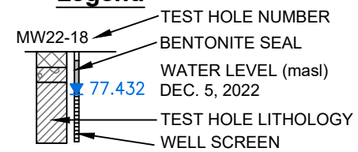

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FIGURE 9C

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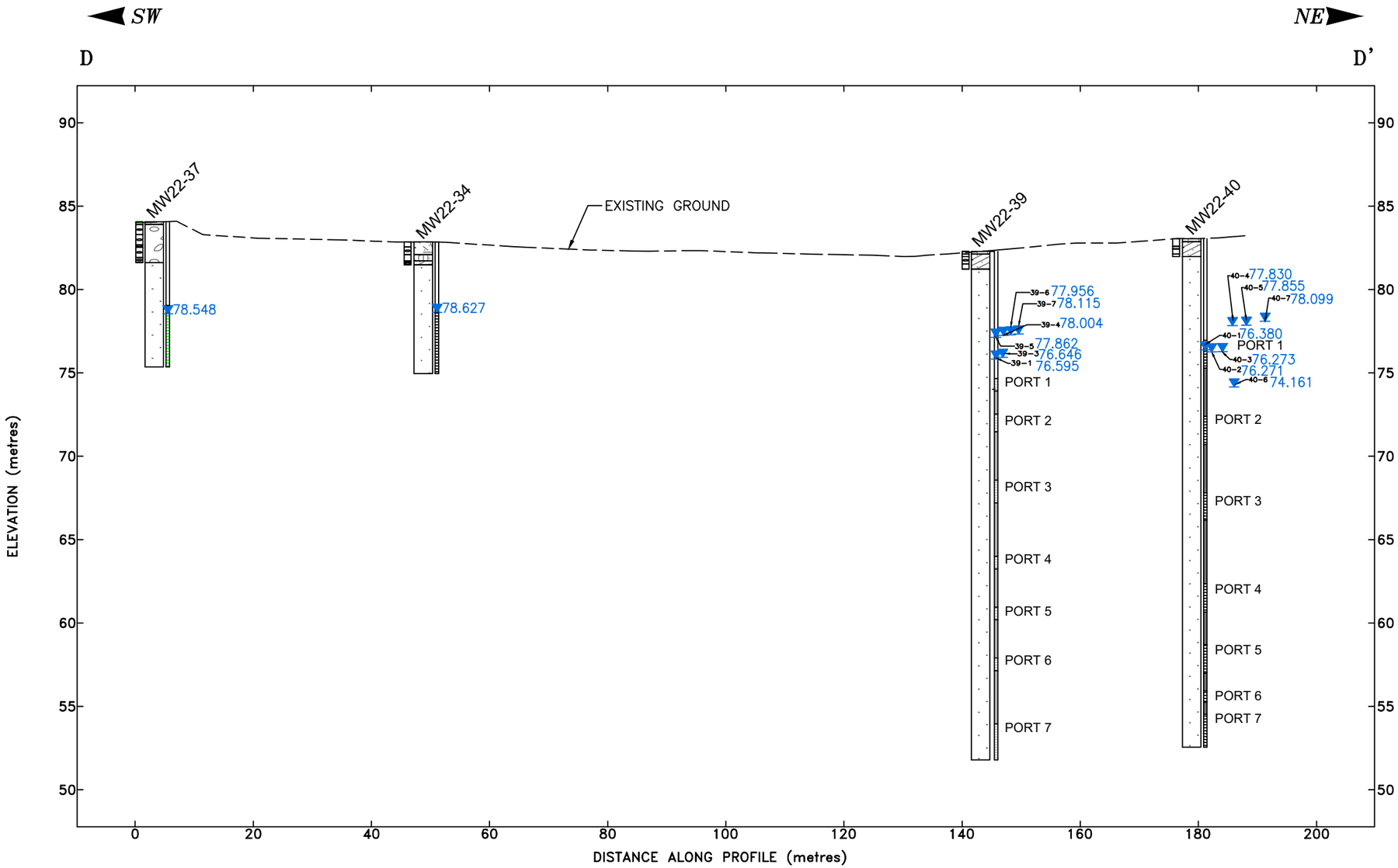

MARCH AND MAIN DEVELOPMENTS INC.

PROJECT NO. 0006-0103

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

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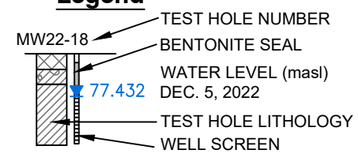

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FIGURE 9D

CROSS SECTION D-D
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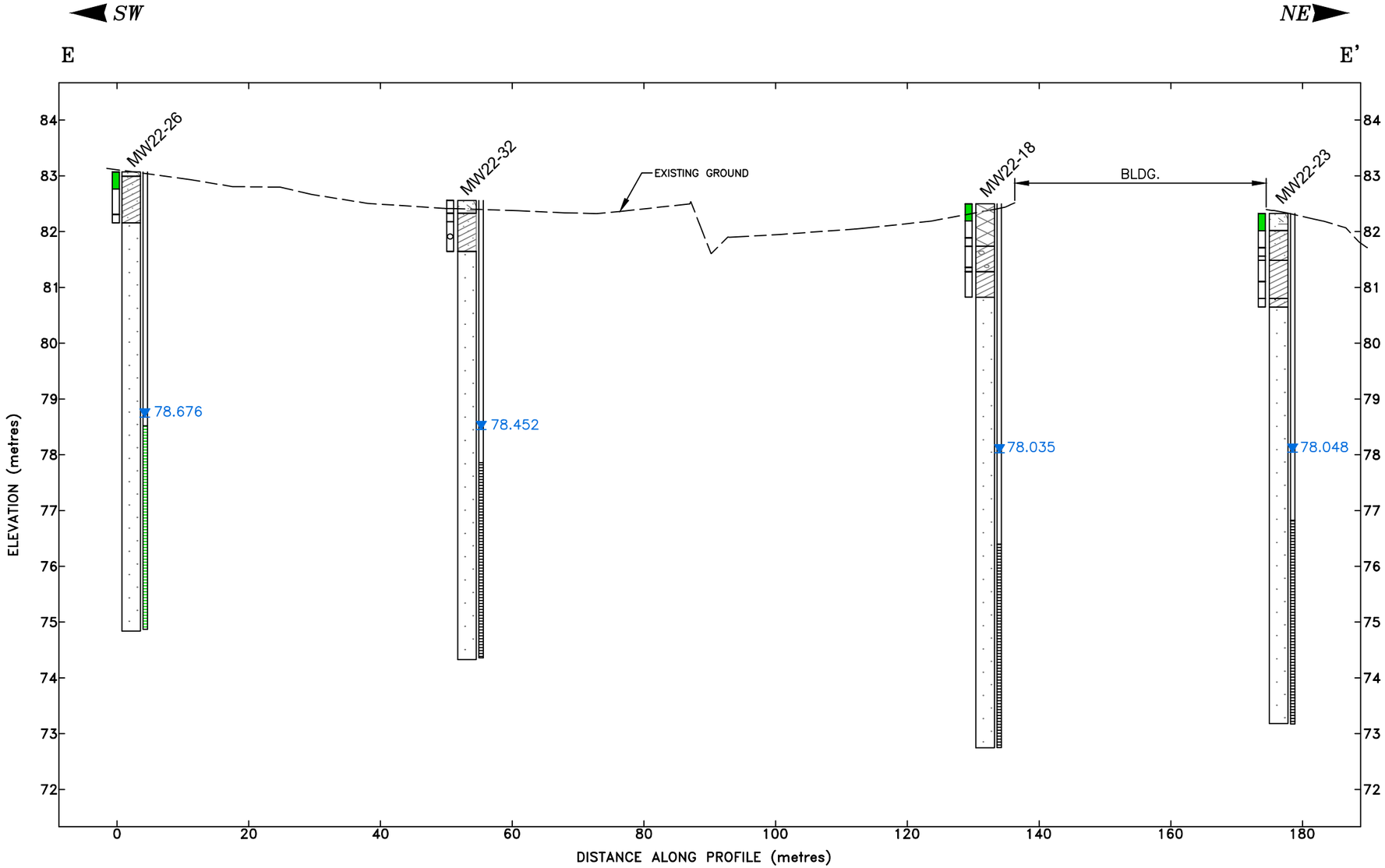

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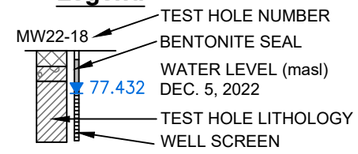

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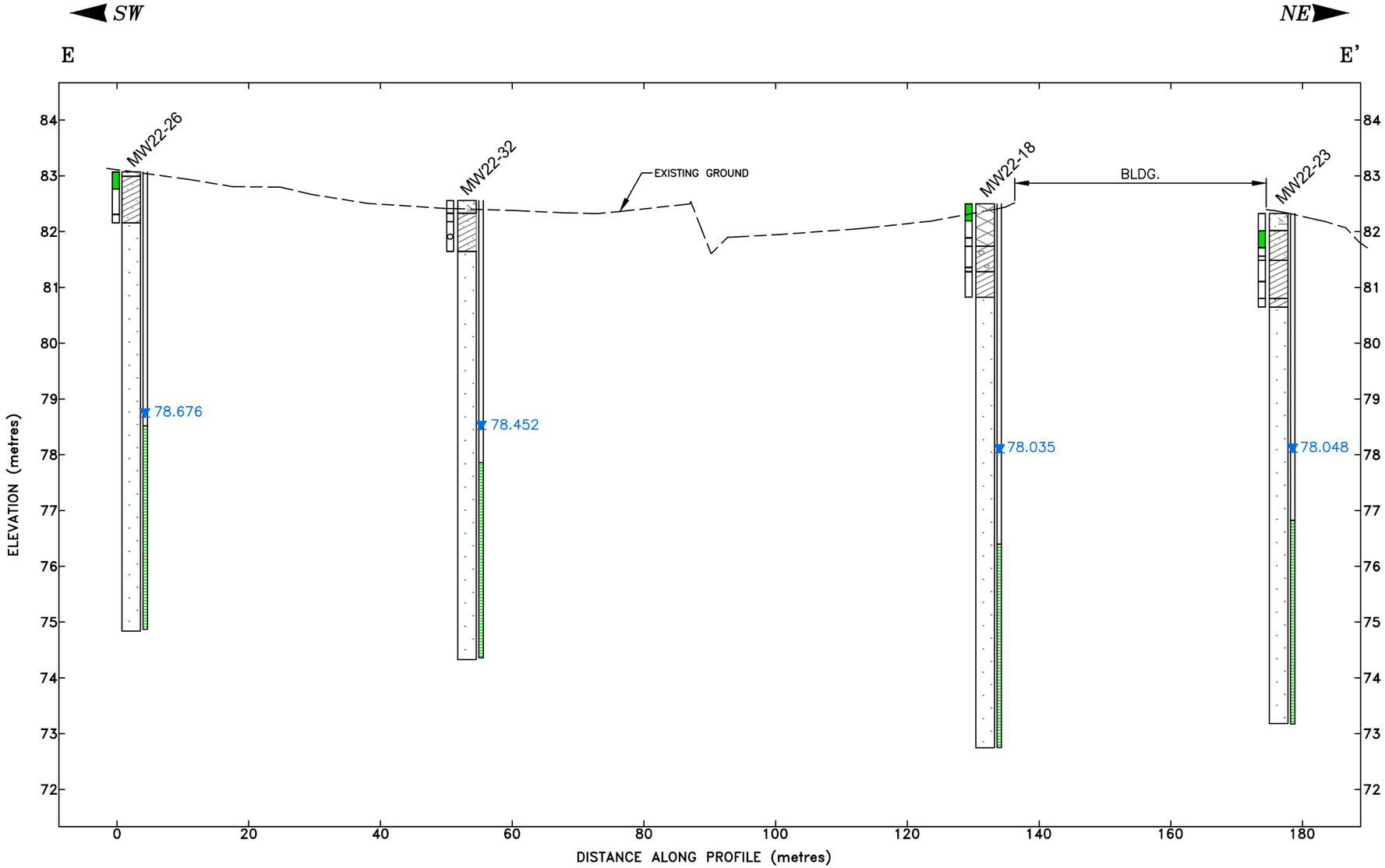
FIGURE 10A

CROSS SECTION E-E

INTERPRETED GEOLOGICAL AND HYDROGEOLOGICAL CONDITIONS WITH METALS ANALYTICAL RESULTS

Omni-McCann



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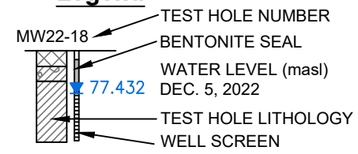

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FIGURE 10B

CROSS SECTION E-E

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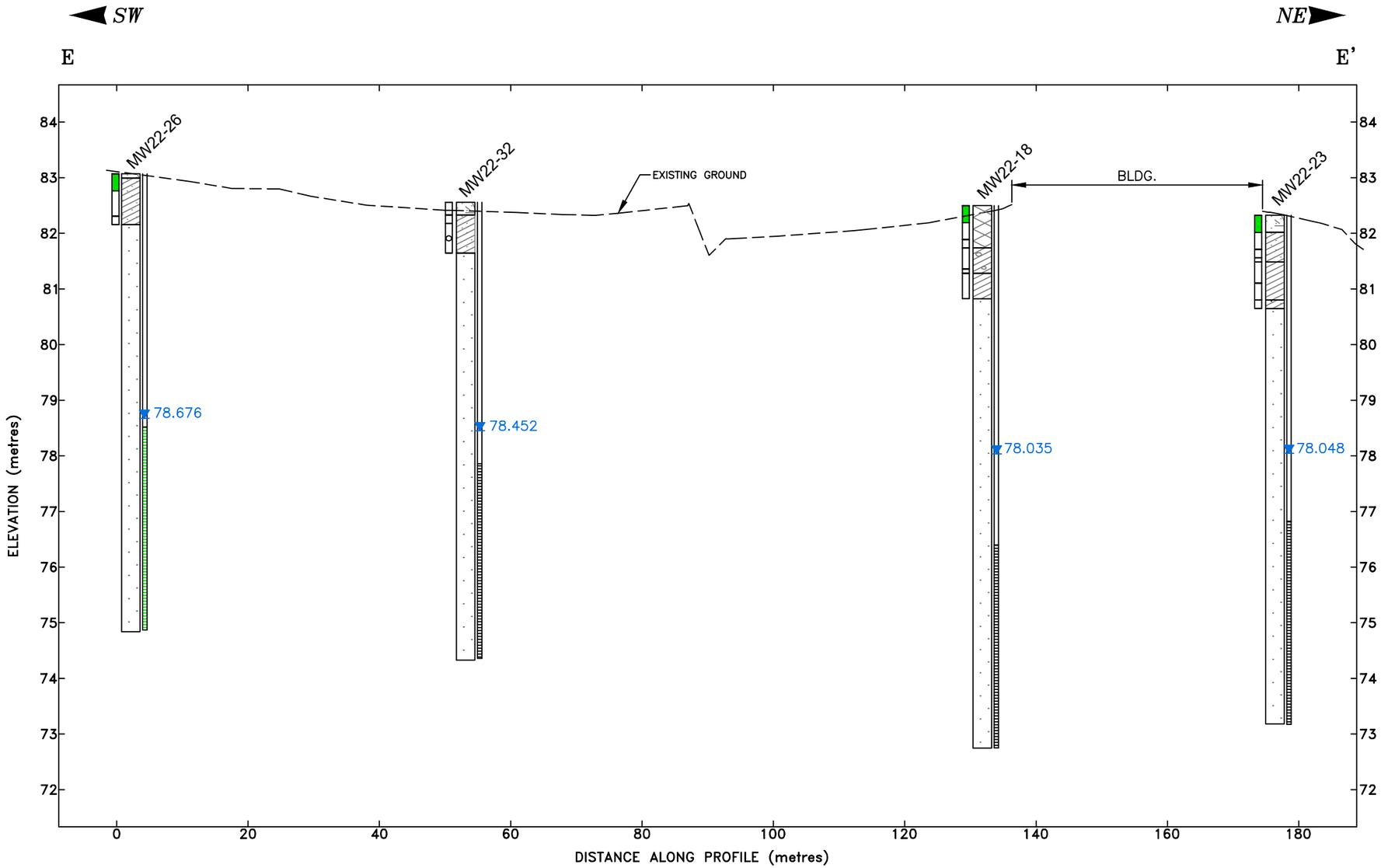
Omni-McCann



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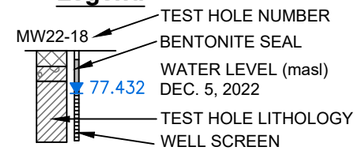

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FIGURE 10C

CROSS SECTION E-E

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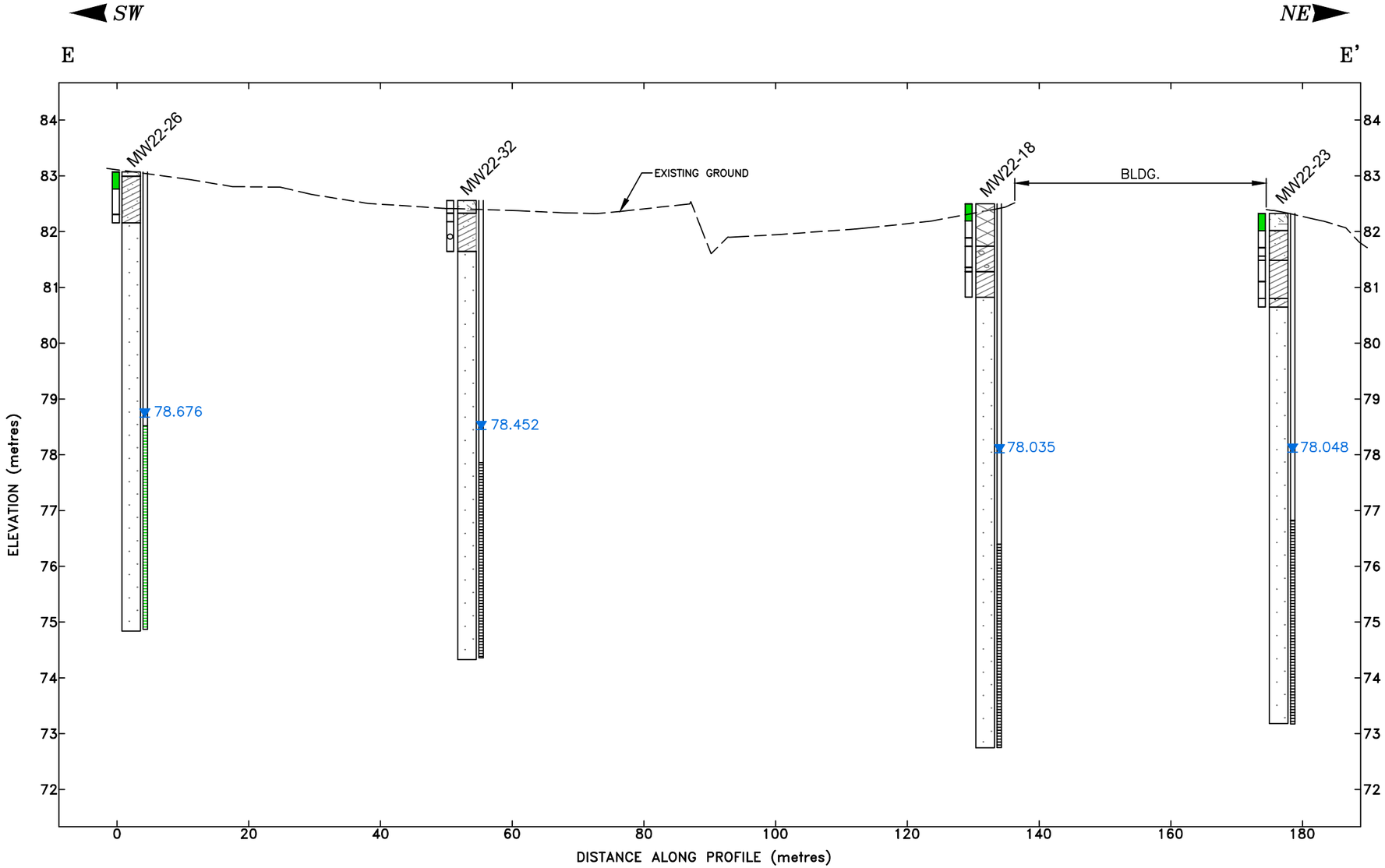

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MARCH AND MAIN DEVELOPMENTS INC.

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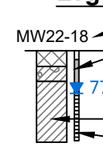

TEST HOLE NUMBER
BENTONITE SEAL
WATER LEVEL (masl) DEC. 5, 2022
TEST HOLE LITHOLOGY
WELL SCREEN

LITHOLOGY GRAPHICS

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FIGURE 10D

CROSS SECTION E-E
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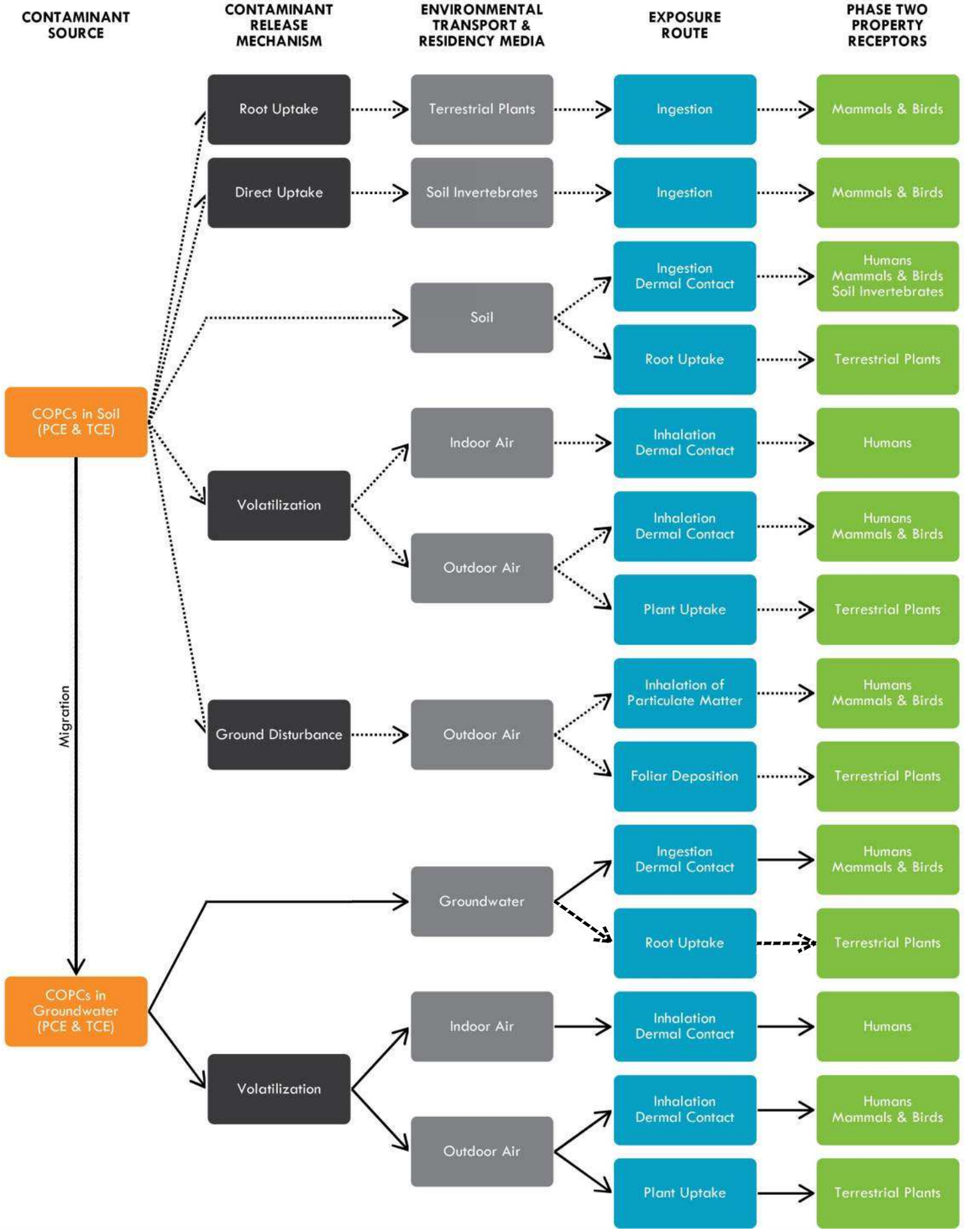

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PROJECT NO. 0006-0103

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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

APRIL, 2023

N

Legend

COMPLETE PATHWAY

INCOMPLETE PATHWAY

FIGURE 11
EXPOSURE PATHWAYS FOR VOLATILE ORGANIC COMPOUNDS

Omni-McCann

APPENDIX A

Sample and Analysis Plan

Omni-McCann

1755 Woodward Dr., Unit 200
Ottawa, ON K2C 0P9
T: 343-809-3368
E: admin@omnimccann.com

October 7, 2022 Project No. 0006-0103

RE: Phase Two Environmental Site Assessment Sampling and Analysis Plan
555, 591, 595, and 603 March Road, Kanata, ON

OBJECTIVE

The objective of this Phase Two Environmental Site Assessment (ESA) is to investigate the presence or absence of environmental impacts to soil and groundwater associated with the historic uses of the above noted properties (herein referred to as the 'site') as they relate to the areas of potential environmental concern (APECs) identified in the Phase One ESA. The APECs and associated contaminants of potential concern (COPCs) identified as part of the Phase One ESA are as follows:

APEC A: Interior and immediately surrounding area of the 555 March Road building.

- Former (1985 – 2005) use of the building as an electronic component manufacturing facility.
- COPCs associated to APEC A are volatile organic compounds (VOCs).

APEC B: Interior and immediately surrounding area of the 591 March Road building; area of known contamination north of building.

- Former (1991 - 2000) dry cleaning operation where chemicals are used.
- COPCs associated to APEC B are VOCs.

APEC C: Interior and surrounding area of 603 March Road building; area of known groundwater contamination.

- Former (1997 – 2007) use of building as an electronic component manufacturing facility.
- COPCs associated to APEC C are VOCs.

APEC D: Interior and immediately surrounding area adjacent to elevator at 603 March Road.

- Storage of hydraulic oil in a fixed tank.

- COPCs associated with APEC D include petroleum hydrocarbons (PHC) and benzene, toluene, ethylbenzene, and xylenes (BTEX).

APEC E: Northern property boundary, 591 March Road parking area, and southern corner of 555 March Road building.

- Presence of two, oil filled, pad mounted, high voltage transformers along the northern boundary. One additional transformer adjacent to the 591 March Road parking area as well as one transformer adjacent to the southern most corner of 555 March Road.
- COPCs associated with APEC E include PHC, BTEX and polychlorinated biphenyls (PCBs).

APEC F: Southern and southwestern property boundary.

- Potential bulk chemical and ink storage. Electronic component manufacturing in surrounding buildings. Metal fabrication and manufacturing operations in nearby buildings.
- COPCs associated with APEC F include PHC, BTEX, VOC, and metals.

APEC G: Northern and southeastern paved areas; West central area of the phase one property.

- Imported fill of unknown or quality.
- COPCs associated with APEC G include PHC, BTEX, polycyclic aromatic hydrocarbons (PAHs), and metals.

APEC H: All exterior areas of the phase one property.

- Potential chlorinated solvent contamination in groundwater from the former March Landfill which operated from 1963 to 1974.
- COPCs associated with APEC H are VOCs.

Based on previous investigations completed on the site, vertical and horizontal delineation of known chlorinated solvent impacts in groundwater will be conducted in tandem with the investigation.

CONCEPTUAL SITE MODEL

The subsurface conditions at the site are summarized as follows based on information gathered from previous investigations:

- Parking areas and drive lanes were asphalt covered, with asphalt thickness generally less than 0.1 m. Imported topsoil is present in landscaped areas around the Site buildings that ranges in thickness from approximately 0.1 to 0.3 m.
- Up to 0.9 m of sand and gravel fill (Granular A - <19 mm, ≤5% material finer than 75 µm) was present beneath paved portions of the Site and under imported topsoil immediately adjacent to the paved portions of the Site. Sand and gravel fill was not typically observed below the landscaped areas of the Site.

- Low plasticity clay with sand was observed between 0.6 m to 2 m thick, extending to bedrock. At some boreholes on the northern and southern portions of the Site, medium to high plasticity clay was observed extending to bedrock.
- On the undeveloped southwestern and central portions of the Site, a 0.7 m thick layer of humic topsoil was observed.
- A layer of clay with varying sand content between 0.1 m to 0.9 m thick was observed in the southwest, extending up to the center of the undeveloped portion of the Site. In the northwestern portion of the Site, a layer of sand with silt or clay was observed on top of bedrock.
- Native soils encountered on site are interpreted to be of glaciomarine origin.
- Bedrock under the site consists of interbedded dolostone and sandstone of the Beekmantown Group.
- No significant water table has been found in soils during previous investigations.
- The site is generally flat lying.
- Previous uses of the site include electronic component manufacturing, commercial retail plaza with various tenants, fitness club.
- A dry cleaning facility operating the 591 March Road plaza operated during the 1990's and released waste dry-cleaning fluids at the rear of the plaza onto the 595 March Road property. PCE, TCE, and DCE impacts in soil and groundwater under 591 and 595 March Road have been confirmed through previous investigations. 2016 groundwater monitoring showed low concentrations of PCE and TCE in groundwater under 591 and 595 March Road.
- Electronic component manufacturing occurred at the 603 March Road facility between 1997 and 2007 with records showing the use of TCE during that period. Previous investigations found evidence of TCE impacted groundwater around and under the 603 March Road building.
- Potassium permanganate was applied to 591 and 595 March Road via injection points in the early 2010's which reduced the concentrations of chlorinated solvents. Follow-up sampling showed concentration rebounding consistent with back diffusion from rock matrix. 2016 groundwater sampling showed a diminished plume with no impacts remaining on the 591 March Road property.
- Surface water runoff is directed to parking lot edge drainage swales or landscaped areas. Some runoff is directed to municipal storm sewers located on March Road.
- The nearest permanent surface water body is Shirleys Brook located approximately 513 m northeast of the site.

APPLICABLE SITE CONDITION STANDARDS

The following conditions were used in the selection of appropriate assessment standard for the site:

- The site is currently operating as fitness club (555 March Road), multi-unit commercial businesses (591 March Road), vacant (595 March Road), and office/ research and development (603 March Road). The land use is therefore characterised as 'commercial' under O.Reg. 153/04. However, the proposed use of the phase two property includes residential units, therefore, the 'residential' land use criteria under O.Reg. 153/04 is required.
- Generally, bedrock has been identified at a depth of less than 2 m across the site during previous investigations.
- Groundwater beneath the site and within the immediately surrounding area is not used as a source of potable drinking water.
- The closest permanent surface water body (Shirleys Brook) is located more than 30 m from the site (i.e., approximately 513 m northeast at its closest point).
- Overburden beneath the site has been characterized previously as mixture of coarse fill materials and medium-fine grained native materials. As coarse textured soil criteria are generally more stringent, soil parameters will be compared to coarse grained criteria. Also, since no permanent or significant water has been found in soil, and a bedrock groundwater table was confirmed by previous investigations, coarse textured criteria were adopted for groundwater.

Based on the above, analytical results of soil and groundwater samples collected as part of the Phase Two ESA will be compared to:

- Table 7: Generic Site Condition Standards (Table 7 SCS) for Shallow Soils in a Non-Potable Groundwater Condition for coarse textured soils Residential/Parkland/Institutional Property Use of the Soil, Ground Water, and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act.

STANDARD OPERATING PROCEDURES

The following standard operating procedures apply to this investigation:

- Borehole Drilling
- Soil Logging/Classification
- Soil Sampling
- Head Space OVC Screening
- Equipment Decontamination
- Monitoring Well Installation
- Monitoring Well Development
- Groundwater Monitoring

- Low-Flow Groundwater Sampling
- Monitoring Well Hydraulic Testing

BOREHOLE DRILLING AND SOIL SAMPLING

Borehole drilling and soil sample collection will be conducted per Table 1 below. The rationale for the proposed borehole locations is also provided in Table 1.

Table 1: Drilling and Sampling Plan

APEC	BH/MW	Samples	COPC
APEC A: Former use of *555* March Rd. building as electronic component manufacturer.	BH/MW – 4	Soil – up to 8 GW – up to 4 Dup – at least 1 soil and 1 GW	VOC
APEC B: Known release of chlorinated solvents from former dry cleaning facility.	BH/MW - 6	Soil – up to 12 GW – up to 31* Dup – at least 1 soil and 3 GW	VOC
APEC C: Former use of 603 March Rd. building as electronic component manufacturer and known chlorinated solvent impacts.	BH/MW – 15 BH/MW – 1 covered by APEC B	Soil – up to 30 GW – up to 36* Dup – at least 3 soil and 3 GW	VOC
APEC D: Bulk storage and use of hydraulic oil for elevator operation in 603 March Rd. building.	BH/MW – 1 covered by APEC C	Soil – up to 2 covered by APEC C GW – 1 covered by APEC C Dup – at least 1 soil and 1 GW covered by APEC C	PHC BTEX
APEC E: Operation of pad mounted transformers for each of the buildings on site.	BH – 4 MW – 2 covered by APEC C	Soil – up to 8, 4 of which covered by APEC C GW – 2* covered by APEC C Dup – at least 1 soil and 1 GW covered by APEC C	PHC BTEX PCB
APEC F: Off-site property uses to the south and southwest of the site including printmaking/ink use, electronic component manufacturing, and metal fabrication.	BH/MW – 5	Soil – up to 10 GW – up to 5 Dup – at least 1 soil and 1 GW	PHC VOC Metals
APEC G: Importation of fill of unknown quality including blast/break out rock.	BH/MW – 1 BH/MW – 12 covered by APEC A and APEC C	Soil – up to 26, 24 of which covered by APEC A and APEC C GW – none Dup – at least 2 soil covered by APEC A and APEC C	PHC BTEX PAH Metals
APEC H: Risk management are for former March Landfill and known chlorinated solvent plume associated with the landfill.	BH/MW – 3 BH/MW – 30 covered by all other APECs	Soil – none GW – 73*, 70 of which covered by APEC A, APEC B, APEC C, APEC D, APEC E, APEC F Dup – at least 7 which are covered by APEC A, APEC B, APEC C, APEC D, APEC E, APEC F	VOC

Notes:

** - indicates the usage of monitoring infrastructure installed during previous investigations for sample collection.*

The drilling and sampling plan has been designed to supplement the monitoring infrastructure that was already in place from previous investigations on the site. Soil samples at nested locations are to be used to confirm the presence or absence of COPCs in the APEC's that the sample is collected. All soil samples are to be described and logged, per the *Soil Logging/Classification* SOP, and samples collected in 0.6m (2ft) intervals with shorter interval samples allowed when changes in stratigraphy, colour, or odours implicating contamination are observed. Samples will be collected using a 0.6m, 50mm diameter steel split spoon advanced ahead of hollow stem augers as described in the *Borehole Drilling* SOP. Soil samples addressing VOCs will be collected with Terra Core kits into preserved in vials that have been pre-charged with methanol supplied by the lab per the *Soil Sampling* SOP. Soil samples will be field screened using head space organic vapour content (OVC) measurements (*Head Space OVC Screening* SOP) to determine which samples will be submitted for laboratory analysis to a maximum of two (2) samples per borehole, one (1) worst case and one (1) from another layer. Duplicate soil samples will be collected at a frequency of one (1) duplicate for every ten (10) soil samples and at least one (1) from each APEC. Soil sampling will be continued to refusal on bedrock at which time rock drilling equipment will be deployed until evidence of interception of the groundwater table is observed or the target depth is achieved. Where rock coring is conducted, core and fracture logs will be completed. Table 2 shows the target depths of each new borehole, the drilling method to be used, and monitoring well installation by APEC.

GROUNDWATER MONITORING WELL INSTALLATION

All bedrock boreholes will have monitoring well installations. Three (3) boreholes located in the source area of APEC B will have multilevel monitoring wells designed and installed based on data gathered during core and fracture logging. All remaining boreholes will have conventional monitoring wells installed in accordance with the details in Table 2 and details from the *Monitoring Well Installation* SOP.

After installation is complete, collect water levels, develop monitoring wells, and survey the vertical and horizontal positions of each well.

Table 2: Drilling and Installation Plan

APEC	Borehole Quantity and Naming	Target Depth (meters below ground surface)	Drilling Method	Installation Type
APEC A	4; MW22-## starting from 18 as a continuation from previous OMI investigations.	6 – 10	Soil – Split Spoon & Hollow Stem Auger Rock – Air Hammer	Conventional Well
APEC B	3; MW22-03C, MW22-04C, MW22-05C corresponding to well clusters already in place.	18.2 30.5	Soil – Split Spoon & Hollow Stem Auger	Conventional Well 7 Channel CMT

	3; MW22-## depending on numbering to that point in the program.		Rock 18.2 m Target – Air Hammer Rock 30.5 m Target – Diamond Core	
APEC C	1; MW22-01C corresponding to well cluster already in place. 6; MW22-06B, MW22-13B, MW22-14B, MW22-15B, MW22-16B, MW22-17B corresponding to wells already in place. 8; MW22-## depending on numbering to that point in the program.	18.2 12.2 6 – 10	Soil – Split Spoon & Hollow Stem Auger Rock – Air Hammer	Conventional Well
APEC E	2; BH22-## depending on numbering to that point in the program.	Top of rock	Soil – Split Spoon & Hollow Stem Auger	None
APEC F	5; MW22-## depending on numbering to that point in the program.	6 – 10	Soil – Split Spoon & Hollow Stem Auger Rock – Air Hammer	Conventional Well
APEC H	3; MW22-## depending on numbering to that point in the program.	6 – 10	Soil – Split Spoon & Hollow Stem Auger Rock – Diamond Core	Conventional Well

GROUNDWATER SAMPLING

Existing monitoring wells in unique locations or with visible labels for which OMI has construction details will be used to confirm groundwater VOC concentrations from previous investigations. In particular, all locations installed during OMI's investigation at 603 March Road and three (3) locations in the parking area of 591 March Road, BH4-10, BH5-10, and BH6-10, will be used to confirm groundwater VOC concentrations.

Groundwater sampling will be conducted in accordance with OMI SOP *Low-Flow Groundwater Sampling*. All samples for metals including Cr-VI and Hg will be filtered using a 0.45 µm filter. A summary of groundwater samples is provided in Table 2 above. Field duplicates will be collected

at a frequency of one (1) duplicate sample for every ten (10) groundwater samples and at least one (1) for each analytical group. Field blanks for VOC and PHC will be collected each day of groundwater sampling. A VOC and PHC trip blank will be assigned to each cooler that samples are stored in.

QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

Quality assurance and quality control (QA/QC) measures to be employed during this investigation will follow all requirements set out by O.Reg. 153/04 as well as best practices established within OMI. All field instruments will be pre-calibrated prior to use in the field. Calibration checks will be performed daily with re-calibration to be performed if measurements are outside of manufacturer's recommendations. Non dedicated equipment will be cleaned with an Alconox solution and distilled water consistent with OMI's *Equipment Decontamination* SOP.

The number and suggested locations of QA/QC samples is provided in Table 1 above.

HYDRAULIC TESTING

A selection of monitoring well locations representing each monitoring interval will be chosen for rising head testing per the *Monitoring Well Hydraulic Testing* SOP. At least three (3) locations from each monitoring interval will be selected across the site. All non-dedicated equipment will be cleaned using the methods described above.

OTHER NOTES

- Monitoring well location BH4-10, BH5-10, and BH6-10 will be assessed for sampling feasibility.
- Questions regarding sample selection, monitoring well design or other technical decisions will be directed to the project manager, Daniel Elliot (613-857-4936), or technical advisor, Kristina Small (343-548-5696).

APPENDIX B

Finalized Field Logs

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01A
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, dry.	0-2		1 2 6 12	50	VOCs	0.0			
0.4												
0.6				2-3		9 29 50+	80		0.7			
0.8												
1.0	82.29		**Bedrock** Interbedded dolostone and sandstone.									
1.2												
1.4												
1.6												
1.8												
2.0	81.29											
2.2												Bentonite seal
2.4												
2.6												
2.8												
3.0	80.29											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 17
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023251.39 N
349824.25 E
Groundsurface Elevation: 83.29 m
Top of Casing Elevation: 82.24 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01A
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.29											
5.2												
5.4												
5.6												
5.8												
6.0	77.29										GW = 5.962 mbg	50 mm 010 slot PVC pipe
6.2												
6.4												
6.6												
6.8												
7.0	76.29											
7.2												
7.4												
7.6			End of well at 7.60 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.60 m to 7.60 m below surface Elevation at top of pipe (TOP) = 82.240 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 17
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023251.39 N
349824.25 E
Groundsurface Elevation: 83.29 m
Top of Casing Elevation: 82.24 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01A
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Groundwater Information: Depth to groundwater from TOP = 4.912 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 17
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023251.39 N
349824.25 E
Groundsurface Elevation: 83.29 m
Top of Casing Elevation: 82.24 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01B
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, dry.									
0.4												
0.6												
0.8												
1.0	82.34		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.34											
2.2												
2.4												
2.6												
2.8												
3.0	80.34											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.6 N
349824.77 E
Groundsurface Elevation: 83.34 m
Top of Casing Elevation: 83.28 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01B
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												Bentonite seal
4.8												
5.0	78.34											
5.2												
5.4												
5.6												
5.8												
6.0	77.34											
6.2												
6.4											▼	GW = 6.361 mbg
6.6												
6.8												
7.0	76.34											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.6 N
349824.77 E
Groundsurface Elevation: 83.34 m
Top of Casing Elevation: 83.28 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01B
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.34											
9.2												
9.4												
9.6												
9.8												
10.0	73.34											
10.2												
10.4												Silica sand
10.6												50 mm 010 slot PVC pipe
10.8												
11.0	72.34											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.6 N
349824.77 E
Groundsurface Elevation: 83.34 m
Top of Casing Elevation: 83.28 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-01B
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2			End of well at 12.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 9.20 m to 12.20 m below surface Elevation at top of pipe (TOP) = 83.280 m Groundwater Information: Depth to groundwater from TOP = 6.301 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.6 N
349824.77 E
Groundsurface Elevation: 83.34 m
Top of Casing Elevation: 83.28 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-01C
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, brown, moist.	0.25-2		7 10 10 21	100	PHC BTEX PAH Metals	2.0			Flushmount, jplug, cement
0.2												
0.4												
0.6												
0.8				2.5-3		50+	100	VOCs	3.2			
1.0	82.26		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.26											
2.2												
2.4												
2.6												
2.8												
3.0	80.26											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023250.7 N
349823.7 E
Groundsurface Elevation: 83.26 m
Top of Casing Elevation: 83.1 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-01C
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.26											
5.2												
5.4												
5.6												
5.8												
6.0	77.26											
6.2												
6.4											▼	GW = 6.361 mbg
6.6												
6.8												
7.0	76.26											
7.2												
7.4												
7.6												
7.8												Bentonite seal

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023250.7 N
349823.7 E
Groundsurface Elevation: 83.26 m
Top of Casing Elevation: 83.1 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-01C
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.26											
9.2												
9.4												
9.6												
9.8												
10.0	73.26											
10.2												
10.4												
10.6												
10.8												
11.0	72.26											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023250.7 N
349823.7 E
Groundsurface Elevation: 83.26 m
Top of Casing Elevation: 83.1 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-01C
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8												
13.0	70.26											
13.2												
13.4												
13.6												
13.8												
14.0	69.26											
14.2												
14.4												
14.6												
14.8												
15.0	68.26											
15.2												
15.4												
15.6												
15.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023250.7 N
349823.7 E
Groundsurface Elevation: 83.26 m
Top of Casing Elevation: 83.1 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-01C
Relative Location: 603 W bay door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
16.2												
16.4												
16.6												
16.8												Silica sand 50 mm 010 slot PVC pipe
17.0	66.26											
17.2												
17.4												
17.6												
17.8												
18.0	65.26											
18.2												
18.4			End of well at 18.40 m, due to achievement of target depth. Well Completion Details: Screened interval from 15.40 m to 18.40 m below surface Elevation at top of pipe (TOP) = 83.100 m Groundwater Information: Depth to groundwater from TOP = 6.201 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023250.7 N
349823.7 E
Groundsurface Elevation: 83.26 m
Top of Casing Elevation: 83.1 m

Notes:
SPLIT SPOON
NO RECOVERY

BOREHOLE LOG

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

Borehole #: MW21-02A
Relative Location: 603 S accessible door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.	0-2		2 8 6 9	15		0.1			Flushmount, jplug, cement
0.6			**Silt** Sandy silt, some clay, trace gravel, very dense, soft, low plastic, grey-green, moist.	2/3		3 5 50+	100	VOCs PHCs	0.0			
1.0	82.04		**Bedrock** Interbedded dolostone and sandstone									Bentonite seal
2.0	81.04											
3.0	80.04											
3.8												

Organic Vapour Concentration (ppmv): 1 | 10 | 100

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 17
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023251.01 N
349860.28 E
Groundsurface Elevation: 83.04 m
Top of Casing Elevation: 82.9 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-02A
Relative Location: 603 S accessible door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8											▼	GW = 4.807 mbg
5.0	78.04											
5.2												Silica sand
5.4												
5.6												
5.8												50 mm 010 slot PVC pipe
6.0	77.04											
6.2												
6.4												
6.6												
6.8												
7.0	76.04											
7.2												
			End of well at 7.30 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 4.30 m to 7.30 m below surface Elevation at top of pipe (TOP) = 82.900 m									
			Groundwater Information: Depth to groundwater from TOP = 4.667 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 17
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023251.01 N
349860.28 E
Groundsurface Elevation: 83.04 m
Top of Casing Elevation: 82.9 m

Notes:
SPLIT SPOON

CONCENTRIC V1.0 0006-0103 - BOREHOLE LOGS.GPJ CONCENTRIC TEMPLATE V1.0.GDT 23-4-4

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-02B
Relative Location: 603 S accessible door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.6			**Bedrock** Interbedded dolostone and sandstone									
1.0	82.02											
2.0	81.02											
3.0	80.02											

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.58 N
349860.11 E
Groundsurface Elevation: 83.02 m
Top of Casing Elevation: 82.83 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-02B
Relative Location: 603 S accessible door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												Bentonite seal
4.8												
5.0	78.02											
5.2												
5.4												
5.6												
5.8												
6.0	77.02											
6.2												
6.4											▼	GW = 6.396 mbg
6.6												
6.8												
7.0	76.02											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.58 N
349860.11 E
Groundsurface Elevation: 83.02 m
Top of Casing Elevation: 82.83 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-02B
Relative Location: 603 S accessible door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.02											
9.2												
9.4												
9.6												
9.8												
10.0	73.02											
10.2												
10.4												Silica sand
10.6												50 mm 010 slot PVC pipe
10.8												
11.0	72.02											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.58 N
349860.11 E
Groundsurface Elevation: 83.02 m
Top of Casing Elevation: 82.83 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-02B
Relative Location: 603 S accessible door

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
12.2			End of well at 12.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 9.20 m to 12.20 m below surface Elevation at top of pipe (TOP) = 82.830 m Groundwater Information: Depth to groundwater from TOP = 6.206 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023250.58 N
349860.11 E
Groundsurface Elevation: 83.02 m
Top of Casing Elevation: 82.83 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03A
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									
0.2			**Gravel Fill** Sandy gravel, some clay, very dense, grey-brown, wet.									Flushmount, jplug, cement
0.4				0-2.5		1 5 3 5	30	VOCs	0.0			
0.6												
0.8			**Bedrock** Interbedded dolostone and sandstone									
1.0	81.45											
1.2												
1.4												
1.6												
1.8												
2.0	80.45											Bentonite seal
2.2												
2.4												
2.6												
2.8												
3.0	79.45											
3.2												
3.4												
3.6												
3.8												

Field test data: Organic Vapour Concentration (ppmv), 1 to 100

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 18
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023240.08 N
349888.75 E
Groundsurface Elevation: 82.45 m
Top of Casing Elevation: 82.36 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03A
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2											GW = 4.182 mbg	
4.4												
4.6												
4.8												
5.0	77.45											
5.2												
5.4												
5.6												Silica sand
5.8												50 mm 010 slot PVC pipe
6.0	76.45											
6.2												
6.4												
6.6												
6.8												
7.0	75.45											
7.2												
7.4												
7.6			End of well at 7.60 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.30 m to 7.30 m below surface Elevation at top of pipe (TOP) = 82.360 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 18
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023240.08 N
349888.75 E
Groundsurface Elevation: 82.45 m
Top of Casing Elevation: 82.36 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03A
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Groundwater Information: Depth to groundwater from TOP = 4.092 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 18
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023240.08 N
349888.75 E
Groundsurface Elevation: 82.45 m
Top of Casing Elevation: 82.36 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03B
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2			**Gravel Fill** Sandy gravel, some clay, very dense, grey-brown, wet.									
0.4												
0.6												
0.8												
1.0	81.40		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	80.40											
2.2												
2.4												
2.6												
2.8												
3.0	79.40											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.46 N
349888.36 E
Groundsurface Elevation: 82.40 m
Top of Casing Elevation: 82.34 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03B
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												Bentonite seal
4.8												
5.0	77.40											
5.2												
5.4												
5.6											▼	GW = 5.704 mbg
5.8												
6.0	76.40											
6.2												
6.4												
6.6												
6.8												
7.0	75.40											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.46 N
349888.36 E
Groundsurface Elevation: 82.40 m
Top of Casing Elevation: 82.34 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03B
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.40											
9.2												
9.4												
9.6												
9.8												
10.0	72.40											
10.2												
10.4												Silica sand
10.6												50 mm 010 slot PVC pipe
10.8												
11.0	71.40											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.46 N
349888.36 E
Groundsurface Elevation: 82.40 m
Top of Casing Elevation: 82.34 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-03B
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2			End of well at 12.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 9.20 m to 12.20 m below surface Elevation at top of pipe (TOP) = 82.340 m Groundwater Information: Depth to groundwater from TOP = 5.644 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.46 N
349888.36 E
Groundsurface Elevation: 82.40 m
Top of Casing Elevation: 82.34 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-03C
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, soft, organics, brown, moist.	0-1		1 ω ω 7	50	PHC PAH BTEX Metals	1.4			Flushmount, jplug, cement
0.2			**Sand and Gravel Fill** Sand and gravel, some clay, loose, black, moist.									
0.4												
0.6												
0.8			**Clay** Some sand, soft, high plasticity, brown, moist.	2.5-2.75		50+	100	VOCs	1.4			
1.0	81.44											
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	80.44											
2.2												
2.4												
2.6												
2.8												
3.0	79.44											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023241.45 N
349889.98 E
Groundsurface Elevation: 82.44 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-03C
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
5.0	77.44										GW = 5.522 mbg	
6.0	76.44											
7.0	75.44											Bentonite seal

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023241.45 N
349889.98 E
Groundsurface Elevation: 82.44 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-03C
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.44											
9.2												
9.4												
9.6												
9.8												
10.0	72.44											
10.2												
10.4												
10.6												
10.8												
11.0	71.44											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023241.45 N
349889.98 E
Groundsurface Elevation: 82.44 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-03C
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8												
13.0	69.44											
13.2												
13.4												
13.6												
13.8												
14.0	68.44											
14.2												
14.4												
14.6												
14.8												
15.0	67.44											
15.2												
15.4												
15.6												
15.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023241.45 N
349889.98 E
Groundsurface Elevation: 82.44 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

BOREHOLE LOG

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

Borehole #: MW22-03C
Relative Location: 603 PL S of building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
16.2												
16.4												
16.6												Silica sand
16.8												50 mm 010 slot PVC pipe
17.0	65.44											
17.2												
17.4												
17.6												
17.8												
18.0	64.44											
18.2												
			End of well at 18.30 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 15.30 m to 18.30 m below surface Elevation at top of pipe (TOP) = 82.370 m									
			Groundwater Information: Depth to groundwater from TOP = 5.452 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023241.45 N
349889.98 E
Groundsurface Elevation: 82.44 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04A
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2												
0.4			**Silt** Sandy silt, trace gravel, firm, light brown, moist.	0-2		1 1 2 3	90		0.0			
0.6												
0.8			**Clay** Silty clay, some sand, trace gravel, medium plastic, firm to hard, grey-brown, moist.									
1.0	81.84			2-4		2 2 6 11	100	VOCs	0.0			
1.2			**Bedrock** Interbedded dolostone and sandstone			50+	0					
1.4												
1.6												
1.8												
2.0	80.84											
2.2												
2.4												Bentonite seal
2.6												
2.8												
3.0	79.84											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 18
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023263.55 N
349917.75 E
Groundsurface Elevation: 82.84 m
Top of Casing Elevation: 82.71 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04A
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	77.84											
5.2												
5.4												
5.6												
5.8												
6.0	76.84											
6.2												
6.4											▼	GW = 6.481 mbg
6.6												
6.8												Silica sand
7.0	75.84											
7.2												
7.4												50 mm 010 slot PVC pipe
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 18
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023263.55 N
349917.75 E
Groundsurface Elevation: 82.84 m
Top of Casing Elevation: 82.71 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04A
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.84		End of well at 9.00 m, due to achievement of target depth. Well Completion Details: Screened interval from 6.00 m to 9.00 m below surface Elevation at top of pipe (TOP) = 82.710 m Groundwater Information: Depth to groundwater from TOP = 6.351 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 18
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023263.55 N
349917.75 E
Groundsurface Elevation: 82.84 m
Top of Casing Elevation: 82.71 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04B
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2												
0.4			**Silt** Sandy silt, trace gravel, firm, light brown, moist.									
0.6												
0.8			**Clay** Silty clay, some sand, trace gravel, medium plastic, firm to hard, grey-brown, moist.									
1.0	81.82											
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	80.82											
2.2												
2.4												
2.6												
2.8												
3.0	79.82											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023261.93 N
349917.5 E
Groundsurface Elevation: 82.82 m
Top of Casing Elevation: 82.66 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04B
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												Bentonite seal
5.0	77.82											
5.2												
5.4												
5.6												
5.8												
6.0	76.82											
6.2												
6.4											▼	GW = 6.506 mbg
6.6												
6.8												
7.0	75.82											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023261.93 N
349917.5 E
Groundsurface Elevation: 82.82 m
Top of Casing Elevation: 82.66 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04B
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.82											
9.2												
9.4												
9.6												
9.8												
10.0	72.82											
10.2												
10.4												
10.6												
10.8												
11.0	71.82											Silica sand
11.2												50 mm 010 slot PVC pipe
11.4												
11.6												
11.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023261.93 N
349917.5 E
Groundsurface Elevation: 82.82 m
Top of Casing Elevation: 82.66 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-04B
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8			End of well at 12.80 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 9.80 m to 12.80 m below surface
Elevation at top of pipe (TOP) = 82.660 m

Groundwater Information:
Depth to groundwater from TOP = 6.346 m

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023261.93 N
349917.5 E
Groundsurface Elevation: 82.82 m
Top of Casing Elevation: 82.66 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**
Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-04C
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, firm, non-plastic, brown, moist.									Flushmount, jplug, cement
0.2			**Sand and Silt** Sand and silt, some gravel, compact, firm, brown, moist.	0-1.5		2 3 5 4	75		0.0			
0.4												
0.6												
0.8			**Clay** Sandy clay, some gravel, firm, low-plastic, brown and gray, dry.									
1.0	81.86			2.5-4.25		11 15 11 29	83	VOCs	0.0			
1.2												
1.4			**Bedrock** Interbedded dolostone and sandstone			50+						
1.6												
1.8												
2.0	80.86											
2.2												
2.4												
2.6												
2.8												
3.0	79.86											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 28
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023261.98 N
349918.39 E
Groundsurface Elevation: 82.86 m
Top of Casing Elevation: 82.68 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-04C
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	77.86											
5.2												
5.4												
5.6												
5.8												
6.0	76.86											
6.2											▼	GW = 6.127 mbg
6.4												
6.6												
6.8												
7.0	75.86											
7.2												
7.4												
7.6												Bentonite seal
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 28
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023261.98 N
349918.39 E
Groundsurface Elevation: 82.86 m
Top of Casing Elevation: 82.68 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-04C
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.86											
9.2												
9.4												
9.6												
9.8												
10.0	72.86											
10.2												
10.4												
10.6												
10.8												
11.0	71.86											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 28
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023261.98 N
349918.39 E
Groundsurface Elevation: 82.86 m
Top of Casing Elevation: 82.68 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-04C
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8												
13.0	69.86											
13.2												
13.4												
13.6												
13.8												
14.0	68.86											
14.2												
14.4												
14.6												
14.8												
15.0	67.86											
15.2												
15.4												
15.6												
15.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 28
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023261.98 N
349918.39 E
Groundsurface Elevation: 82.86 m
Top of Casing Elevation: 82.68 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-04C
Relative Location: SE corner of 603 property

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
16.2												
16.4												
16.6												Silica sand
16.8												50 mm 010 slot PVC pipe
17.0	65.86											
17.2												
17.4												
17.6												
17.8												
18.0	64.86											
18.2												
			End of well at 18.30 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 15.30 m to 18.30 m below surface Elevation at top of pipe (TOP) = 82.680 m									
			Groundwater Information: Depth to groundwater from TOP = 5.947 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 28
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023261.98 N
349918.39 E
Groundsurface Elevation: 82.86 m
Top of Casing Elevation: 82.68 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05A
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 / 10 / 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0	83.72		**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.	0-0.5		1	0					Flushmount, jplug, cement
0.2			**Bedrock** Interbedded dolostone and sandstone			50+						
0.4												
0.6												
0.8												
1.0	82.72											
1.2												
1.4												
1.6												
1.8												
2.0	81.72											
2.2												
2.4												Bentonite seal
2.6												
2.8												
3.0	80.72											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 19
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023317.83 N
349895.67 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.62 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05A
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
5.0	78.72											
6.0	77.72											Silica sand
												50 mm 010 slot PVC pipe
											▼	GW = 6.699 mbg
7.0	76.72											

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 19
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023317.83 N
349895.67 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.62 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05A
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
			End of well at 8.10 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.10 m to 8.10 m below surface Elevation at top of pipe (TOP) = 83.620 m Groundwater Information: Depth to groundwater from TOP = 6.599 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 19
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023317.83 N
349895.67 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.62 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05B
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2												
0.4			**Bedrock** Interbedded dolostone and sandstone									
0.6												
0.8												
1.0	82.72											
1.2												
1.4												
1.6												
1.8												
2.0	81.72											
2.2												
2.4												
2.6												
2.8												
3.0	80.72											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023318.34 N
349895 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05B
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												Bentonite seal
4.8												
5.0	78.72											
5.2												
5.4												
5.6												
5.8												
6.0	77.72											
6.2												
6.4												
6.6												
6.8												
7.0	76.72											
7.2												
7.4												
7.6												
7.8											▼	GW = 7.808 mbg

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023318.34 N
349895 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05B
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.72											
9.2												
9.4												
9.6												
9.8												
10.0	73.72											
10.2												
10.4												Silica sand
10.6												50 mm 010 slot PVC pipe
10.8												
11.0	72.72											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023318.34 N
349895 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-05B
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2												
12.4			End of well at 12.50 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 9.20 m to 12.20 m below surface Elevation at top of pipe (TOP) = 83.610 m									
			Groundwater Information: Depth to groundwater from TOP = 7.698 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023318.34 N
349895 E
Groundsurface Elevation: 83.72 m
Top of Casing Elevation: 83.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-05C
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, loose, dark brown, moist.	0-1			100	VOCs	0.2			Flushmount, jplug, cement
0.2												
0.4			**Bedrock** Interbedded dolostone and sandstone									
0.6												
0.8												
1.0	82.63											
1.2												
1.4												
1.6												
1.8												
2.0	81.63											
2.2												
2.4												
2.6												
2.8												
3.0	80.63											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023319.43 N
349895.21 E
Groundsurface Elevation: 83.63 m
Top of Casing Elevation: 83.52 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-05C
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.63											
5.2												
5.4												
5.6												
5.8												
6.0	77.63											
6.2												
6.4												
6.6												
6.8												
7.0	76.63											
7.2												
7.4											▼	GW = 7.434 mbg Bentonite seal
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023319.43 N
349895.21 E
Groundsurface Elevation: 83.63 m
Top of Casing Elevation: 83.52 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-05C
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.63											
9.2												
9.4												
9.6												
9.8												
10.0	73.63											
10.2												
10.4												
10.6												
10.8												
11.0	72.63											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023319.43 N
349895.21 E
Groundsurface Elevation: 83.63 m
Top of Casing Elevation: 83.52 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-05C
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8												
13.0	70.63											
13.2												
13.4												
13.6												
13.8												
14.0	69.63											
14.2												
14.4												
14.6												
14.8												
15.0	68.63											
15.2												
15.4												
15.6												
15.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023319.43 N
349895.21 E
Groundsurface Elevation: 83.63 m
Top of Casing Elevation: 83.52 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-05C
Relative Location: 603 Lawn near March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
16.2												
16.4												
16.6												Silica sand
16.8												50 mm 010 slot PVC pipe
17.0	66.63											
17.2												
17.4												
17.6												
17.8												
18.0	65.63											
18.2												
			End of well at 18.30 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 15.30 m to 18.30 m below surface Elevation at top of pipe (TOP) = 83.520 m									
			Groundwater Information: Depth to groundwater from TOP = 7.324 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023319.43 N
349895.21 E
Groundsurface Elevation: 83.63 m
Top of Casing Elevation: 83.52 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-06A
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2			Construction debris									
			Sand Sand, some silt and clay, trace gravel, loose, tan, moist.	0-2		1 3 5 3	60		0.0			
0.4												
0.6			**Clay** Clay, some sand, firm to hard, high plastic, brown, moist.									
0.8				2/3		3 3 50+	100	VOCs	0.0			
1.0	82.04		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.04											
2.2												
2.4												
2.6												Bentonite seal
2.8												
3.0	80.04											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 19
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023323.8 N
349835.36 E
Groundsurface Elevation: 83.04 m
Top of Casing Elevation: 82.9 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-06A
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.04											
5.2												
5.4												
5.6												GW = 5.499 mbg
5.8												
6.0	77.04											
6.2												
6.4												Silica sand
6.6												50 mm 010 slot PVC pipe
6.8												
7.0	76.04											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 19
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023323.8 N
349835.36 E
Groundsurface Elevation: 83.04 m
Top of Casing Elevation: 82.9 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-06A
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
			End of well at 8.10 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.10 m to 8.10 m below surface Elevation at top of pipe (TOP) = 82.900 m Groundwater Information: Depth to groundwater from TOP = 5.359 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 November 19
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023323.8 N
349835.36 E
Groundsurface Elevation: 83.04 m
Top of Casing Elevation: 82.9 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-06B
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silty sand, organics, loose, dark brown, moist.	0-0.75		1 15 6 4	83		0.1			Flushmount, jplug, cement
0.2			**Sand** Sand, some gravel, loose, tan/gray, moist.	0.75-1.5			83		0.1			
0.4			**Clay** Clay, some sand, soft, medium plasticity, dark brown, moist.	1.5-1.75			83	PHC BTEX PCB	0.1			
0.6												
0.8			**Sand** Sand, some clay, loose, brown, moist.	2.5-3.25		4 50+	100	PHC VOC PCB	0.2			
1.0	82.05		**Clay** Clay, trace sand, firm, low plasticity, brown, moist.									
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	81.05											
2.2												
2.4												
2.6												
2.8												
3.0	80.05											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023324.47 N
349836.13 E
Groundsurface Elevation: 83.05 m
Top of Casing Elevation: 82.97 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-06B
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		NOTES
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	
4.2												
4.4												
4.6												
4.8												Bentonite seal
5.0	78.05											
5.2												
5.4												
5.6												
5.8												
6.0	77.05											
6.2												
6.4												
6.6											▼	GW = 6.704 mbg
6.8												
7.0	76.05											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023324.47 N
349836.13 E
Groundsurface Elevation: 83.05 m
Top of Casing Elevation: 82.97 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-06B
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.05											
9.2												
9.4												
9.6												
9.8												
10.0	73.05											
10.2												
10.4												
10.6												
10.8												
11.0	72.05											Silica sand
11.2												50 mm 010 slot PVC pipe
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023324.47 N
349836.13 E
Groundsurface Elevation: 83.05 m
Top of Casing Elevation: 82.97 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-06B
Relative Location: 603 Lawn near Terry Fox

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2												
12.4												
12.6			End of well at 12.70 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 9.70 m to 12.70 m below surface Elevation at top of pipe (TOP) = 82.970 m									
			Groundwater Information: Depth to groundwater from TOP = 6.624 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 9
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023324.47 N
349836.13 E
Groundsurface Elevation: 83.05 m
Top of Casing Elevation: 82.97 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-07
Relative Location: 603 interior former sump

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Concrete**									
0.2			**Clear Stone Fill** 3/4 in minus crushed and washed gravel.									Flushmount, jplug, cement
0.4												
0.6												Vapour Well
0.8												
1.0	82.16											
1.2												
1.4												
1.6			**Bedrock** Interbedded dolostone and sandstone									
1.8												
2.0	81.16											
2.2												Bentonite seal
2.4												
2.6												
2.8												
3.0	80.16										▼	GW = 3.015 mbg
3.2												
3.4												
3.6												
3.8												

DRILLER: Strata - Phil
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.076
WELL DIAMETER (m): 0.032
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023158.07 N
349827.95 E
Groundsurface Elevation: 83.16 m
Top of Casing Elevation: 84.11 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-07
Relative Location: 603 interior former sump

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
5.0	78.16											
6.0	77.16											
7.0	76.16		End of well at 7.00 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 4.00 m to 7.00 m below surface
Elevation at top of pipe (TOP) = 84.110 m

Groundwater Information:
Depth to groundwater from TOP = 3.965 m

DRILLER: Strata - Phil
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.076
WELL DIAMETER (m): 0.032
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023158.07 N
349827.95 E
Groundsurface Elevation: 83.16 m
Top of Casing Elevation: 84.11 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-08
Relative Location: 603 interior existing sump

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Concrete**									
0.2			**Clear Stone Fill** 3/4 in minus crushed and washed gravel									Flushmount, jplug, cement
0.4												
0.6												Vapour Well
0.8												
1.0	81.94											
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	80.94											
2.2												Bentonite seal
2.4												
2.6												
2.8												
3.0	79.94										▼	GW = 3.052 mbg
3.2												
3.4												
3.6												
3.8												

DRILLER: Strata - Phil
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.076
WELL DIAMETER (m): 0.032
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5923261.47 N
349941.22 E
Groundsurface Elevation: 82.94 m
Top of Casing Elevation: 83.89 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-08
Relative Location: 603 interior existing sump

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	77.94											
5.2												
5.4												
5.6												Silica sand
5.8												32 mm 010 slot PVC pipe
6.0	76.94											
6.2												
6.4												
6.6												
6.8												
7.0	75.94											
7.2												
			End of well at 7.30 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 4.30 m to 7.30 m below surface
Elevation at top of pipe (TOP) = 83.890 m

Groundwater Information:
Depth to groundwater from TOP = 4.002 m

DRILLER: Strata - Phil
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.076
WELL DIAMETER (m): 0.032
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5923261.47 N
349941.22 E
Groundsurface Elevation: 82.94 m
Top of Casing Elevation: 83.89 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-13A
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2												
0.4			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, dry.									
0.6												
0.8												
1.0	82.25		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.25											
2.2												Bentonite seal
2.4												
2.6												
2.8												
3.0	80.25											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023263.8 N
349813.24 E
Groundsurface Elevation: 83.25 m
Top of Casing Elevation: 83.12 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-13A
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.25											
5.2											▼	GW = 5.209 mbg
5.4												
5.6												
5.8												
6.0	77.25											Silica sand 50 mm 010 slot PVC pipe
6.2												
6.4												
6.6												
6.8												
7.0	76.25											
7.2												
7.4												
7.6			End of well at 7.60 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.60 m to 7.60 m below surface Elevation at top of pipe (TOP) = 83.120 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023263.8 N
349813.24 E
Groundsurface Elevation: 83.25 m
Top of Casing Elevation: 83.12 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-13A
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Groundwater Information: Depth to groundwater from TOP = 5.079 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 20
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023263.8 N
349813.24 E
Groundsurface Elevation: 83.25 m
Top of Casing Elevation: 83.12 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-13B
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, brown, dry.	0-2		7 19 18 25	75	PHC VOC PAH Metals	0.8			Flushmount, jplug, cement
0.8			**Bedrock** Interbedded dolostone and sandstone			50+						
1.0	82.28											
2.0	81.28											
3.0	80.28											

1 10 100

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023262.76 N
349813.14 E
Groundsurface Elevation: 83.28 m
Top of Casing Elevation: 83.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-13B
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												Bentonite seal
4.8												
5.0	78.28											
5.2												
5.4												
5.6												
5.8												
6.0	77.28											
6.2												
6.4											▼	GW = 6.385 mbg
6.6												
6.8												
7.0	76.28											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023262.76 N
349813.14 E
Groundsurface Elevation: 83.28 m
Top of Casing Elevation: 83.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-13B
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.28											
9.2												
9.4												
9.6												
9.8												
10.0	73.28											
10.2												
10.4												
10.6												Silica sand 50 mm 010 slot PVC pipe
10.8												
11.0	72.28											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023262.76 N
349813.14 E
Groundsurface Elevation: 83.28 m
Top of Casing Elevation: 83.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-13B
Relative Location: W 603 emergency exit

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2			End of well at 12.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 9.20 m to 12.20 m below surface Elevation at top of pipe (TOP) = 83.160 m Groundwater Information: Depth to groundwater from TOP = 6.265 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 10
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023262.76 N
349813.14 E
Groundsurface Elevation: 83.28 m
Top of Casing Elevation: 83.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-14A
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, brown, dry.									Flushmount, jplug, cement
0.2												
0.4												
0.6			**Bedrock** Interbedded dolostone and sandstone									
0.8												
1.0	82.77											
1.2												
1.4												
1.6												
1.8												
2.0	81.77											
2.2												
2.4												
2.6												Bentonite seal
2.8												
3.0	80.77											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 23
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.16 N
349807.37 E
Groundsurface Elevation: 83.77 m
Top of Casing Elevation: 83.64 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-14A
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.77											
5.2												
5.4												
5.6												
5.8											▼	GW = 5.901 mbg
6.0	77.77											
6.2												
6.4												
6.6												Silica sand
6.8												50 mm 010 slot PVC pipe
7.0	76.77											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 23
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.16 N
349807.37 E
Groundsurface Elevation: 83.77 m
Top of Casing Elevation: 83.64 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-14A
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2			End of well at 8.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.20 m to 8.20 m below surface Elevation at top of pipe (TOP) = 83.640 m Groundwater Information: Depth to groundwater from TOP = 5.771 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 23
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.16 N
349807.37 E
Groundsurface Elevation: 83.77 m
Top of Casing Elevation: 83.64 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-14B
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
0.1			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, dry.									Flushmount, jplug, cement
0.2				0-2		1 3 3 4	100	PHC BTEX PAH Metals	0.9			
0.4			**Silt** Sandy silt, firm, dark brown, moist.									
0.6												
0.8												
1.0	82.84			2.5-4		2 2 50+	100	PHC BTEX PAH Metals	0.0			
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	81.84											
2.2												
2.4												
2.6												
2.8												
3.0	80.84											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023234.36 N
349806.46 E
Groundsurface Elevation: 83.84 m
Top of Casing Elevation: 83.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-14B
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												Bentonite seal
5.0	78.84											
5.2												
5.4												
5.6												
5.8												
6.0	77.84											
6.2												
6.4												
6.6											▼	GW = 6.659 mbg
6.8												
7.0	76.84											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023234.36 N
349806.46 E
Groundsurface Elevation: 83.84 m
Top of Casing Elevation: 83.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-14B
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.84											
9.2												
9.4												
9.6												
9.8												
10.0	73.84											
10.2												
10.4												
10.6												
10.8												
11.0	72.84											Silica sand
11.2												50 mm 010 slot PVC pipe
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023234.36 N
349806.46 E
Groundsurface Elevation: 83.84 m
Top of Casing Elevation: 83.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-14B
Relative Location: Center 603 parking

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8			End of well at 12.80 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 9.80 m to 12.80 m below surface
Elevation at top of pipe (TOP) = 83.850 m

Groundwater Information:
Depth to groundwater from TOP = 6.669 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023234.36 N
349806.46 E
Groundsurface Elevation: 83.84 m
Top of Casing Elevation: 83.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-15A
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose, dark brown, moist.									Flushmount, jplug, cement
0.2												
0.4			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, dry.									
0.6												
0.8												
1.0	82.43											
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	81.43											
2.2												
2.4												Bentonite seal
2.6												
2.8												
3.0	80.43											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023236.22 N
349843.75 E
Groundsurface Elevation: 83.43 m
Top of Casing Elevation: 83.28 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-15A
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.43											
5.2											▼	GW = 5.161 mbg
5.4												
5.6												
5.8												
6.0	77.43											
6.2												Silica sand
6.4												50 mm 010 slot PVC pipe
6.6												
6.8												
7.0	76.43											
7.2												
7.4												
7.6												
7.8												
			End of well at 7.90 m, due to achievement of target depth.									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023236.22 N
349843.75 E
Groundsurface Elevation: 83.43 m
Top of Casing Elevation: 83.28 m

Notes:

CONCENTRIC V1.0 0006-0103 - BOREHOLE LOGS.GPJ CONCENTRIC TEMPLATE V1.0.GDT 23-4-4

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-15A
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Well Completion Details: Screened interval from 4.90 m to 7.90 m below surface Elevation at top of pipe (TOP) = 83.280 m Groundwater Information: Depth to groundwater from TOP = 5.011 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023236.22 N
349843.75 E
Groundsurface Elevation: 83.43 m
Top of Casing Elevation: 83.28 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-15B
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt and sand, some clay, trace gravel, loose,	0-1		1 2 3 4	50	PHC BTEX PAH Metals	0.0			Flushmount, jplug, cement
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, moist.									
0.4			**Clay** Clay, some sand, firm, low-plastic, tan, moist.									
0.6			No gravel.									
0.8				2-3.5		4 5 4 5	75		0.7			
1.0	82.44											
1.2				4-4.25		50+	100	VOCs	1.2			
1.4			**Bedrock** Interbedded dolostone and sandstone									
1.6												
1.8												
2.0	81.44											
2.2												
2.4												
2.6												
2.8												
3.0	80.44											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.32 N
349842.76 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.38 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-15B
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												Bentonite seal
5.0	78.44											
5.2												
5.4												
5.6												
5.8												
6.0	77.44											
6.2												
6.4												
6.6											▼	GW = 6.551 mbg
6.8												
7.0	76.44											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.32 N
349842.76 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.38 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-15B
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	74.44											
9.2												
9.4												
9.6												
9.8												
10.0	73.44											
10.2												
10.4												
10.6												
10.8												
11.0	72.44											Silica sand
11.2												50 mm 010 slot PVC pipe
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.32 N
349842.76 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.38 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-15B
Relative Location: SW 603 building corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2												
12.4												
12.6												
12.8			End of well at 12.80 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 9.80 m to 12.80 m below surface
Elevation at top of pipe (TOP) = 83.380 m

Groundwater Information:
Depth to groundwater from TOP = 6.491 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023235.32 N
349842.76 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.38 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-16A
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, brown, dry.									Flushmount, jplug, cement
0.8			**Bedrock** Interbedded dolostone and sandstone									
1.0	81.72											
2.0	80.72											Bentonite seal
3.0	79.72											

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 23
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.77 N
349870.52 E
Groundsurface Elevation: 82.72 m
Top of Casing Elevation: 82.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-16A
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4											▼	GW = 4.433 mbg
4.6												
4.8												
5.0	77.72											
5.2												
5.4												
5.6												
5.8												
6.0	76.72											Silica sand 50 mm 010 slot PVC pipe
6.2												
6.4												
6.6												
6.8												
7.0	75.72											
7.2												
7.4												
7.6			End of well at 7.60 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.60 m to 7.60 m below surface Elevation at top of pipe (TOP) = 82.610 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 23
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.77 N
349870.52 E
Groundsurface Elevation: 82.72 m
Top of Casing Elevation: 82.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-16A
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Groundwater Information: Depth to groundwater from TOP = 4.323 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 23
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.77 N
349870.52 E
Groundsurface Elevation: 82.72 m
Top of Casing Elevation: 82.61 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-16B
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, gray, moist.	0-1		6 3 1 2	88	PHC BTEX PAH Metals	0.0			Flushmount, jplug, cement
0.4			**Clay** Clay, some sand, high plastic, soft, grayish brown, moist.	1-1.75					0.0			
0.6												
0.8			**Silty sand** Silty sand, some clay, some gravel, loose, tan/beige/black, dry.	2.5-3		50+	100	VOCs	0.0			
1.0	81.74		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	80.74											
2.2												
2.4												
2.6												
2.8												
3.0	79.74											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.21 N
349870.11 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-16B
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												Bentonite seal
4.6												
4.8												
5.0	77.74											
5.2												
5.4												
5.6												
5.8												
6.0	76.74										▼	GW = 6.094 mbg
6.2												
6.4												
6.6												
6.8												
7.0	75.74											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.21 N
349870.11 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-16B
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.74											
9.2												
9.4												
9.6												
9.8												
10.0	72.74											
10.2												
10.4												Silica sand
10.6												50 mm 010 slot PVC pipe
10.8												
11.0	71.74											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.21 N
349870.11 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-16B
Relative Location: S of MW21-02 30m

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2			End of well at 12.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 9.20 m to 12.20 m below surface Elevation at top of pipe (TOP) = 82.640 m Groundwater Information: Depth to groundwater from TOP = 5.994 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 25
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023239.21 N
349870.11 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-17A
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0			**Asphalt**									
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, brown, dry.									Flushmount, jplug, cement
0.4												
0.6												
0.8												
1.0	81.74		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	80.74											
2.2												Bentonite seal
2.4												
2.6												
2.8												
3.0	79.74											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023270.22 N
349884.86 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-17A
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	77.74										▼	GW = 4.972 mbg
5.2												
5.4												
5.6												
5.8												
6.0	76.74											Silica sand 50 mm 010 slot PVC pipe
6.2												
6.4												
6.6												
6.8												
7.0	75.74											
7.2												
7.4												
7.6			End of well at 7.60 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.60 m to 7.60 m below surface Elevation at top of pipe (TOP) = 82.640 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023270.22 N
349884.86 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW21-17A
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Groundwater Information: Depth to groundwater from TOP = 4.872 m									

DRILLER: Aardvark - Ryan
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2021 December 21
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023270.22 N
349884.86 E
Groundsurface Elevation: 82.74 m
Top of Casing Elevation: 82.64 m

Notes:

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-17B
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, gray, moist.	0-0.75		3 3 1 1	88	PHC PAH BTEX Metals	1.0			Flushmount, jplug, cement
0.2												
			Sandy clay Sandy clay, some gravel, soft, high plastic. dark brown to beige, moist.	0.75-1.75					0.0			
0.4												
0.6												
0.8												
			Becomes firm.	2.5-3.5		2 4 50+	100	VOCs	0.0			
1.0	81.73		Becomes hard.									
			Bedrock Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	80.73											
2.2												
2.4												
2.6												
2.8												
3.0	79.73											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023270.76 N
349885.37 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 82.63 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-17B
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												Bentonite seal
4.8												
5.0	77.73											
5.2												
5.4												
5.6												
5.8												
6.0	76.73											
6.2											▼	GW = 6.246 mbg
6.4												
6.6												
6.8												
7.0	75.73											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023270.76 N
349885.37 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 82.63 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-17B
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.73											
9.2												
9.4												
9.6												
9.8												
10.0	72.73											
10.2												
10.4												
10.6												Silica sand
10.8												50 mm 010 slot PVC pipe
11.0	71.73											
11.2												
11.4												
11.6												
11.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023270.76 N
349885.37 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 82.63 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-17B
Relative Location: 603 parking, S of cafeteria

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
12.2			End of well at 12.30 m, due to achievement of target depth. Well Completion Details: Screened interval from 9.30 m to 12.30 m below surface Elevation at top of pipe (TOP) = 82.630 m Groundwater Information: Depth to groundwater from TOP = 6.146 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 26
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023270.76 N
349885.37 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 82.63 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-18
Relative Location: SW side of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, grey, moist.	0-1		12 12 10 6	50	PHC BTEX PAH Metals	0.6			Flushmount, jplug, cement
0.2												
0.4												
0.6				2-2.5		6 5 4 4	75		0.4			
0.8			**Gravelly clay** Gravelly clay, hard, grey, moist.									
1.0	81.50			2.5-3.75				VOCs	0.3			
1.2			No gravel.									
1.4				4-5.5		2 3 50+	100		0.3			
1.6			**Bedrock** Interbedded dolostone and sandstone									
1.8												
2.0	80.50											
2.2												
2.4												
2.6												
2.8												
3.0	79.50											
3.2												Bentonite seal
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023134.33 N
349982.51 E
Groundsurface Elevation: 82.50 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-18
Relative Location: SW side of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6											▼	GW = 4.595 mbg
4.8												
5.0	77.50											
5.2												
5.4												
5.6												
5.8												
6.0	76.50											
6.2												
6.4												
6.6												
6.8												
7.0	75.50											
7.2												
7.4												
7.6												
7.8												Silica sand

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023134.33 N
349982.51 E
Groundsurface Elevation: 82.50 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-18
Relative Location: SW side of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2												50 mm 010 slot PVC pipe
8.4												
8.6												
8.8												
9.0	73.50											
9.2												
9.4												
9.6												
9.8			End of well at 9.80 m, due to achievement of target depth. Well Completion Details: Screened interval from 6.80 m to 9.80 m below surface Elevation at top of pipe (TOP) = 82.370 m Groundwater Information: Depth to groundwater from TOP = 4.465 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023134.33 N
349982.51 E
Groundsurface Elevation: 82.50 m
Top of Casing Elevation: 82.37 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: BH22-19
Relative Location: 555 transformer

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, soft, dark brown, moist.	0-0.5	SS	2 10 8 6	25		0.0			
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, grey, moist.									
0.4												
0.6												
0.8			**Clay** Clay, some gravel, firm, high plasticity, grey, moist.	2-3.5	SS	3 6 3 4	75	BTEX PHC PCB	0.0			
1.0	81.23		1" sand pocket, becomes soft.									
1.2					SS	50+						
			End of borehole at 1.20 m, due to refusal on assumed bedrock.									

DRILLER: Aardvark - Jon
DRILLING METHOD: SPLIT SPOON
BOREHOLE DIAMETER (m): 0.152
WELL DIAMETER (m):
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023101.94 N
350001.46 E
Groundsurface Elevation: 82.23 m
Top of Casing Elevation: m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-20
Relative Location: S central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, grey, moist.	0-0.5		6 4 3 2	50		0.7			Flushmount, jplug, cement
0.2			**Clay** Clay, some sand, firm, medium plastic, greyish brown, moist.	0.5-1				PHC BTEX PAH Metals	0.5			
0.4												
0.6			Becomes soft.									
0.8												
1.0	80.98			2-4		1 1 1 3	100	VOCs	0.4			
1.2			**Bedrock** Interbedded dolostone and sandstone									
1.4												
1.6												
1.8												
2.0	79.98											
2.2												
2.4												Bentonite seal
2.6												
2.8												
3.0	78.98											
3.2												
3.4												GW = 3.405 mbg
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023087.26 N
350004.33 E
Groundsurface Elevation: 81.98 m
Top of Casing Elevation: 81.91 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-20
Relative Location: S central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	76.98											
5.2												
5.4												
5.6												
5.8												
6.0	75.98											
6.2												
6.4												Silica sand
6.6												50 mm 010 slot PVC pipe
6.8												
7.0	74.98											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023087.26 N
350004.33 E
Groundsurface Elevation: 81.98 m
Top of Casing Elevation: 81.91 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-20
Relative Location: S central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												Slough
8.8												
9.0	72.98											

End of well at 9.10 m, due to achievement of target depth.

Well Completion Details:
Screened interval from 5.20 m to 8.20 m below surface
Elevation at top of pipe (TOP) = 81.910 m

Groundwater Information:
Depth to groundwater from TOP = 3.335 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 17
LOGGED BY: DE/AC

UTM COORDINATES
ZONE: 18
5023087.26 N
350004.33 E
Groundsurface Elevation: 81.98 m
Top of Casing Elevation: 81.91 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-21
Relative Location: SE of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, grey, moist.	0-0.5		12 5 5 17	25	PHC BTEX	0.0			
0.2			**Gravelly clay** Gravelly clay, soft, medium plastic, brownish grey, moist.									Flushmount, jplug, cement
0.4												
0.6												
0.8			**Clay** Clay, some sand, firm, low plasticity, grey, moist.									
1.0	81.12			2.5-2.5		1 3 3 3	100	VOCs	0.0			
1.2												
1.4												
1.6			Becomes non-plastic.									
1.8				5-7		3 3 4 5	100		0.0			
2.0	80.12		1" sand pocket, becomes sandy clay.									
2.2			**Bedrock** Interbedded dolostone and sandstone									
2.4												
2.6												
2.8												
3.0	79.12											
3.2												
3.4												
3.6												Bentonite seal
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 18
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023117.81 N
350011.87 E
Groundsurface Elevation: 82.12 m
Top of Casing Elevation: 82.02 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-21
Relative Location: SE of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8											▼	GW = 4.783 mbg
5.0	77.12											
5.2												
5.4												
5.6												
5.8												
6.0	76.12											
6.2												
6.4												
6.6												
6.8												
7.0	75.12											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 18
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023117.81 N
350011.87 E
Groundsurface Elevation: 82.12 m
Top of Casing Elevation: 82.02 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-21
Relative Location: SE of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												Silica sand
9.0	73.12											
9.2												50 mm 010 slot PVC pipe
9.4												
9.6												
9.8												
10.0	72.12											
10.2												
10.4												
10.6												
			End of well at 10.70 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 7.70 m to 10.70 m below surface Elevation at top of pipe (TOP) = 82.020 m									
			Groundwater Information: Depth to groundwater from TOP = 4.683 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 18
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023117.81 N
350011.87 E
Groundsurface Elevation: 82.12 m
Top of Casing Elevation: 82.02 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-22
Relative Location: East site corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, loose, dark brown, moist.									
0.2			**Gravelly sand** Gravelly sand, loose, brown/grey, moist. Becomes saturated.	0-1.25		3 15 13 8	63	PHC BTEX PAH Metals	0.8			Flushmount, jplug, cement
0.4												
0.6												
0.8			**Sand and clay** Sand and clay, firm, low plasticity, brown/grey, moist.	2.5-3		2 4 8 50+	25	VOCs	0.3			
1.0	80.94											
1.2												
1.4												
1.6			**Bedrock** Interbedded dolostone and sandstone									
1.8												
2.0	79.94											
2.2												
2.4												
2.6												
2.8												Bentonite seal
3.0	78.94											
3.2											▼	GW = 3.263 mbg
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 18
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023130.61 N
350051.01 E
Groundsurface Elevation: 81.94 m
Top of Casing Elevation: 81.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-22
Relative Location: East site corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		NOTES
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	
4.2												
4.4												
4.6												
4.8												
5.0	76.94											
5.2												
5.4												
5.6												
5.8												
6.0	75.94											
6.2												
6.4												
6.6												
6.8												
7.0	74.94											Silica sand
7.2												50 mm 010 slot PVC pipe
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 18
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023130.61 N
350051.01 E
Groundsurface Elevation: 81.94 m
Top of Casing Elevation: 81.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-22
Relative Location: East site corner

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	72.94											Slough
			End of well at 9.10 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 5.80 m to 8.80 m below surface Elevation at top of pipe (TOP) = 81.850 m									
			Groundwater Information: Depth to groundwater from TOP = 3.173 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 18
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023130.61 N
350051.01 E
Groundsurface Elevation: 81.94 m
Top of Casing Elevation: 81.85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-23
Relative Location: Front of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Clayey silt, some sand, firm, non-plastic, brown, moist.	0-1		1 3 5 5	100	PHC BTEX PAH Metals	4.0			Flushmount, jplug, cement
0.4			**Sandy clay** Sandy clay, firm, low plasticity, grey, moist.	1-2				VOCs	0.0			
0.8			Some gravel, loose, grey/brown/tan,	2.5-2.75		3 4 7 7	75		0.0			
1.0	81.32		Becomes hard.	2.75-4					0.0			
1.2			No sand.									
1.6			**Sandy clay** Sandy clay, soft, medium plasticity, greyish brown, moist.	5-5.5		2 50+	100		0.0			
1.8			**Bedrock** Interbedded dolostone and sandstone									
2.0	80.32											
3.0	79.32											Bentonite seal
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023163.36 N
350016.09 E
Groundsurface Elevation: 82.32 m
Top of Casing Elevation: 82.22 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-23
Relative Location: Front of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	77.32											
5.2												
5.4											▼	GW = 5.376 mbg
5.6												
5.8												
6.0	76.32											
6.2												
6.4												
6.6												
6.8												
7.0	75.32											
7.2												Silica sand
7.4												
7.6												50 mm 010 slot PVC pipe
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023163.36 N
350016.09 E
Groundsurface Elevation: 82.32 m
Top of Casing Elevation: 82.22 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-23
Relative Location: Front of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	73.32		End of well at 9.10 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 6.10 m to 9.10 m below surface Elevation at top of pipe (TOP) = 82.220 m									
			Groundwater Information: Depth to groundwater from TOP = 5.276 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023163.36 N
350016.09 E
Groundsurface Elevation: 82.32 m
Top of Casing Elevation: 82.22 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-24
Relative Location: NE side of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, some clay, organics, loose, firm, non-plastic, brown, moist.									
0.2			**Sandy clay** Sandy clay, firm, low plasticity, grey, moist.	0-1.25		1 1 3 4	63	PHC BTEX PAH Metals	0.7			Flushmount, jplug, cement
0.4												
0.6												
0.8			Becomes some sand.									
1.0	80.93			2.5-4.5		2 5 5 6	100		0.7			
1.2												
1.4												
1.6			Becomes trace sand.	5-6		2 2 2 14	100		0.6			
1.8												
2.0	79.93		**Sandy silt** Sandy silt, some clay, some gravel, loose, pinkish/grey/brown/tan, wet.	6-7				VOCs	0.7			
2.2			**Bedrock** Interbedded dolostone and sandstone									
2.4												
2.6												
2.8												
3.0	78.93											Bentonite seal
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023175.24 N
349981.42 E
Groundsurface Elevation: 81.93 m
Top of Casing Elevation: 81.84 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-24
Relative Location: NE side of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6											▼	GW = 4.627 mbg
4.8												
5.0	76.93											
5.2												
5.4												
5.6												
5.8												
6.0	75.93											
6.2												
6.4												
6.6												
6.8												
7.0	74.93											
7.2												
7.4												
7.6												
7.8												Silica sand

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023175.24 N
349981.42 E
Groundsurface Elevation: 81.93 m
Top of Casing Elevation: 81.84 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-24
Relative Location: NE side of 555 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												50 mm 010 slot PVC pipe
8.4												
8.6												
8.8												
9.0	72.93											
9.2												
9.4												
9.6												
9.8			End of well at 9.80 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 6.80 m to 9.80 m below surface
Elevation at top of pipe (TOP) = 81.840 m

Groundwater Information:
Depth to groundwater from TOP = 4.537 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023175.24 N
349981.42 E
Groundsurface Elevation: 81.93 m
Top of Casing Elevation: 81.84 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: BH22-25
Relative Location: 591 transformer

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, some clay, loose, soft, dark brown, moist.	0-0.5		2 3 5 4	25		0.0			
0.2			**Clay** Some sand, firm, non-plastic, grey, moist.									
0.4												
0.6												
0.8			**Sandy silt** Some clay, firm, non-plastic, dark brown, moist.	2.5-3		2 5 6 7	100		0.0			
1.0	81.61		**Clay** Some sand, firm, non-plastic, grey, moist.									
1.2				3-4.5				PHC BTEX PCB SAR Grain Size	0.0			
1.4												
1.6												
1.8				5-7		3 4 3 4	100		0.0			
2.0	80.61											
2.2												
2.4			**Sand and Gravel** Black.,	7-8.5		6 6 6 6	100	PHC BTEX PCB pH	0.3			
2.6			**Clay** Some sand, firm, non-plastic, grey, moist.									
			Sandy clay Soft, medium plasticity, greyish brown, wet.	8.5-9					0.3			
			End of borehole at 2.70 m, due to refusal on assumed bedrock.									

DRILLER: Aardvark - Jon
DRILLING METHOD: SPLIT SPOON
BOREHOLE DIAMETER (m): 0.152
WELL DIAMETER (m):
DRILL DATE: 2022 October 19
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023169.44 N
349945.83 E
Groundsurface Elevation: 82.61 m
Top of Casing Elevation: m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-26
Relative Location: South corner of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, trace organics, trace gravel, soft, non-plastic, dark brown, moist.	0-1		1 2 2 3	50	PHC VOC Metals	0.0 (1 – 10 – 100)			Steel casing, stickup, jplug
0.2			**Sandy clay** Sandy clay, soft, low plasticity, brown/grey, moist.									
0.4												
0.6												
0.8						1 50+						
1.0	82.07		**Bedrock** Interbedded doloston and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.07											
2.2												
2.4												Bentonite seal
2.6												
2.8												
3.0	80.07											
3.2												
3.4											▼	GW = 3.484 mbg
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 20
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023019.32 N
349926.26 E
Groundsurface Elevation: 83.07 m
Top of Casing Elevation: 83.98 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-26
Relative Location: South corner of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.07											
5.2												
5.4												
5.6												
5.8												
6.0	77.07											
6.2												
6.4												Silica sand
6.6												50 mm 010 slot PVC pipe
6.8												
7.0	76.07											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 20
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023019.32 N
349926.26 E
Groundsurface Elevation: 83.07 m
Top of Casing Elevation: 83.98 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-26
Relative Location: South corner of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2			End of well at 8.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.20 m to 8.20 m below surface Elevation at top of pipe (TOP) = 83.980 m Groundwater Information: Depth to groundwater from TOP = 4.394 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 20
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023019.32 N
349926.26 E
Groundsurface Elevation: 83.07 m
Top of Casing Elevation: 83.98 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-27
Relative Location: SW area of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, loose, dark brown, moist.	0-1		1 1 3 2	75	PHC VOC Metals	0.0			Steel casing, stickup, jplug
0.2			**Silty sand** Silty sand, loose, greyish brown, moist.									
0.4			**Sandy clay** Sandy clay, firm, low plasticity, greyish brown, moist.	1-1.5					0.0			
0.6												
0.8			Becomes some gravel with high plasticity, tan/brown/grey,	2.5-3		1 50+			0.0			
1.0	82.11		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.11											
2.2												
2.4												Bentonite seal
2.6												
2.8												
3.0	80.11											
3.2												
3.4											▼	GW = 3.460 mbg
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 20
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023062.31 N
349888.57 E
Groundsurface Elevation: 83.11 m
Top of Casing Elevation: 84.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-27
Relative Location: SW area of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.11											
5.2												
5.4												
5.6												
5.8												
6.0	77.11											
6.2												
6.4												Silica sand
6.6												50 mm 010 slot PVC pipe
6.8												
7.0	76.11											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 20
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023062.31 N
349888.57 E
Groundsurface Elevation: 83.11 m
Top of Casing Elevation: 84.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-27
Relative Location: SW area of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2			End of well at 8.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.20 m to 8.20 m below surface Elevation at top of pipe (TOP) = 84.160 m Groundwater Information: Depth to groundwater from TOP = 4.510 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 20
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023062.31 N
349888.57 E
Groundsurface Elevation: 83.11 m
Top of Casing Elevation: 84.16 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-28
Relative Location: South corner of 603

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Asphalt**									
			Sand and Gravel Fill Sand and gravel, some silt and clay, loose, grey, moist.									
0.2			**Sand** Sand, some clay, trace gravel, compact, tan, moist.	0.25-1.5		4 3 5 6	63	PHC BTEX PAH Metals	0.1			Flushmount, jplug, cement
0.4												
0.6												
0.8												
1.0	82.97											
1.2												
1.4			**Sandy clay** Sandy clay, some gravel, medium plasticity, brownish grey, wet.	4.5-5		1 50+	100		0.0			
1.6			**Bedrock** Interbedded dolostone and sandstone									
1.8												
2.0	81.97											
2.2												Bentonite seal
2.4												
2.6												
2.8												
3.0	80.97											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023174.62 N
349805.36 E
Groundsurface Elevation: 83.97 m
Top of Casing Elevation: 83.91 m

Notes:
NO RECOVERY
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-28
Relative Location: South corner of 603

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.97											
5.2												
5.4												
5.6												GW = 5.504 mbg
5.8												
6.0	77.97											
6.2												Silica sand
6.4												
6.6												50 mm 010 slot PVC pipe
6.8												
7.0	76.97											
7.2												
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023174.62 N
349805.36 E
Groundsurface Elevation: 83.97 m
Top of Casing Elevation: 83.91 m

Notes:
NO RECOVERY
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-28
Relative Location: South corner of 603

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
												Slough
8.2			End of well at 8.20 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 5.20 m to 8.20 m below surface
Elevation at top of pipe (TOP) = 83.910 m

Groundwater Information:
Depth to groundwater from TOP = 5.444 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023174.62 N
349805.36 E
Groundsurface Elevation: 83.97 m
Top of Casing Elevation: 83.91 m

Notes:
NO RECOVERY
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-29
Relative Location: NW central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Asphalt**						1 10 100			
			Sand and Gravel Fill Sand and gravel, some silt and clay, compact, light grey, dry.									Flushmount, jplug, cement
0.2			**Sandy silt** Sandy silt, loose, firm, non-plastic, brown, moist.	0.25-2.5		8 17 9 5	75	PHC BTEX PAH Metals	1.1			
0.4												
0.6												
0.8			Some gravel.									
1.0	83.39		**Sandy clay** Sandy clay, some silt, soft, medium plasticity, caramel brown, moist.	2.5-3.75		3 3 3 4	63	PHC BTEX PAH Metals	0.0			
1.2												
1.4			**Bedrock** Interbedded dolostone and sandstone									
1.6												
1.8												
2.0	82.39											
2.2												
2.4												
2.6												
2.8												
3.0	81.39											
3.2												Bentonite seal
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023206.81 N
349776.54 E
Groundsurface Elevation: 84.39 m
Top of Casing Elevation: 84.3 m

Notes:
NO RECOVERY
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-29
Relative Location: NW central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	79.39											
5.2												
5.4												
5.6												
5.8												
6.0	78.39											
6.2												
6.4												
6.6												
6.8												
7.0	77.39											
7.2											▼	GW = 7.210 mbg
7.4												
7.6												
7.8												Silica sand

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023206.81 N
349776.54 E
Groundsurface Elevation: 84.39 m
Top of Casing Elevation: 84.3 m

Notes:
NO RECOVERY
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-29
Relative Location: NW central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
8.2												50 mm 010 slot PVC pipe
8.4												
8.6												
8.8												
9.0	75.39											
9.2												
9.4												
9.6												
9.8			End of well at 9.80 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 6.80 m to 9.80 m below surface
Elevation at top of pipe (TOP) = 84.300 m

Groundwater Information:
Depth to groundwater from TOP = 7.120 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023206.81 N
349776.54 E
Groundsurface Elevation: 84.39 m
Top of Casing Elevation: 84.3 m

Notes:
NO RECOVERY SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-30
Relative Location: NW corner of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, some gravel, organics, brown/grey, moist.									Flushmount, jplug, cement
0.2				0-1.75		1 2 3 6	88	PHC BTEX PAH Metals	0.0			
0.4			Becomes black. 1" Sand pocket.									
0.6			**Bedrock** Interbedded dolostone and sandstone									
1.0	83.12											
2.0	82.12											
3.0	81.12											Bentonite seal
4.0												

SAMPLE | FIELD TEST DATA | WELL COMPLETION

Organic Vapour Concentration (ppmv): 1 — 10 — 100

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023239.39 N
349747.3 E
Groundsurface Elevation: 84.12 m
Top of Casing Elevation: 84.07 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-30
Relative Location: NW corner of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	79.12											
5.2												
5.4												
5.6											▼	GW = 5.672 mbg
5.8												
6.0	78.12											
6.2												
6.4												
6.6												
6.8												
7.0	77.12											
7.2												Silica sand
7.4												
7.6												50 mm 010 slot PVC pipe
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023239.39 N
349747.3 E
Groundsurface Elevation: 84.12 m
Top of Casing Elevation: 84.07 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-30
Relative Location: NW corner of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
8.2												
8.4												
8.6												
8.8												
9.0	75.12		End of well at 9.10 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 6.10 m to 9.10 m below surface
Elevation at top of pipe (TOP) = 84.070 m

Groundwater Information:
Depth to groundwater from TOP = 5.622 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 21
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023239.39 N
349747.3 E
Groundsurface Elevation: 84.12 m
Top of Casing Elevation: 84.07 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-31
Relative Location: S central grass 603

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, loose, dark brown, dry.	0-1		1 6 6 12	50	PHC BTEX PAH Metals	0.4			Flushmount, jplug, cement
0.2			**Sand and Gravel Fill** Sand and gravel, some silt and clay, loose, grey, dry.									
0.4												
0.6												
0.8			**Sandy clay** Sandy clay, soft to firm, low plasticity, grey-brown, moist.	2.5-3.5		5 7 9 10	50	VOCs	0.7			
1.0	82.44											
1.2												
1.4												
1.6												
1.8				5-6.5		4 13 9 50+	100		0.6			
2.0	81.44		**Bedrock** Interbedded dolostone and sandstone									Bentonite seal
2.2												
2.4												
2.6												
2.8												
3.0	80.44											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023201.88 N
349840.71 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.35 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-31
Relative Location: S central grass 603

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2												
4.4												
4.6												
4.8												
5.0	78.44										▼	GW = 5.069 mbg
5.2												
5.4												
5.6												
5.8												Silica sand
6.0	77.44											50 mm 010 slot PVC pipe
6.2												
6.4												
6.6												
6.8												
7.0	76.44											
7.2												
7.4												
7.6			End of well at 7.60 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.60 m to 7.60 m below surface Elevation at top of pipe (TOP) = 83.350 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023201.88 N
349840.71 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.35 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-31
Relative Location: S central grass 603

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			Groundwater Information: Depth to groundwater from TOP = 4.979 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 24
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023201.88 N
349840.71 E
Groundsurface Elevation: 83.44 m
Top of Casing Elevation: 83.35 m

Notes:
SPLIT SPOON
NO RECOVERY

BOREHOLE LOG

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

Borehole #: MW22-32
Relative Location: S central site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silt, some sand, high organics content, soft, non-plastic, dark brown, moist.	0-0.75		1, 3, 4, 7	63		1 – 10 – 100			Steel casing, stickup, jplug
0.2			**Sandy clay** Sandy clay, firm, low plasticity, grey/brown, moist.	0.75-1.25								
0.4												
0.6												
0.8												
1.0	81.56		**Bedrock** Interbedded dolostone and sandstone									
			10.1cm, medium texture (M), bedded fabric (BD), weathering AW1.5.									
1.2			3cm, M, BD, R5, AW1.5, joint condition - 20, rough roughness (r), extremely close spacing (xc)									
			8cm, R5, AW1.5, 20, r, xc									
			3cm, R5, AW1.5, 20, r, xc									
1.4			22cm, R5, AW1.5, 20, r, xc									
1.6			22cm, R5, AW1.5, 20, r, xc									
1.8			16cm, R5, AW1.5, 20, xc, QZ joint fill, V/J fill type									
2.0	80.56		17cm, R5, AW1.5, 20, r, xc									
			9cm, R5, AW1.5, 20, r, xc, VL. END OF RUN. RECOVERY = 89.3%, RQD = 68%									
2.2			8cm, F/M, BD/R5/ AW1.5, 20, r, xc									
2.4												
2.6												Bentonite seal
2.8			65cm, M/F, R5, AW1, 20, r, xc									
3.0	79.56		8cm, M/F, BD, R5, AW1, 20, r, xc									
3.2			25.5cm, M, BD, R5, AW1, 20, r, xc								▼	GW = 3.157 mbg
3.4			17cm, M, BD, R5, AW1, 20, r, xc									
			2cm, M, BD, R5, AW1, 20 r xc									
3.6			18.5cm, R5, AW1, 20, r, xc. ENF OF RUN. RECOVERY = 94.7%, RQD = 87.5%									
3.8			10cm, M, BD, R5, AW1, 20									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 31
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023068.65 N
349939.2 E
Groundsurface Elevation: 82.56 m
Top of Casing Elevation: 83.51 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-32
Relative Location: S central site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
			22.5cm, M, R3, AW1, 20, r, xc									
			5.5cm, M, R5, AW1, 20, r, xc									
4.2			19.5cm, M, R3, AW1, 20, r, xc									
			2.5cm, M, R5, AW1, 20, r, xc									
4.4			4cm, R5, 20, BX									
			2.5cm									
			8cm, M, BD, R5, BX									
4.6			2.5cm, M, BD, R5									
			24.5cm, M, BD, R3, r, xc									
4.8												
5.0	77.56											
5.2			51cm, M, BD, R3, AW1, r, xc. END OF RUN. RECOVERY = 100%, RQD = 83.6%									
5.4			20.5cm, M, BD, R3, AW1, 20, r, xc									
5.6												
5.8												
6.0	76.56		61cm, M, BD, R3, AW1, 20, r, xc									
6.2			17cm, M, BD, R5, AW1, 20, r, xc									
			16cm, M, BD, R5, AW1, 20, r, xc									
6.4			BX									Silica sand
			12cm, M, BD, R5, AW1, 20, r, xc									
6.6												50 mm 010 slot PVC pipe
			31cm, M, BD, R4, AW1, 20, r, L. END OF RUN. RECOVERY = 100%, RQD = 98.4%									
6.8			15.5cm, M, BD, R3, AW1, 20, r, xc									
7.0	75.56											
			20.5cm, M, BD, R5, AW1, 20, r, xc									
			4cm, M, BD, R5, AW1, 25, r, xc									
7.2			11cm, M, BD, R5, AW1, 20, r, xc									
7.4												
7.6			32cm, M, BD, R3, AW1, 20/25, r, xc									
			15.5cm, M, BD, R5, AW1, 20, r, xc									
7.8			2cm, M, BD, R5, AW1, 20, r, xc									
			2.5cm, M, BD, R5, AW1, 20, r, xc									
			1.5cm, M, BD, R2, AW1, 20, r, xc									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 31
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023068.65 N
349939.2 E
Groundsurface Elevation: 82.56 m
Top of Casing Elevation: 83.51 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-32
Relative Location: S central site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
			28cm, M, BD, R4, AW1, 20, r, xc									
8.2			13.5cm, M, BD, R3, AW1, 20, r, xc 7cm, M, BD, R5, AW1, 20, r. END OF RUN. RECOVERY = 100%, RQD = 88.9% End of well at 8.20 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.20 m to 8.20 m below surface Elevation at top of pipe (TOP) = 83.510 m Groundwater Information: Depth to groundwater from TOP = 4.107 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 31
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023068.65 N
349939.2 E
Groundsurface Elevation: 82.56 m
Top of Casing Elevation: 83.51 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-33
Relative Location: S central site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0			**Clayey silt** Clayey silt, soft, non-plastic, dark brown, moist.	0-5"		1 2 50+	100		1 – 10 – 100			
0.2			**Sandy clay** Sandy clay, soft, medium plasticity, brown/grey, moist.	8"-11" 5"-8"								Steel casing, stickup, jplug
			Sand Loose, well graded, reddish brown, moist.									
0.4			**Bedrock** Interbedded dolostone and sandstone									
			7cm, scratch (Y/N) Y, medium texture (M), bedded fabric (BD), R5 field strength, AW1 weathering, condition -20, rough roughness (r), extremely close spacing (xc)									
0.6			16cm, Y, M, BD, R5, AW1, 20, r, xc									
			9.5cm, Y, M, BD, R5, AW1, 20, r, xc									
0.8			2cm, N, M, BD, R5, AW1.5, 20, r, vc									
			9cm, N, M, BD, R5, AW1.5, 20, r, vc									
			7.5cm, N, M, BD, R5, AW1.5, 20, r, vc									
1.0	81.73		8.5cm, N, M, BD, R5, AW1.5, 20, r, xc									
1.2			37.5cm, Y, M, BD, R3, AW1, 20, r, xc									
1.4												
1.6			37cm, Y, M, BD, R3, AW1, 20, r, xc									
			1.5cm, Y, M, BD, R3, AW2, 20, r, vc									
1.8												
2.0	80.73		14.5cm, scratches, M, BD, R4, AW1.5. END OF RUN. RECOVERY = 98.6%, RQD = 70%									
			11.5cm, N, M, BD, R5, AW1, 20, r, xc									
2.2			7cm, N, M, BD, R5, AW1, 20, r, xc									
2.4			20cm, N, M, BD, R3, AW1, 20, r, xc									Bentonite seal
2.6			Vertical fracture									
			35.5cm, N, M, BD, R3, AW1, 20, r, xc									
2.8												
			18cm, Y, M, BD, R3, AW1.5, 20, r, xc									
3.0	79.73											
3.2											▼	GW = 3.183 mbg
3.4												
			52.5cm, Y, M BD, R3, AW1, 20, r, xc									
3.6			4cm, Y, M, BD, R5, AW1, 20, r. END OF RUN. RECOVERY = 97.7%, RQD = 92.6%									
			4cm, Y, M, BD, R5, AW1, 20, r, xc									
			4.5cm, Y, M, BD, R3, AW1, 20, r, xc									
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 31
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023113.66 N
349895.39 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 83.7 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-33
Relative Location: S central site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
			42.5cm, Y, M, BD, R4, AW1, 20, r, xc									
			8cm, Y, M, BD, R5, AW1, 20, r, xc									
4.2												
			23cm, Y, M BD, R3, AW1, 20, r, xc									
4.4												
4.6												
			36.5cm, Y, M, BD, R3, AW1, 12, sm, xc									
4.8			mottled - 11.5cm, N, M, BD, R5, AW1, 20, r, xc									
5.0	77.73		20cm, N, M, R3, AW1. END OF RUN. RECOVERY = 98.7%, RQD = 89%									
5.2												
5.4			mottling - 43cm, Y, M, BD, R5, AW1, 20, r, xc, BX, J									
5.6												
5.8												
			48.5cm, Y, M, BD, R5, AW1, 20, sm, xc									
6.0	76.73											
			18cm, N, M, BD, R4, AW1, 20, r, xc									
			2cm, N, M, BD, R5, AW1, 20, r, xc									
6.2			4cm, N, M, BD, R5, AW1, 20, r, xc									Silica sand
6.4												
			28cm, Y, M, BD, R3, AW1. END OF RUN. RECOVERY = 94.4%, RQD = 95.8%									50 mm 010 slot PVC pipe
6.6												
6.8												
			43cm, N, R4, AW1, 20, r, xc									
7.0	75.73		7.5cm, Y, M, BD, R5, AW1, 20, r, xc									
			12.5cm, Y, M, BD, R5, AW1, 20, r, xc									
7.2			8cm, N, M, BD, R5, AW1, 20, r, xc									
			13.5cm, N, M, BD, R5, AW1, 20, r, xc									
7.4												
			16cm, N, M, BD, R4, AW1m 20, r, xc									
7.6			6cm, Y, M, BD, R5, AW1, 12, sm, vc, VL, BX, J									
7.8												
			26.5cm, Y, M, BD, R3, AW1, 20, r, xc									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 31
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023113.66 N
349895.39 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 83.7 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-33
Relative Location: S central site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
			15.5cm, N. M. BD, R5, AW1. END OF RUN. RECOVERY = 97.7%, RQD = 85.5% End of well at 8.10 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.10 m to 8.10 m below surface Elevation at top of pipe (TOP) = 83.700 m Groundwater Information: Depth to groundwater from TOP = 4.153 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 October 31
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023113.66 N
349895.39 E
Groundsurface Elevation: 82.73 m
Top of Casing Elevation: 83.7 m

Notes:
SPLIT SPOON

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-34
Relative Location: Center of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, loose, soft, well-graded, dark brown, moist.	0-1		1 1 2 2	50		0.0			Steel casing, stickup, jplug
0.8			**Sandy silt** Sandy silt, some clay, soft, tan, moist.	2.5-3.75		2 1 0 1	75		0.0			
1.0	83.06											
1.2			**Clay** Clay, some sand, firm, grey/brown, moist.	3.75-4					0.0			
1.4			**Bedrock** Interbedded dolostone and sandstone									
1.6			3cm, scratches(Y/N) - N, medium texture (M), bedded fabric (BD), field strength - R5, weathering - AW1.5, condition - 20, rough roughness (r), extremely close spacing (xc)									
			6.5cm, Y, M, BD, R5, AW1, 20, r, xc									
			13cm, Y, M, BD, R4, AW1, 20, r, xc									
1.8			9.5cm, N, M, BD, R5< AW1.5, 20, r, vc, Medium persistence (M), Broken rock fill (BX), J									
			6cm, Y, C, BD, R5< AW2, 20, sm, xc									
2.0	82.06		4cm, Y, C, BD, R3, AW3, 12, sm, xc 2.5cm, Y, M, BD, R5, AW2, 20, sm. END OF RUN. RECOVERY = 29.2%, RQD = 29%									
2.2												Bentonite seal
2.4			45.5cm, Y, M, BD, R4, AW1, 20, R, xc									
2.8			37cm, Y, M, BD, R4, AW1, 20, r, xc									
			5.5cm, Y, M, BD, R5, AW1.5, 20, sm, xc									
3.0	81.06											
3.2			20cm, N, M, BD, R4, AW1, 20, sm ,xc									
3.4			32.5cm, N, M, BD, R3, AW1. END OF RUN. RECOVERY = 92.4%, RQD = 96%									
3.6			2cm, N, M, BD, R5, AW1, 20, r, xc								▼	GW = 3.636 mbg
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 1
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023185.09 N
349840.42 E
Groundsurface Elevation: 84.06 m
Top of Casing Elevation: 85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-34
Relative Location: Center of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2			74cm, Y, M, BD, R5, AW1.5, 20, r, xc, L, BX, J									
4.4												
4.6			40.5cm, Y, M, BD, R4, AW1.5, 20, r, xc, L, BX, J									
4.8			10cm, Y, M, BD, R5, AW1.5, 20, r, xc									
5.0	79.06		28cm, Y, M, BD, R3, AW1.5, 20, r. END OF RUN. RECOVERY = 101.6%, RQD = 98.7%									
5.2			7.5cm, Y, M, BD, R3, AW1.5, 20, sm, xc									
5.4			18cm, Y, M, BD, R3, AW1.5, 20, r, vc, M, BX, J									
			7.5cm, Y, M, BD, R5, AW1, 20, r, xc									
5.6												
5.8			31.5cm, Y, M, BD, R3, AW1.5, 20, r, vc, L, BX, J									
6.0	78.06											Silica sand
6.2												
6.4			56cm, Y, M, BD, R4, AW1.5, 20, sm, xc									50 mm 010 slot PVC pipe
6.6			20cm, Y, M, BD, R5, AW1.5, 20, r. END OF RUN. RECOVERY = 92.4%, RQD = 89%									
			4cm, N, M, BD, R5, AW1.5, 20, r, xc									
6.8												
7.0	77.06		35cm, Y, M, BD, R4, AW1.5, 20, r, xc									
7.2			23.5cm, N, M, BD, R4, AW1.5, 20, sm, xc									
			9cm, Y, M, BD, R5, AW1, 20, 20, r, xc									
7.4			9.5cm, Y, M, BD, R5, AW1, 20, r, xc									
			3.5cm, N, M, BD, R5, AW1, 20, r, xc									
			3.5cm, N, M, BD, R5, AW1.5, 20, r, xc									
7.6			7.5cm, Y, M, BD, R5, AW1.5, 20, r, xc									
			1.5cm, Y, M, BD, R5, AW1, 20, r, xc									
7.8			6.5cm, N, M, BD, R5, AW1, 20, r. END OF RUN. RECOVERY = 68%, RQD = 56.6%									
			25cm, N, M, BD, R5, AW1, 20, sm. END OF RUN. RECOVERY = 100%, RQD = 100%									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 1
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023185.09 N
349840.42 E
Groundsurface Elevation: 84.06 m
Top of Casing Elevation: 85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-34
Relative Location: Center of site

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100	WELL CONSTRUCTION	WATER LEVEL	NOTES
			End of well at 7.90 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.90 m to 7.90 m below surface Elevation at top of pipe (TOP) = 85.000 m Groundwater Information: Depth to groundwater from TOP = 4.576 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 1
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023185.09 N
349840.42 E
Groundsurface Elevation: 84.06 m
Top of Casing Elevation: 85 m

Notes:
SPLIT SPOON
NO RECOVERY

BOREHOLE LOG

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

Borehole #: MW22-35
Relative Location: Near NW 603 entrance

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, loose, dark brown, moist.	0-1		5 15 16 50+	50	PHC VOC Metals PAH	0.7 (1 – 10 – 100)			Flushmount, jplug, cement
0.2			**Silty Sand and Gravel** Silty sand and gravel, loose, poorly graded, grey/white, dry.									
0.4			**Sand** Sand, some silt, compact, well-graded, brown, moist.									
0.6			**Bedrock** Interbedded dolostone and sandstone									
0.8												
1.0	82.01											
1.2												
1.4												
1.6			3cm, scratches - Y/N (N), medium texture (M), bedded fabric (BD), field strength (R5), weathering- AW1, condition - 12, smooth roughness (sm), extremely close spacing (xc) 7.5cm, N, M, BD, R5, AW1.5, 20, sm, xc 9.5cm, N, M, BD, R5, AW1.5, 12, sm, vc									
1.8			12.5cm, N, M/F, BD, R5, AW1.5, 20, r, c									
2.0	81.01		6.5cm, N, M/F, BD, R5, AW2. END OF RUN. RECOVERY = 91%, RQD = 32% 6cm, N, M, BD, R5, AW1.5, 20, sm, xc									
2.2												
2.4			24cm, Y, M, BD, R4, AW1.5, 20, sm, xc 8.5cm, Y, M, BD, R5, AW2, 12, sm, xc									Bentonite seal
2.6												
2.8			43cm, Y, M, BD, R3, AW1.5, 20, sm, xc									
3.0	80.01		8.5cm, Y, M, BD, R5, AW1, 20, r, xc 8cm, Y, M, BD, R5, AW1, 20, r, xc 8.5cm, Y, M, BD, R3, AW1.5, 20, sm, xc, M, BX 27.5cm, Y, M, BD, R3, AW1.5, 20, sm, xc									
3.2												
3.4			9.5cm, N, M, BD, R5, AW1.5. END OF RUN. RECOVERY = 94.4%, RQD = 65.9% 13cm, N, M, BD, R5, AW1, 20, r, xc 1cm, N, M, BD, R5, AW1, 20, sm, xc 9cm, N, M, BD, R3, AW1.5, 20, sm, xc 2cm, Y, M, BD, R4, AW1, 20, sm, xc 1cm, Y, M, BD, R4, AW1.5, 20, sm, vc, M, BX 9.5cm, Y, M, BD, R3, AW1, 12, sm, xc 1.5cm, Y, M, BD, R4, AW1, 12, sm, xc									
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 2
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023276.91 N
349789.98 E
Groundsurface Elevation: 83.01 m
Top of Casing Elevation: 82.88 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-35
Relative Location: Near NW 603 entrance

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
4.2			16.5cm, Y, M, BD, R3, AW1, 20, sm, xc 10cm, N, M, BD, R5, AW1, 20, r, xc 15.cm, Y, M, BD, R5, AW1.5, 2, sm, xc									
4.4			26cm, N, M, BD, R4, AW1, 20, r, xc									
4.6												
4.8												
5.0	78.01		50.5, Y, M, BD, R4, AW1, 20. END OF RUN. RECOVERY = 93%, RQD = 82% 2.5cm, Y, M, BD, R5, AW1, 12, sm, xc 13cm, Y, M, BD, R3, AW1, 20, r, xc									
5.2			15.5cm, Y, M, BD, R5, AW1, 20, r, xc 7cm, Y, M, BD, R5, AW1, 12, sm, xc									
5.4			17cm, Y, M, BD, BD, R5, AW1, 12, sm, xc 4cm, N, M, BD, R5, AW1, 12, sm, xc									
5.6												
5.8			29.5cm, N, M, BD, R4, AW1, 20, r, xc 13cm, Y, M, BD, R5, AW1, 20, r, vc									
6.0	77.01		19.5cm, N, M, BD, R5, AW1, 12, sm, xc									
6.2			13.5cm, N, M, BD, R5, AW1, 12, sm, xc 4.5cm, N, M, BD, R5, AW1, 12, sm, xc 2cm, N, M, BD, R1, AW1, 20, r, xc								▼	GW = 6.233 mbg Silica sand
6.4												50 mm 010 slot PVC pipe
6.6			15.5cm, N, M, BD, R4, AW1. END OF RUN. RECOVERY = 100%, RQD = 89.6% 16cm, N, M, BD, R5, AW1, 20, r, xc 3cm, N, M, BD, R5, AW1, 20, r, xc									
6.8			16.5cm, Y, M, BD, R3, AW1, 12, sm, xc									
7.0	76.01		11.5cm, Y, M, BD, R4, AW1, 20, r, xc									
7.2			16cm, Y, M, BD, R4, AW1, 20, r, xc 11cm, Y, M, BD, R4, AW1, 20, R, xc, H, BX									
7.4			3.5cm, N, M, BD, R5, AW1, 12, sm, xc 5cm, Y, M, BD, R5, AW1, 12, sm, vc, H, BX									
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 2
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023276.91 N
349789.98 E
Groundsurface Elevation: 83.01 m
Top of Casing Elevation: 82.88 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-35
Relative Location: Near NW 603 entrance

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL CONSTRUCTION	WATER LEVEL	NOTES
			Fractured rock. 57.5cm, M, BD, R3, AW4. END OF RUN. RECOVERY = 100%, RQD = 46.5% End of well at 8.00 m, due to achievement of target depth. Well Completion Details: Screened interval from 5.00 m to 8.00 m below surface Elevation at top of pipe (TOP) = 82.880 m Groundwater Information: Depth to groundwater from TOP = 6.103 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 2
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023276.91 N
349789.98 E
Groundsurface Elevation: 83.01 m
Top of Casing Elevation: 82.88 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-36
Relative Location: SW central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
0.0			**Topsoil** Sandy silt, organics, soft, dark brown, moist.	0-0.75		1 50+	75	PHC VOC Metals	0.6 (1 / 10 / 100)			Steel casing, stickup, jplug
0.2			**Sand** Sand, some silt, loose, well graded, tan/beige, moist.									
0.4			**Bedrock** Interbedded dolostone and sandstone									
0.6			25.5cm, N, M, BD, R4, AW1, 20, r, xc									
			7.5cm, N, M, BD, R5, AW1, 20, r, xc									
0.8			13.5cm, Y, M, BD, R5, AW1, 20, sm, xc									
			7cm, Y, M, BD, R5, AW1, 20, r, xc, M, BX, J									
1.0	82.19											
1.2												
			42cm, Y, M, BD, R4, AW1, 20, r, xc									
1.4												
1.6			27.5cm, Y, M, BD, R3, AW1, 20, r, xc									
			9cm, Y, M, BD, R5, AW1.5, 20, sm, xc									
1.8			9.5cm, N, M, BD, R4, AW1, 20, sm, xc									
			10cm, N, M, BD, R5, AW1, 20, r. END OF RUN. RECOVERY = 99%, RQD = 77.8%									
2.0	81.19		7.5cm, N, M, BD, R5, AW1, 20, r, vc									
2.2												
2.4			43.5cm, N, M, BD, R3, AW1, 20, r, xc									Bentonite seal
2.6			15cm, Y, M, BD, R5, AW1, 20, sm, xc									
2.8												
3.0	80.19		37cm, N, M, BD, R3, AW1, 20, r, xc									
3.2			26cm, Y, M, BD, R4, AW1, 20, r, xc									
3.4			13.5cm, Y, M, BD, R5, AW1, 20, r, xc									
3.6			16.5cm, Y, M, BD, R3, AW1, 20, r. END OF RUN. RECOVERY = 104%, RQD = 99.4%									
3.8			37cm, N, M, BD, R3, AW1, 20, r, xc								▼	GW = 3.896 mbg

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 7
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023108.25 N
349869.5 E
Groundsurface Elevation: 83.19 m
Top of Casing Elevation: 83.98 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-36
Relative Location: SW central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
			10.5cm, N, M, BD, R5, AW1, 20, r, xc									
			3cm, N, M, BD, R5, AW1, 12, sm, xc									
			4cm, N, M, BD, R5, AW1, 12, sm, xc									
4.2			7cm, N, M, BD, R4, AW1, 12, sm, xc, M, BX, J									
			2cm, N, M, BD, R5, AW1, 12, sm, xc									
			6.5cm, Y, M, BD, R4, AW1, 12, sm, xc									
4.4												
			27.5cm, Y, M, BD, R4, AW1, 20, sm, vc									
4.6												
4.8												
5.0	78.19											
			51cm, N, M, BD, R4, AW1. END OF RUN. RECOVERY = 100%, RQD = 82.7%									
5.2												
5.4			35cm, Y, M, BD, R4, AW1, 12, sm, xc									
5.6												
5.8			39cm, Y, M, BD, R3, AW1, 12, sm, xc									
			14.5cm, N, M, BD, R5, AW1, 12, sm, xc									
6.0	77.19		9.5cm, N, M, BD, R5, AW1, 12, sm, xc									
6.2			25cm, Y, M, BD, R4, AW1, 25, r, xc									Silica sand
6.4			15.5cm, N, M, BD, R5, AW1, 25, r. END OF RUN. RECOVERY = 91%, RQD = 93.1%									50 mm 010 slot PVC pipe
6.6			15.5cm, N, M, BD, R5, AW1, 20, sm, xc, VL									
6.8												
			24cm, N, M, BD, R4, AW1, 20, sm, xc									
			3.5cm, N, M, BD, R5, AW1, 12, sm, xc									
7.0	76.19		13.5cm, N, M, BD, R5, AW1, 20, r, xc									
7.2			18.5cm, N, M, BD, R5, AW1, 20, r, xc									
7.4												
			27cm, N, M, BD, R4, AW1, 20, r, xc									
			6.5cm, N, M, BD, R5, AW1, 20, r, xc									
7.6			5.5cm, N, M, BD, R5, AW1, 20, r, vc									
			4cm, M, BD, AW, 12, sm, xc, BX									
7.8												
			20.5cm, N, M, BD, R5, AW1, 20, sm, xc, END OF RUN. RECOVERY = 97%, RQD = 80.7%									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 7
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023108.25 N
349869.5 E
Groundsurface Elevation: 83.19 m
Top of Casing Elevation: 83.98 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-36
Relative Location: SW central site boundary

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
			End of well at 7.90 m, due to achievement of target depth. Well Completion Details: Screened interval from 4.90 m to 7.90 m below surface Elevation at top of pipe (TOP) = 83.980 m Groundwater Information: Depth to groundwater from TOP = 4.686 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 7
LOGGED BY: AC/DE

UTM COORDINATES
ZONE: 18
5023108.25 N
349869.5 E
Groundsurface Elevation: 83.19 m
Top of Casing Elevation: 83.98 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-37
Relative Location: Hines turn around

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL CONSTRUCTION	WATER LEVEL	NOTES
0.0	84.06		**Topsoil** Sandy silt, loose, non-plastic, broken rocks, dark brown, moist.	0-0.5		1 4 9 10	25	PHC BTEX PAH Metals	0.3			Steel casing, stickup, jplug
0.2			**Broken stones** Broken rock fill deposited on site from adjacent properties.									
0.4												
0.6												
0.8												
1.0	83.06					42 26 8 8						
1.2												
1.4												
1.6												
1.8						1 3 7 6						
2.0	82.06											
2.2												
2.4			**Bedrock** Interbedded dolostone and sandstone									
2.6												Bentonite seal
2.8												
3.0	81.06											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 8
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023143.22 N
349822.73 E
Groundsurface Elevation: 84.06 m
Top of Casing Elevation: 85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-37
Relative Location: Hines turn around

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
4.2												
4.4												
4.6											▼	GW = 4.572 mbg
4.8												
5.0	79.06											
5.2												
5.4												
5.6												
5.8												
6.0	78.06											
6.2												
6.4												
6.6												
6.8												Silica sand
7.0	77.06											
7.2												50 mm 010 slot PVC pipe
7.4												
7.6												
7.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 8
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023143.22 N
349822.73 E
Groundsurface Elevation: 84.06 m
Top of Casing Elevation: 85 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-37
Relative Location: Hines turn around

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4												
8.6			End of well at 8.70 m, due to achievement of target depth.									

Well Completion Details:
Screened interval from 5.70 m to 8.70 m below surface
Elevation at top of pipe (TOP) = 85.000 m

Groundwater Information:
Depth to groundwater from TOP = 5.512 m

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 8
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023143.22 N
349822.73 E
Groundsurface Elevation: 84.06 m
Top of Casing Elevation: 85 m

Notes:
SPLIT SPOON
NO RECOVERY

BOREHOLE LOG

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

Borehole #: MW22-38
Relative Location: Terry Fox & March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
0.0			**Topsoil** Silty sand, trace gravel, loose, dark brown, dry.	0-0.75		2 6 7 8	100	PHC BTEX PCB	0.2			Flushmount, jplug, cement
0.2			**Sand** Sand, some gravel, loose, beige, dry.									
0.4			**Sand and clay** Sand and clay, firm, low plasticity, dark brown, moist.	0.75-2			100	PHC BTEX PCB	0.8			
0.6												
0.8						50+	50					
1.0	82.03		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4												
1.6												
1.8												
2.0	81.03											
2.2												
2.4												
2.6												Bentonite seal
2.8												
3.0	80.03											
3.2												
3.4												
3.6												
3.8												

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 8
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023343.34 N
349857.11 E
Groundsurface Elevation: 83.03 m
Top of Casing Elevation: 82.99 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-38
Relative Location: Terry Fox & March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
5.0	78.03											GW = 5.793 mbg
6.0	77.03											Silica sand
7.0	76.03											50 mm 010 slot PVC pipe

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 8
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023343.34 N
349857.11 E
Groundsurface Elevation: 83.03 m
Top of Casing Elevation: 82.99 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-38
Relative Location: Terry Fox & March

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE					FIELD TEST DATA	WELL COMPLETION		
				SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100	CONSTRUCTION	WATER LEVEL	NOTES
8.2												
8.4			End of well at 8.50 m, due to achievement of target depth.									
			Well Completion Details: Screened interval from 5.50 m to 8.50 m below surface Elevation at top of pipe (TOP) = 82.990 m									
			Groundwater Information: Depth to groundwater from TOP = 5.753 m									

DRILLER: Aardvark - Jon
DRILLING METHOD: AIR HAMMER
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 8
LOGGED BY: AC

UTM COORDINATES
ZONE: 18
5023343.34 N
349857.11 E
Groundsurface Elevation: 83.03 m
Top of Casing Elevation: 82.99 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	CONSTRUCTION	WATER LEVEL	NOTES
-0.6									1 – 10 – 100			
-0.4												
-0.2												Monument Stick-up with 7 Channel CMT
0.0	82.27		Ground Surface									
			Topsoil Silt, some clay, some sand, organics, soft, non-plastic, dark brown, moist.	22-39 0-0.5		1 2 4 3	50		1.5			
0.2			**Sandy Clay** Sandy clay, soft, medium plasticity, light brown, moist.	22-39 0.5-1			50	VOCs	3.8			
0.4												
0.6												
0.8			Becomes grey with less sand.									
1.0	81.27			22-39 2.5-3.5		3 50+	100	VOCs	0.7			
			Bedrock Interbedded dolostone and sandstone									
1.2			Length - 20cm, Scratch (Y/N) - Y, Texture - M (medium grain), Fabric - BD (Bedded), Field Strength - R4, Weathering - AW1, End joint condition - 12, Roughness - SM (Smooth), Spacing - XC (Extra Close)									
1.4												
1.6			38.5, Y, M, BD, R4, AW1, 12, SM, XC									
1.8			17.5, Y, M, BD, R4, AW1, 12, SM; END RUN 1, RECOVERY - 100%, RQD - 100%									
2.0	80.27		6.5, Y, M, BD, R5, AW1.5, 12, R (rough), VC (Very Close)									
			4, N, M, BD, R5, AW1, 12, R, XC									
			6.5, N, M, BD, R5, AW1, 12, SM, XC									
2.2			3, N, M, BD, R5, AW1, 12, SM, XC									
2.4												
2.6												
2.8												
3.0	79.27		98.5, N, M, BD, R4, AW1, 12, SM, XC									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
3.4			31.5, N, M, BD, R4, AW1, 12, SM; END RUN 2, RECOVERY - 99%, RQD - 86.7%									
			6, Y, M, BD, R4, AW1, 20, R, XC									
3.6			15.5, Y, M, BD, R5, AW1, 20, R, VC, VL, Joint Fill - BX (Broken Rock)									
			2.5, Y, M, BD, R5, AW1, 20, R, XC									
3.8			3, Y, M, BD, R5, AW1, 20, SM, XC									
			10, Y, M, BD, R5, AW1, 12, SM, XC									
			1.5, Y, M, BD, R5, AW1, 12, SM, XC									
4.0	78.27											
			Mechanical Fracture - 34.5, Y, M, BD, R3, AW1, 20, R, XC									
4.2			9.5, Y, M, BD, R5, AW1, 20, R, XC									
			3.5, Y, M, BD, R4, AW1, 20, R, VC, VL, BX									
4.4			18.5, N, M, BD, R4, AW1, 20, SM, XC									
4.6			12.5, Y, M, BD, R4, AW1, 20, R, XC									
4.8			26, N, M, BD, R4, AW1, 20, SM, XC									
5.0	77.27		10, N, M, BD, R5, AW1, 20, R; END RUN 3, RECOVERY - 100%, RQD - 83%									
			Fracture, Mottling Around Fracture, PID Reading - 0 ppm									
5.2												
5.4												
			Fracture, Discolouration, 0.2									
5.6												
5.8												
6.0	76.27		Fracture, 0									
6.2												
			Fracture, 0									
6.4			End Run 4									
			Fracture, 0									
6.6			Fracture, 0.2									
6.8												
7.0	75.27		Fracture, 0									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
			Fracture, 0									
7.4			Fracture, 0									
			Fracture, 0									
7.6												
			Fracture, 0.3									
7.8			Fracture, 0.3									
			End Run 5									
8.0	74.27		Fracture, 0									
8.2			Fracture, 0.2									Port 1
			Fracture, 0.2									
8.4			Fracture, 0.3									
8.6			Fracture, 0									
			Fracture, Discolouration, Lost Circulation, 0									
8.8												
			Fracture, 0									
9.0	73.27		Fracture, 0									
			Fracture, 0									
9.2												
			Fracture, 0									
9.4			End Run 6, Oxidation, 0.1									
			Fracture, 0.3									
9.6			Fracture, 0.9									
9.8			Fracture, 0.3									
10.0	72.27											
			Fracture, 0.2									
10.2												
10.4												
10.6												Port 2
10.8			Fracture, 0.1									
11.0	71.27		End Run 7									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
11.4												
11.6			Fracture, 0.1									
			Fracture, Oxidation, 0.2									
11.8			Fracture, 0.2									
			Fracture, 0.2									
12.0	70.27											
12.2			Fracture, 0.2									
12.4												
			End Run 8									
12.6			Fracture, 0									
			Fracture, 0									
12.8			Vertical Fracture									
			Fracture, 0									
			Fracture, 0									
13.0	69.27		Fracture, 0									
			Fracture, 0									
13.2			Fracture, 0									
			Fracture, 0									
13.4												
			Fracture, 0									
13.6			Fracture, Oxidation, 0									
			Fracture, 0									
13.8												
			Fracture, 0									
14.0	68.27		End Run 9									
14.2												
			Fracture, 0.2									
14.4												
14.6												
14.8												
15.0	67.27											Port 3
			Fracture, 0.3									
			Fracture, 0.7									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
15.4			Fracture, 0.4									
			Fracture, 04.									
			Fracture, 0.2									
			Fracture, 0.2									
15.6			End Run 10									
			Fracture, 0									
15.8												
16.0	66.27											
16.2												
16.4												
16.6			Fracture, 0									
16.8												
17.0	65.27		Fracture, 0									
			End Run 11									
			Fracture, 0.1									
17.2			Fracture, 0									
			Fracture, 0									
			Fracture, 0									
17.4			Fracture, 0									
17.6			Fracture, 0									
			Fracture, 0									
17.8			Clay Seam within Fracture Set									
18.0	64.27		Fracture, 0									
18.2												
			Fracture, 0									
18.4			Fracture, 0									
18.6												
			End Run 12									
18.8			Fracture, 0									
			Fracture, 0									Port 4
19.0	63.27		Fracture, White Colouration, 0									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
19.4												
19.6			Fracture, 0									
			Fracture, 0									
19.8			Fracture, 0									
20.0	62.27		Fracture, 0									
20.2			End Run 13									
20.4												
20.6												
20.8			Fracture, 0									
21.0	61.27		Fracture, 0									
21.2			Fracture, 0									
			Fracture, 0									
21.4			Fracture, 0									
			Fracture, 0									
21.6			Fracture, 0									
			End Run 14									
21.8			Fracture, 0									
22.0	60.27		Fracture, 0									Port 5
22.2			Fracture, 0									
			Fracture, 0									
22.4			Fracture, 0									
22.6			Fracture, 0									
			Fracture, 0									
			Fracture, 0									
22.8			Fracture, 0									
			Fracture, 0									
23.0	59.27		Fracture, 0									
			Fracture, 0									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
23.4			End Run 15									
			Fracture, PID Readings Unreliable									
			Fracture									
23.6			Fracture									
			Fracture									
23.8			Fracture									
			Fracture									
24.0	58.27											
24.2			Fracture									
24.4			Fracture									
			Fracture									
24.6												
24.8			End Run 16									
25.0	57.27		Fracture Zone, Oxidation, 37.5									Port 6
			Fracture Zone End									
25.2			Fracture, 38.3									
25.4												
25.6												
			Fracture, 27.3									
25.8			Fracture, 24.2									
			Fracture, 24.1									
26.0	56.27											
26.2			Fracture, 24.5									
			End Run 17									
26.4												
26.6			Fracture, 8.6									
26.8			Fracture, Oxidation, 10.9									
27.0	55.27											

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-39
Relative Location: Near 603 drainage on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
27.4												
27.6			Fracture, 18.7									
27.8			End Run 18									
28.0	54.27											
28.2												
28.4												
28.6												
28.8			Fracture, 18.2									
29.0	53.27		Fracture, 19.2									Port 7
29.2			Fracture, 19.5									
29.4			End Run 19									
29.6												
29.8			Fracture, 3.1									
30.0	52.27		Fracture, 4									
30.2												
30.4												
			End of well at 30.50 m, due to achievement of target depth.									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 16
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023242.54 N
349915.25 E
Groundsurface Elevation: 82.27 m
Top of Casing Elevation: 83.01 m

Notes:
SPLIT SPOON
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
-0.8												
-0.6												
-0.4												
-0.2												Monument Stick-up with 7 Channel CMT
0.0	83.00		Ground Surface									
			Topsoil Topsoil, Silt, some clay, organics, soft, non-plastic, dark brown, moist.									
0.2			**Sandy Clay** Sandy clay, soft, high plasticity, moist, brown.	22-40 0-1.5		1 2 3	75	VOCs	1.3			
0.4												
0.6												
0.8			Becomes grey-brown.	22-40 2-3		8 9 50+	75	VOCs	2000.0			
1.0	82.00		**Bedrock** Interbedded dolostone and sandstone									
1.2												
1.4			Length - 32.5cm, Scratch (Y/N) - Y, Texture - M (medium grain), Fabric - BD (Bedded), Field Strength - R3, Weathering - AW1, End joint condition - 20, Roughness - R (Rough), Spacing - XC (Extra Close)									
1.6												
1.8			18.5, Y, M, BD, R3, AW1; End Run 1, RECOVERY - 100%, RQD - 100%									
2.0	81.00											
2.2			31, Y, M, BD, R3, AW1, 20, R, XC									
2.4												
2.6			51, Y, M, BD, R4, AW1, 20, R, XC									
2.8			9, Y, M, BD, R5, AW1, 12, SM (Smooth), VC, BX (Broken Rock Filled Joint)									
3.0	80.00											

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100 1000 10000	WELL CONSTRUCTION	WATER LEVEL	NOTES
3.2			36, N, M, BD, R4, AW1, 12, R, XC									
			7, N, M, BD, R4, AW1, 12, SM, XC									
			6.5, N, M, BD, R5, AW1, 12, SM, XC									
3.4			9.5, N, M, BD, R5, AW1, 20, R									
			End Run 2, RECOVERY - 98%, RQD - 78.7%									
3.6			16, N, M, BD, R4, AW1, 12, R, XC									
3.8												
			31, N, M, BD, R4, AW1, 20, R, XC									
4.0	79.00		Mechanical Fracture, 39, Y, M, BD, R3, AW1, 20, R, XC									
4.2												
4.4												
			22.5, Y, M, BD, R3, AW1, 12, SM, XC									
4.6			Mechanical Fracture, 14, Y, M, BD, R4, AW1, 25, R, XC									
4.8												
5.0	78.00		34, Y, M, BD, R4, AW1, 25, R; End Run 3, RECOVERY - 103%, RQD - 100%									
			8, N, M, BD, R4, AW1, 12, SM, XC									
5.2			7, N, M, BD, R5, AW1, 12, SM, XC									
			10.5, N, M, BD, R4, AW1, 20, R, XC									
			9, N, M, BD, R4, AW1, 12, SM, XC									
5.4			6, N, M, BD, R4, AW1, 12, SM, XC									
5.6												
			34.5, N, M, BD, R3, AW1, 12, SM, XC									
5.8			13.5, N, M, BD, R3, AW1, 12, SM, XC									
6.0	77.00											
6.2												
6.4												
			55.5, N, M, BD, R4, AW1, 20, SM, VC									
6.6			2, N, M, BD, R4, AW1, 20, SM; End Run 4, RECOVERY 100%, RQD - 78%									
			Fracture, Oxidation, PID Reading - 0 ppm									
6.8												
7.0	76.00											

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100 1000 10000	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
7.2			Fracture, 0.1									
			Fracture, 0.1									
7.4			Fracture, 0.2									
7.6			Fracture, 0.3									Port 1
7.8												
8.0	75.00		End Run 5									
			Fracture									
8.2			Fracture									
8.4			Fracture									
8.6												
8.8			Fracture									
			Fracture, Broken Rock, Oxidation									
9.0	74.00		Fracture, Broken Rock, Oxidation									
9.2			Fracture									
9.4			Fracture									
9.6			Fracture									
			Oxidation, End Run 6									
9.8												
10.0	73.00		Fracture									
			Fracture									
10.2			Fracture									
10.4			Fracture									
			Fracture									
10.6			Fracture									
10.8			Fracture									
11.0	72.00											

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100 1000 10000	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
11.2			End Run 7									
			Fracture									
11.4			Fracture									
			Fracture									
			Fracture									
11.6			Fracture									
			Fracture									
11.8												
12.0	71.00											
12.2												Port 2
12.4												
			Fracture, Oxidation									
			Fracture, Oxidation									
12.6			End Run 8									
			Fracture									
12.8												
			Fracture									
13.0	70.00											
13.2												
13.4			Fracture									
13.6												
			Fracture									
13.8			Fracture									
			Fracture									
14.0	69.00											
			Fracture									
			End Run 9									
14.2			Fracture, 0									
14.4												
14.6			Fracture, 0									
14.8			Fracture, 0									
			Fracture, 0									
15.0	68.00		Fracture, 0									
			Fracture, 0									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100 1000 10000	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
15.2			Fracture, 0									
			Fracture, 0									
15.4			Fracture, 0									
15.6			Fracture, 0.4									
			End Run 10									
15.8												
16.0	67.00											
16.2			Fracture, 0									
16.4												
			Fracture, 0									
16.6			Fracture, 0									
			Fracture, 0									
16.8			Fracture, 0									Port 3
			Fracture, 0									
			Fracture, 0									
17.0	66.00		Fracture, 0									
			Fracture, 0									
17.2			Fracture, 0									
			End Run 11									
17.4			Fracture, 0									
			Fracture, 0									
17.6												
17.8			Fracture, 0									
18.0	65.00		Fracture, 0									
			Fracture, 0									
18.2			Fracture, 0									
18.4			Fracture, 0									
18.6												
			Fracture, 0									
18.8			Fracture, 0									
			End Run 12									
			Clay layer with broken rock, 0									
19.0	64.00		Fracture, 0									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
19.2									1 10 100 1000 10000			
19.4												
19.6												
19.8			Fracture, 0									
			Fracture, 0									
			Fracture, 0									
20.0	63.00											
20.2			Fracture, 0									
			End Run 13									
20.4												
20.6			Fracture, 0									
20.8												
21.0	62.00		Fracture, 0									
21.2												
21.4			Fracture, 0									
21.6			Fracture, 0									
			Fracture, 0									
21.8			End Run 14									
22.0	61.00		Fracture, 0									
			Fracture, 0									
22.2			Fracture, 0									Port 4
			Fracture, 0									
22.4			Fracture, 0									
			Fracture, 0									
22.6												
22.8			Fracture, 0									
			Fracture, 2.6									
23.0	60.00											

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE	FIELD TEST DATA	WELL COMPLETION	NOTES
				SAMPLE ID / TYPE / SPT COUNT / RECOVERY (%) / LAB ANALYSIS	Organic Vapour Concentration (ppmv) 1 10 100 1000 10000	CONSTRUCTION / WATER LEVEL	
23.2			Fracture, 1.1				
			Fracture, 1.1				
			End Run 15				
23.4							
23.6							
			Fracture, 0				
23.8			Fracture, 0				
			Fracture, 0				
24.0	59.00						
			Fracture, 0				
24.2			Fracture, 0				
			Fracture, 0				
24.4			Fracture, 0				
			Fracture, 0				
24.6			Fracture, 0				
			Fracture, 0				
24.8			End Run 16				
			Fracture, 0				
25.0	58.00						
25.2							
25.4			Fracture, 0				
			Clay layer with broken rock, Oxidation, 0				
25.6			End clay layer				
			Fracture, Oxidation, 0				
			Fracture, Oxidation, 0				
25.8			Fracture, Oxidation, 0				
			Fracture, Oxidation, 0				Port 5
26.0	57.00		Vertical Fracture, Oxidation, 0				
			Fracture, Oxidation, 0				
26.2							
			Fracture, 0				
26.4			End Run 17				
			Fracture, 0				
			Fracture, 0				
26.6			Fracture, 0				
26.8							
27.0	56.00						

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-40
Relative Location: Adjascent March on 595

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 10 100 1000 10000	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
27.2												
27.4			Fracture, Purple colouration in bedding of matrix, 0									
			Fracture, Green residue on fracture surfaces, 0									
27.6			Purple colouration in bedding of matrix									
			Fracture, 0									
			Purple colouration in bedding of matrix									Port 6
27.8			Fracture, 0									
			End purple colouration in matrix, End Run 18									
28.0	55.00											
			Fracture, 0									
28.2												
28.4			Fracture, 0									
28.6												
28.8			End Run 19									Port 7
29.0	54.00											
29.2												
29.4												
29.6			Fracture, 0									
29.8			Fracture, 0									
30.0	53.00		Fracture, 0									
30.2												
			Fracture, 0									
30.4			Fracture, 0									
			End of well at 30.50 m, due to achievement of target depth.									

DRILLER: Aardvark - Jon
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 22
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023265.36 N
349942.76 E
Groundsurface Elevation: 83.00 m
Top of Casing Elevation: 83.91 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv)	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
-1.0	83.06											
-0.8												
-0.6												
-0.4												Monument Stick-up with 7 Channel CMT
-0.2												
0.0	82.06		Ground Surface									
			Topsoil Topsoil, Silt, trace sand, organics, soft, loose, dark brown, moist.									
0.2			**Silty Clay** Silty clay, soft, medium plasticity, light brown, moist.	22-41 0-1.5		0 1 2 2	75		2.1			
0.4												
0.6												
0.8			**Sandy Clay** Sandy clay, trace gravel, firm, high plasticity, grey-brown, moist.	22-41 2-2.75		2 2 5 5	100		2.7			
1.0	81.06			22-41 2.75-4			100	VOCs	3.4			
1.2				22-41 4-4.5		5 50+	100	VOCs	3.7			
1.4			**Bedrock** Interbedded dolostone and sandstone									
			Fracture, PID Reading - 0 ppm									
1.6			Fracture, 0									
1.8			Fracture, 0 End Run 1									
2.0	80.06											
			Fracture, 8.1									
2.2			Fracture									
2.4			Fracture									
			Fracture									
2.6			Fracture, Oxidation									
2.8												

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
3.0	79.06											
3.2			Fracture, Oxidation									
			Fracture, Oxidation									
3.4			End Run 2									
3.6												
3.8			Purplein bedding of matrix									
4.0	78.06		Oxidation in Vertical Fracture Fracture									
4.2												
			Vertical Fracture									
4.4												
			Fracture									
4.6			Fracture									
			Fracture									
4.8			Fracture									
5.0	77.06		End Run 3									
			Fracture, 0									
			Fracture, 0									
5.2												
5.4												
5.6												
5.8			Fracture, 0									
6.0	76.06											
6.2												
6.4			Fracture, 0									
			End Run 4									
6.6												
6.8			Fracture, 0									

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
7.0	75.06		Fracture, 0									
7.2												
			Fracture, 0									
7.4												
7.6			Fracture, 0									Port 1
			Fracture, 0									
7.8												
			Fracture, 0									
8.0	74.06		End Run 5									
			Fracture, 0									
8.2			Fracture, 0									
			Fracture, 0									
			Fracture, 0									
8.4			Fracture, 0									
			Fracture, 0									
8.6			Fracture, Oxidation, Lost Circulation, 0									
			Fracture, 0									
8.8			Fracture, 0									
			Fracture, 0									
			Fracture, 0									
9.0	73.06		Fracture, 0									
9.2												
			Mechanical Fracture, 0									
9.4			Fracture, 0									
			End Run 6									
9.6												
9.8			Fracture, Oxidation, 0									
			Fracture, 0									
10.0	72.06		Fracture, 0									
			Fracture, 0									
10.2												
10.4			Fracture, 0									
10.6												
10.8			Fracture, 0									

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
11.0	71.06		Fracture, 0									
			End Run 7									
11.2												
11.4												
11.6			Fracture, 0									
			Fracture, 0									
11.8												
12.0	70.06											
12.2												
12.4												
12.6			End Run 8									
12.8			Sub-vertical Fracture, 0									
			Fracture, 0									
13.0	69.06		Vertical Fracture									
			Fracture, 0									
13.2			Fracture, 0									
13.4												
13.6			Fracture, 0									
			Fracture, 0									
13.8			Fracture, 0									
14.0	68.06		Fracture, 0									
			End Run 9									
14.2			Mechanical Fracture, 0									
			Fracture, 113									
14.4												
14.6												
14.8												
			Fracture, 19.6									

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE: SAMPLE ID	SAMPLE: TYPE	SAMPLE: SPT COUNT	SAMPLE: RECOVERY (%)	SAMPLE: LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WELL COMPLETION: WATER LEVEL	NOTES
15.0	67.06											
15.2			Fracture, 6.6									Port 2
			Fracture, 2.1									
			Fracture, 1.4									
15.4			Fracture, 1.8									
			Fracture, 1.8									
15.6			End Run 10									
15.8												
16.0	66.06											
16.2			Fracture, 5									
			Fracture, 3.5									
16.4			Fracture, 4									
			Fracture, 0									
16.6			Fracture, 0									
16.8			Fracture, 0									
17.0	65.06											
17.2			End Run 11									
17.4												
17.6												
17.8			Fracture, 0									
18.0	64.06		Fracture, 0									
			Fracture, 0									
18.2			Fracture, 0									
			Clay layer with broken rock									
			Fracture, 0									
18.4			Fracture, 0									
18.6			End Run 12									
18.8												

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
19.0	63.06		Fracture, 0									
19.2			Fracture, 0									
19.4			Fracture, 0									
19.6			Fracture, 0									
19.8			Fracture, 0									Port 3
20.0	62.06		Fracture, 0									
20.2			End Run 13									
20.4												
20.6			Fracture, 0									
20.8												
21.0	61.06											
21.2			Fracture, 0									
21.4			Fracture, 0									
21.6			Fracture, 0									
21.8			End Run 14									
22.0	60.06		Fracture, 0									
22.2			Fracture, 0									
22.4			Fracture, 0.6									
22.6			Fracture, 0									Port 4
22.8			Fracture, 0									

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
23.0	59.06		Fracture, 0									
23.2			Fracture, 0									
			End Run 15									
23.4												
23.6			Fracture, 0									
23.8			Fracture, 0									
24.0	58.06		Fracture, 0									
24.2			Fracture, 0									
24.4												
24.6			Fracture, 0.3									
24.8			End Run 16									
			Fracture, 0									
25.0	57.06		Fracture, 0									
25.2			Fracture, 0.4									
			Fracture, 0.2									
25.4			Fracture, 3.2									Port 5
25.6			Fracture, 0.1									
25.8			Fracture, 0.1									
26.0	56.06		Fracture, 0.2									
			Fracture, 0.1									
26.2			End Run 17									
26.4												
26.6												
26.8												

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

CLIENT: **March and Main Developments Inc.**
PROJECT: **March Road Properties Phase Two ESA**
ADDRESS: **555, 591, 595 and 603 March Rd.**

Project #: 0006-0103

BOREHOLE LOG

Borehole #: MW22-41
Relative Location: Rear center of 591 building

DEPTH (m)	ELEVATION (m)	SOIL TYPE	SOIL DESCRIPTION	SAMPLE ID	SAMPLE TYPE	SPT COUNT	RECOVERY (%)	LAB ANALYSIS	FIELD TEST DATA: Organic Vapour Concentration (ppmv) 1 – 10 – 100	WELL COMPLETION: CONSTRUCTION	WATER LEVEL	NOTES
27.0	55.06		Fracture, 0.1									
			Fracture, 0.9									Port 6
27.2												
			Fracture, 0.4									
27.4												
			Fracture, 0.4									
27.6												
27.8												
			End Run 18									
28.0	54.06		Fracture, 0.1									
			Fracture, 0.2									
28.2												
			Fracture, 0.3									
28.4												
			Fracture, 0.3									
			Fracture, 0.6									
28.6												
			Fracture, 0.7									
28.8												
29.0	53.06		Fracture, 1.4									
			Fracture, 0.5									
			Fracture, 0.3									
29.2												
			Fracture, 0.3									
29.4			End Run 19									
			Fracture, 1.3									
29.6												
												Port 7
29.8												
30.0	52.06											
			Fracture, 3									
30.2			Fracture									
30.4												
			End of well at 30.50 m, due to achievement of target depth.									

DRILLER: Aardvark - Devin
DRILLING METHOD: CORE
BOREHOLE DIAMETER (m): 0.102
WELL DIAMETER (m): 0.051
DRILL DATE: 2022 November 24
LOGGED BY: DE

UTM COORDINATES
ZONE: 18
5023218.99 N
349937.08 E
Groundsurface Elevation: 82.06 m
Top of Casing Elevation: 83.07 m

Notes:
CORE SAMPLE
NO RECOVERY

Omni-McCann

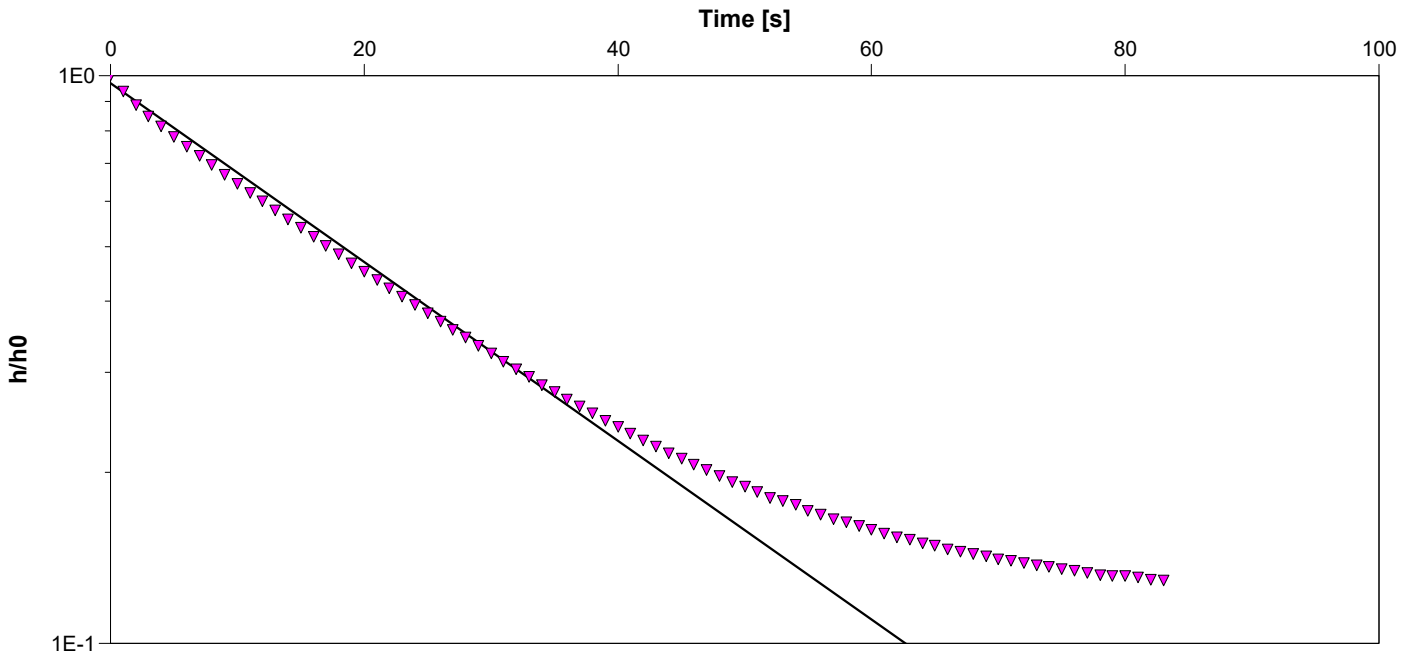
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-21 R1	Test Well: MW21-01A
Test Conducted by: DE		Test Date: 2022-12-19
Analysis Performed by: K	MW22-21 R1	Analysis Date: 2023-01-24
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-01A	1.29×10^{-5}	

Omni-McCann

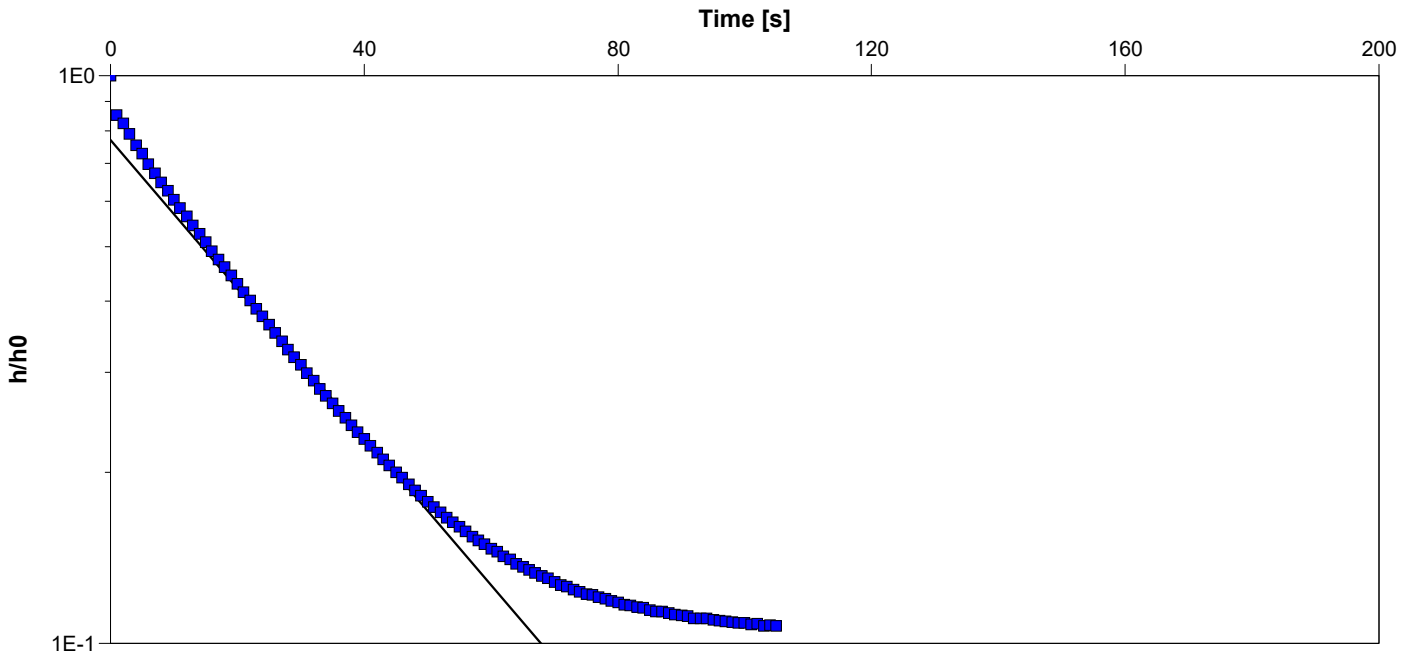
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-21 R2	Test Well: MW22-21
Test Conducted by: DE		Test Date: 2022-12-19
Analysis Performed by:	MW22-21 R2	Analysis Date: 2023-01-24
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW22-21	1.20×10^{-5}	

Omni-McCann

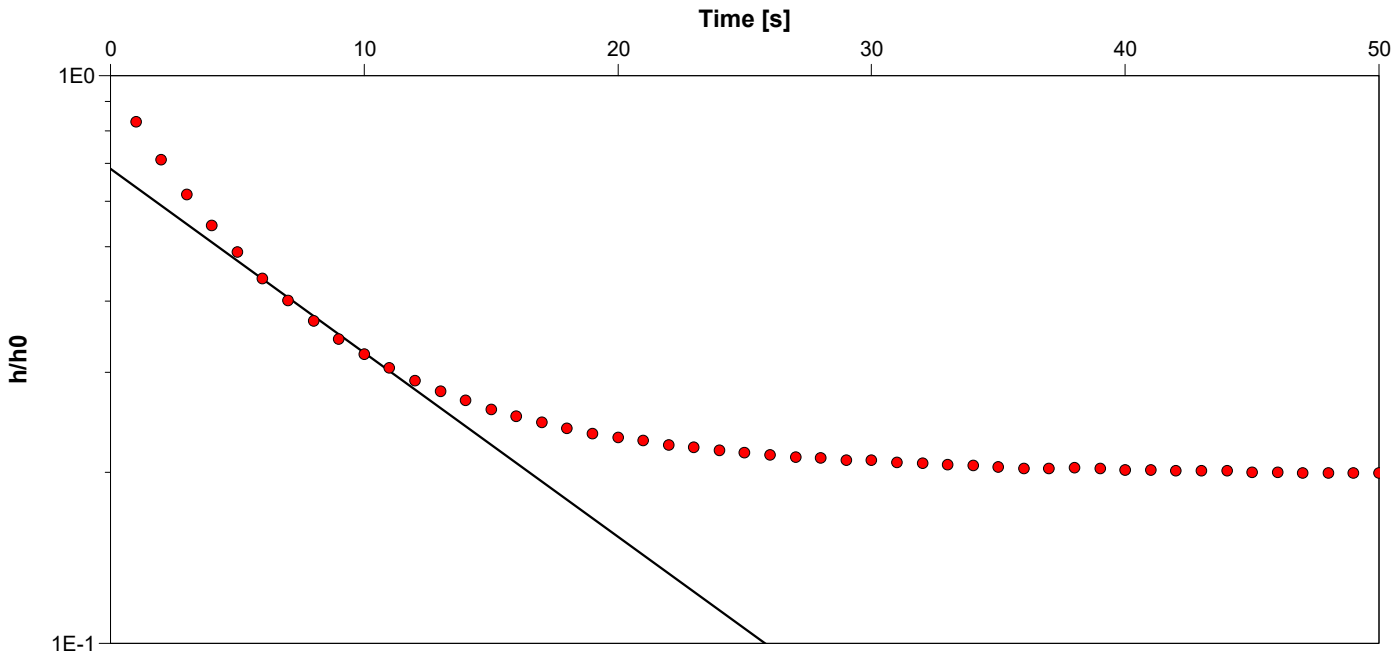
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-32 R1	Test Well: MW22-32
Test Conducted by: DE		Test Date: 2022-12-19
Analysis Performed by: KS	MW22-32 R1	Analysis Date: 2023-01-24
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW22-32	2.68×10^{-5}	

Omni-McCann

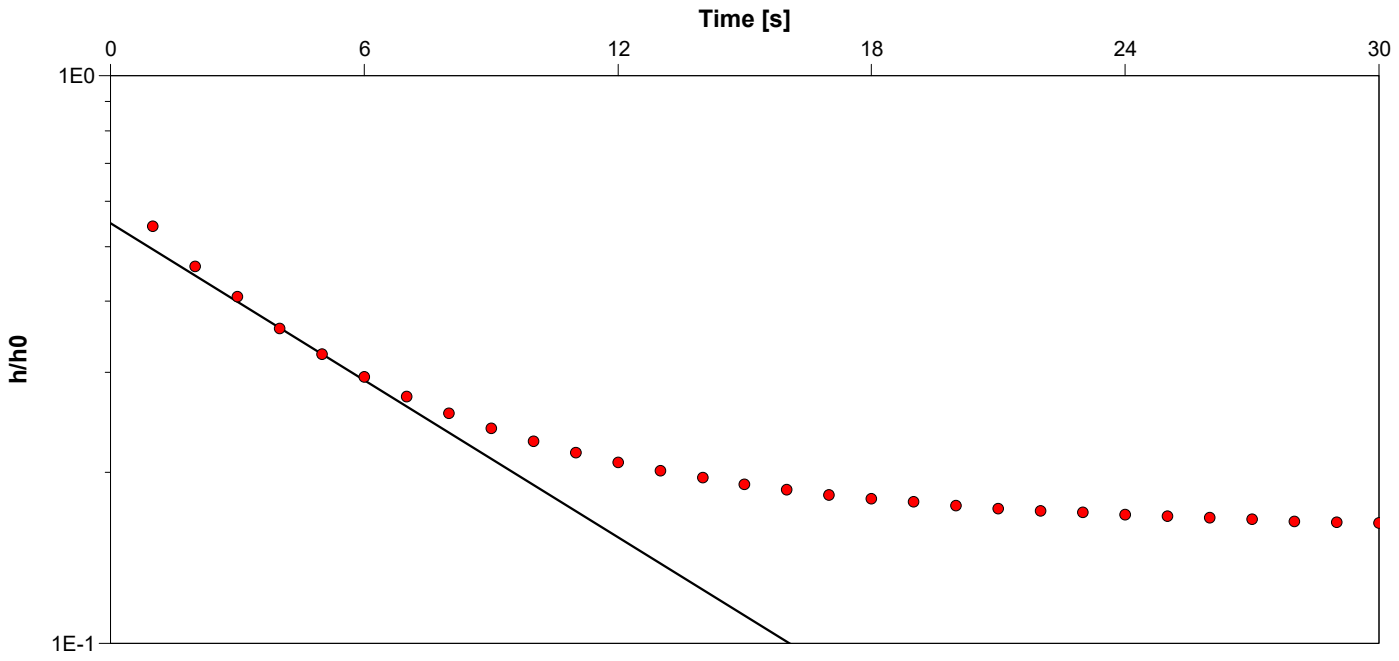
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-32 R2	Test Well: MW22-32
Test Conducted by: DE		Test Date: 2023-01-19
Analysis Performed by: KS	MW22-32 R2	Analysis Date: 2023-01-24
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW22-32	3.81×10^{-5}	

Omni-McCann

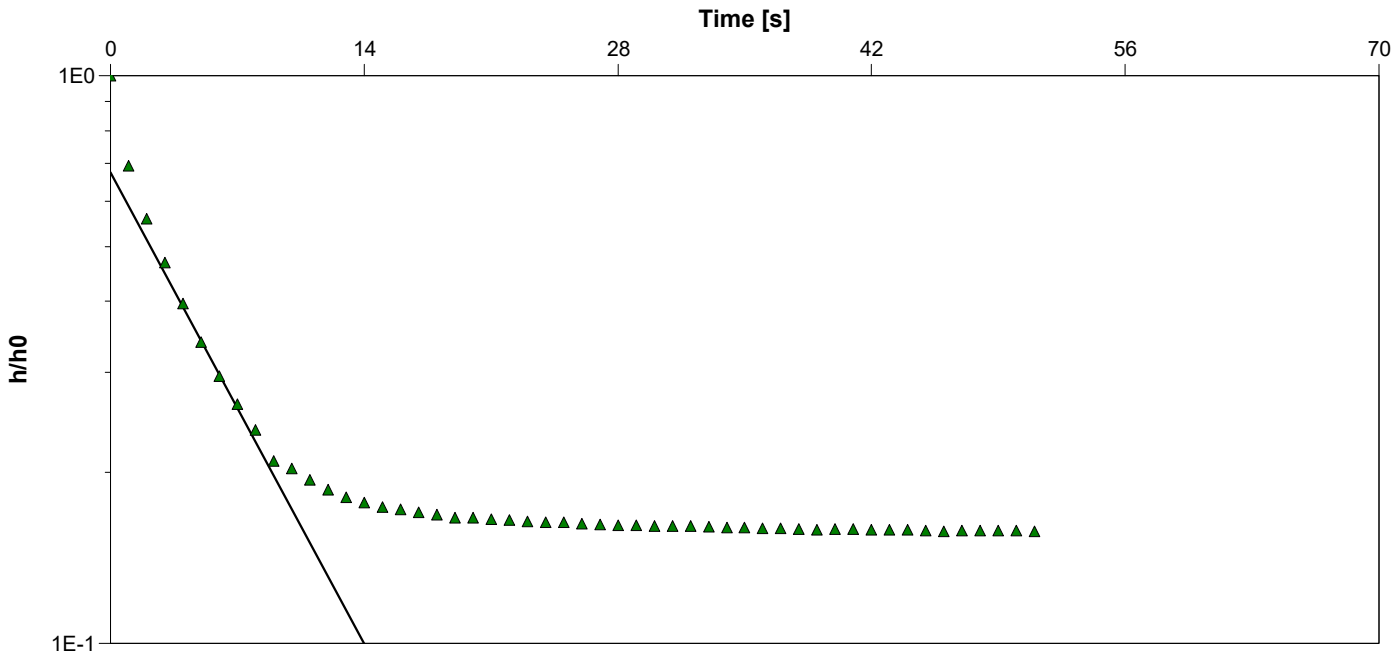
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-36 R1	Test Well: MW22-36
Test Conducted by: DE		Test Date: 2023-01-19
Analysis Performed by: KS	MW22-36	Analysis Date: 2023-01-24
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW22-36	4.88×10^{-5}	

Omni-McCann

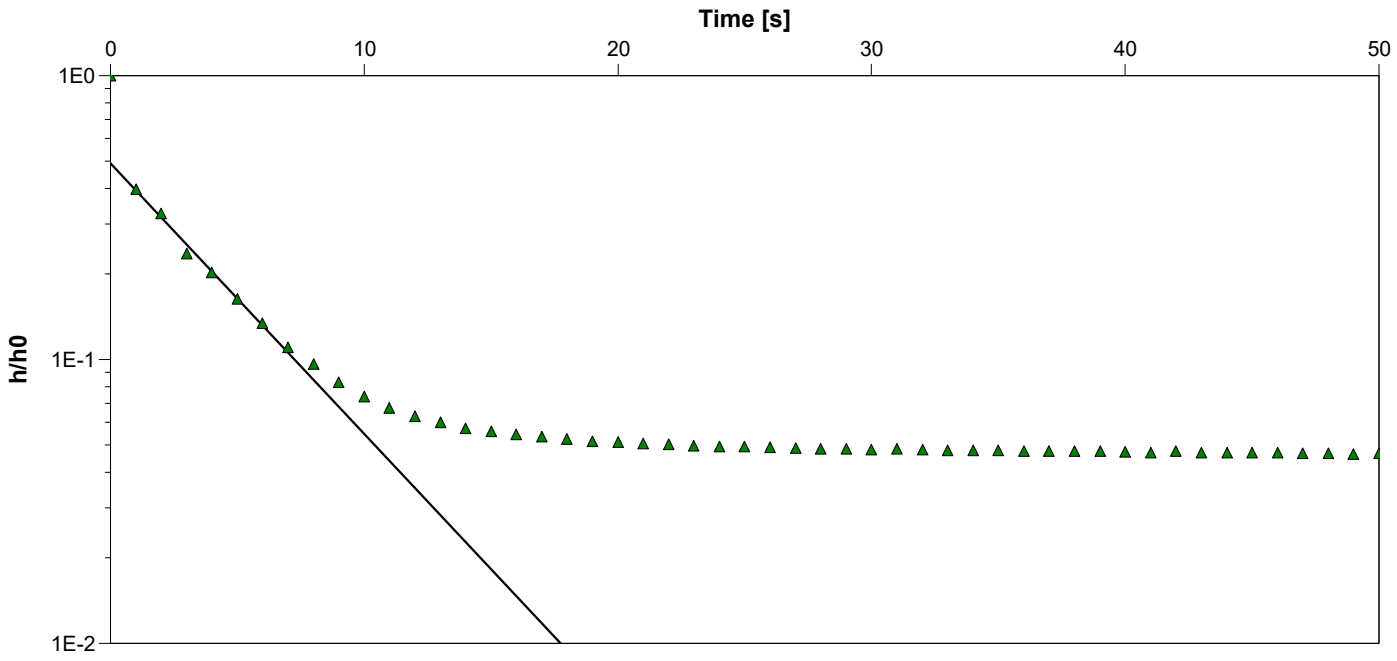
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-36 R2	Test Well: MW22-36
Test Conducted by: DE		Test Date: 2022-12-19
Analysis Performed by: KS	MW22-36 R2	Analysis Date: 2023-01-24
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW22-36	7.85×10^{-5}	

Omni-McCann

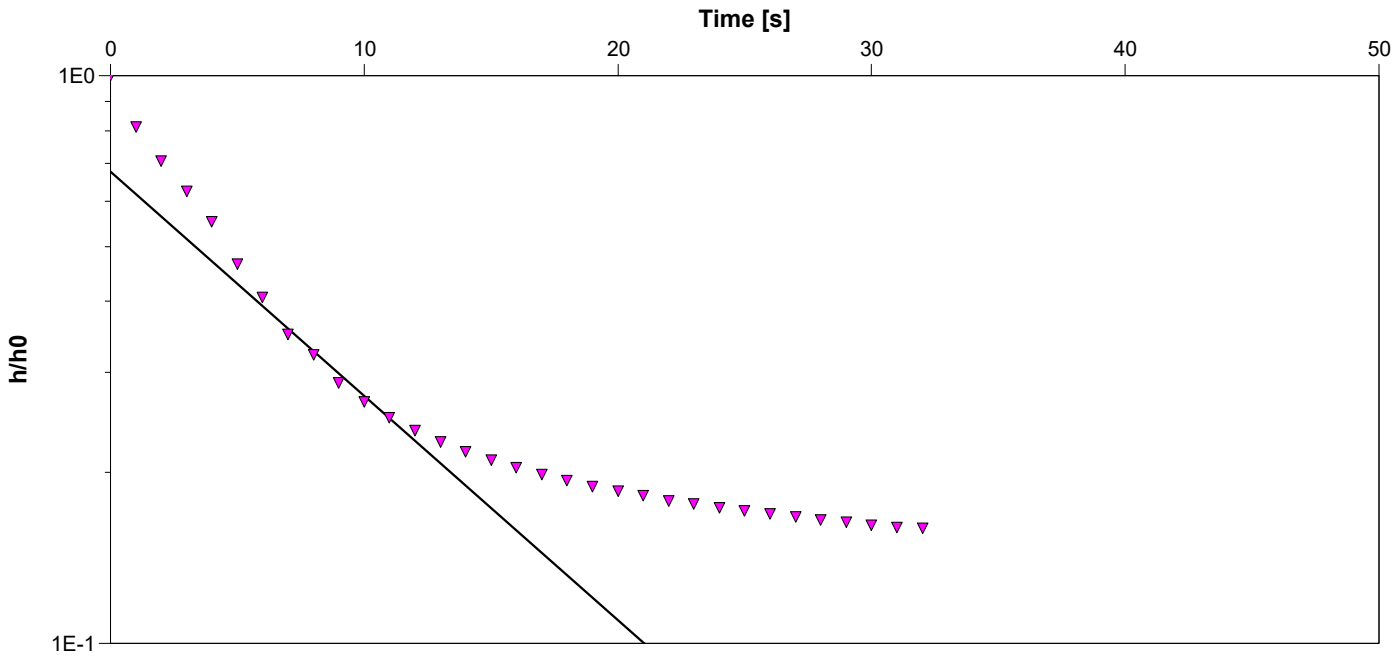
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-01A R1	Test Well: MW21-01A
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: DE	MW21-01A R1	Analysis Date: 2023-03-30
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-01A	3.23×10^{-5}	

Omni-McCann

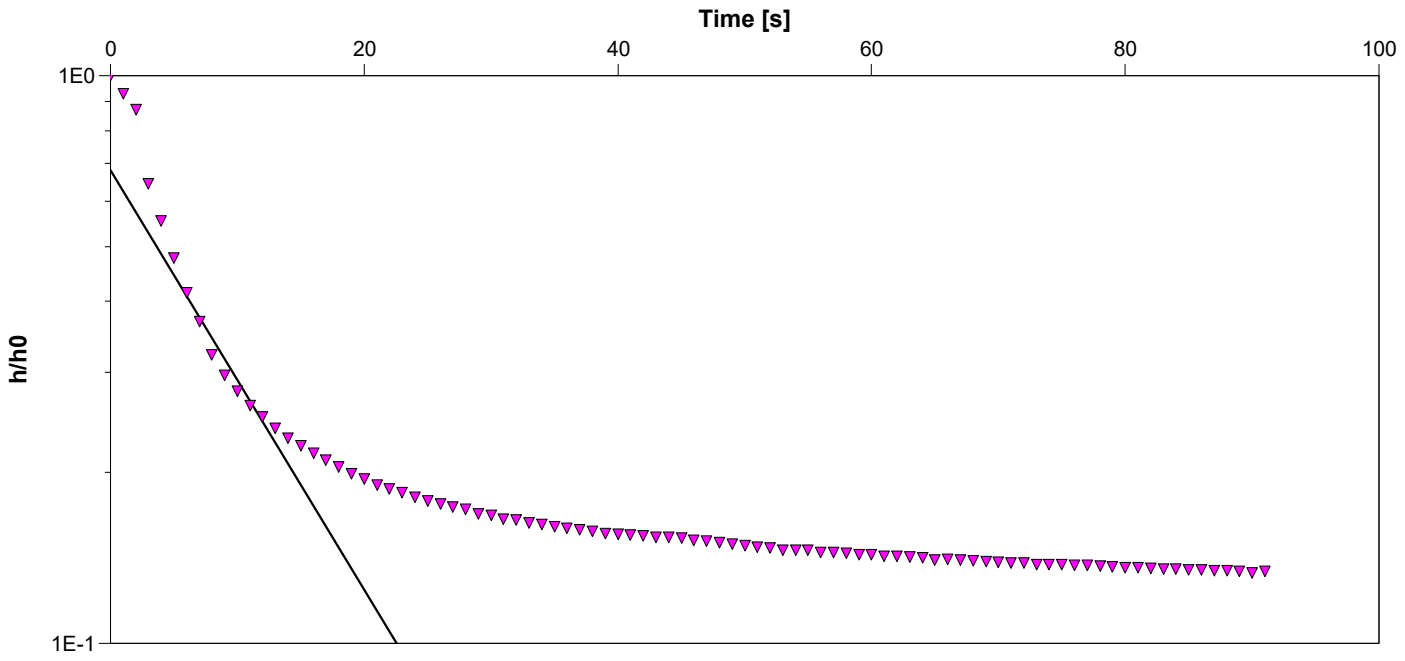
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-01A R2	Test Well: MW21-01A
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: KS	MW21-01A R2	Analysis Date: 2023-03-30
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-01A	3.03×10^{-5}	

Omni-McCann

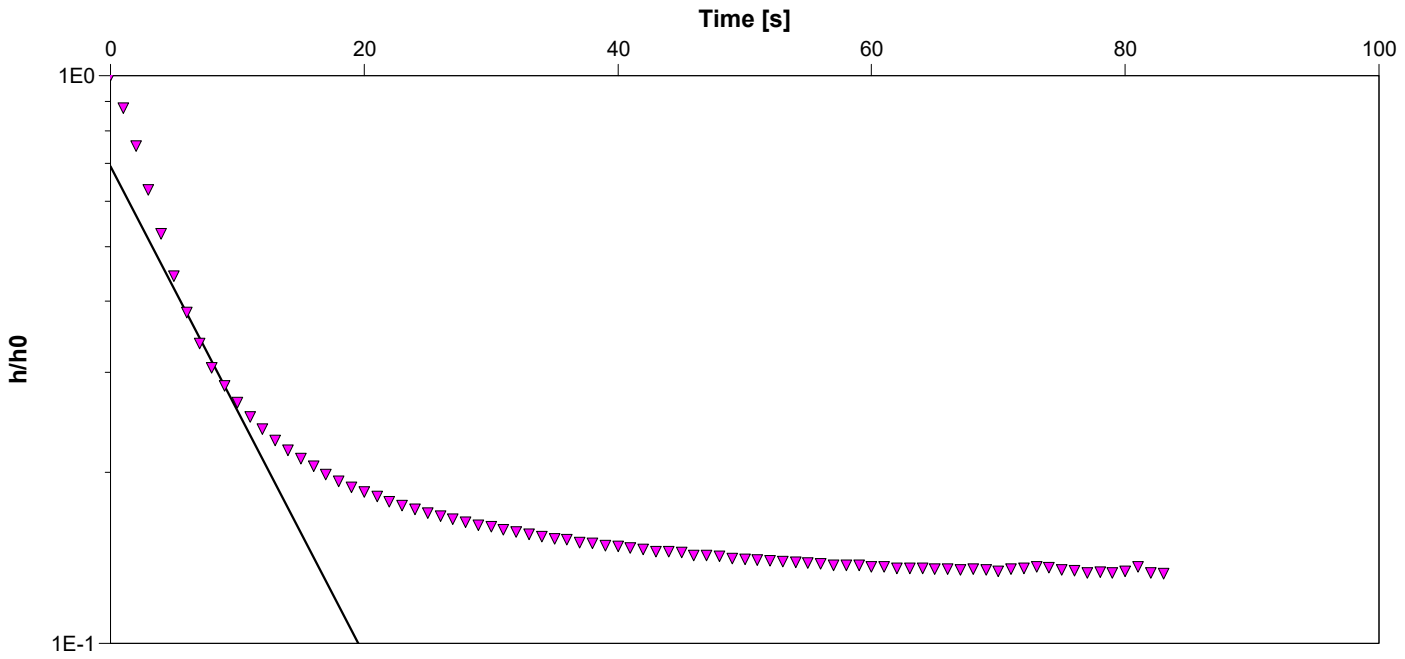
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-01A R3	Test Well: MW21-01A
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: KS	MW21-01A R3	Analysis Date: 2023-03-30
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-01A	3.52×10^{-5}	

Omni-McCann

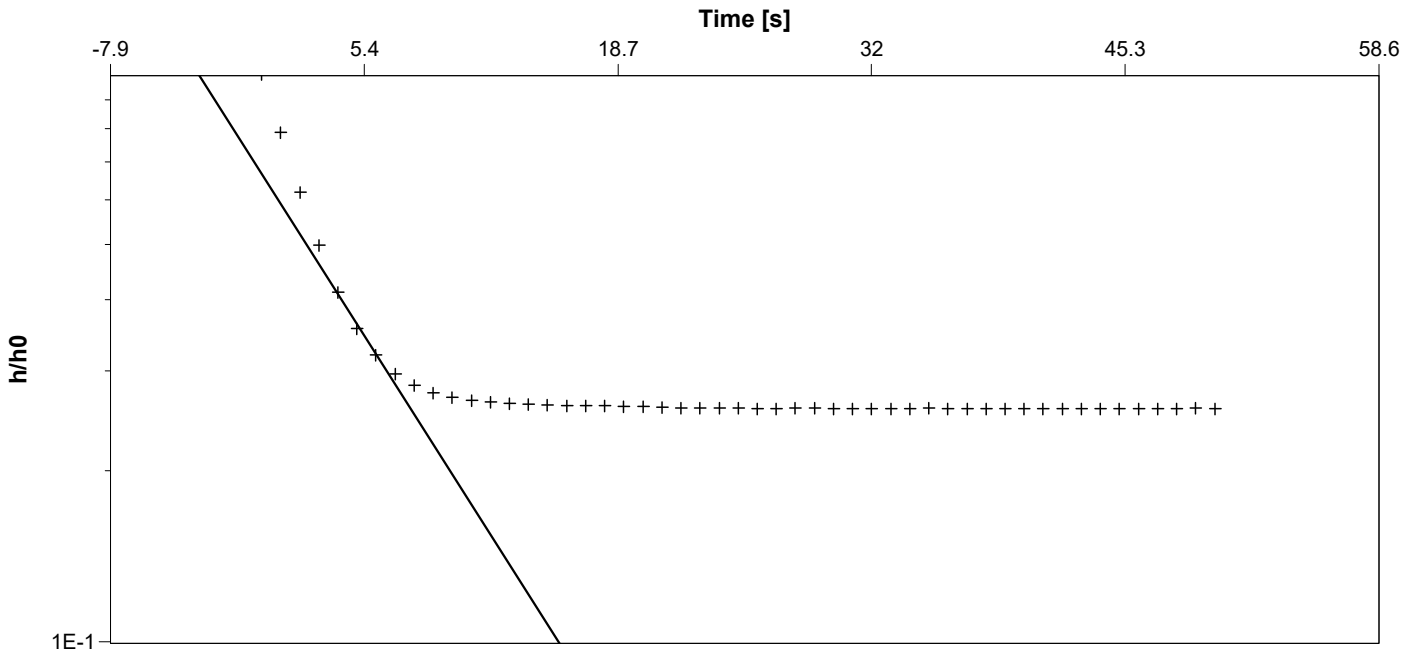
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-01B R2	Test Well: MW21-01B
Test Conducted by: DE		Test Date: 2022-12-19
Analysis Performed by: KS	MW21-01B R1	Analysis Date: 2023-03-30
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-01B	4.92×10^{-5}	

Omni-McCann

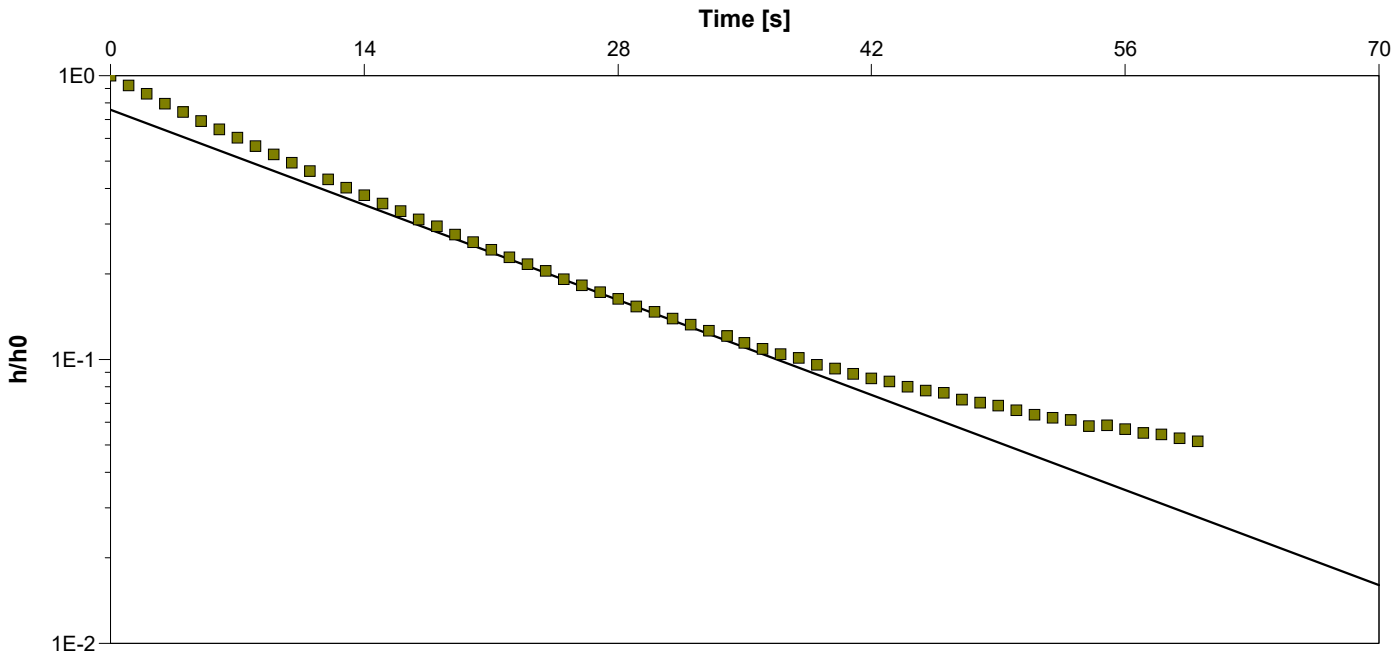
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-01C R1	Test Well: MW21-01C
Test Conducted by:		Test Date: 2023-03-31
Analysis Performed by: DE	MW22-01C R1	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-01C	2.32×10^{-5}	

Omni-McCann

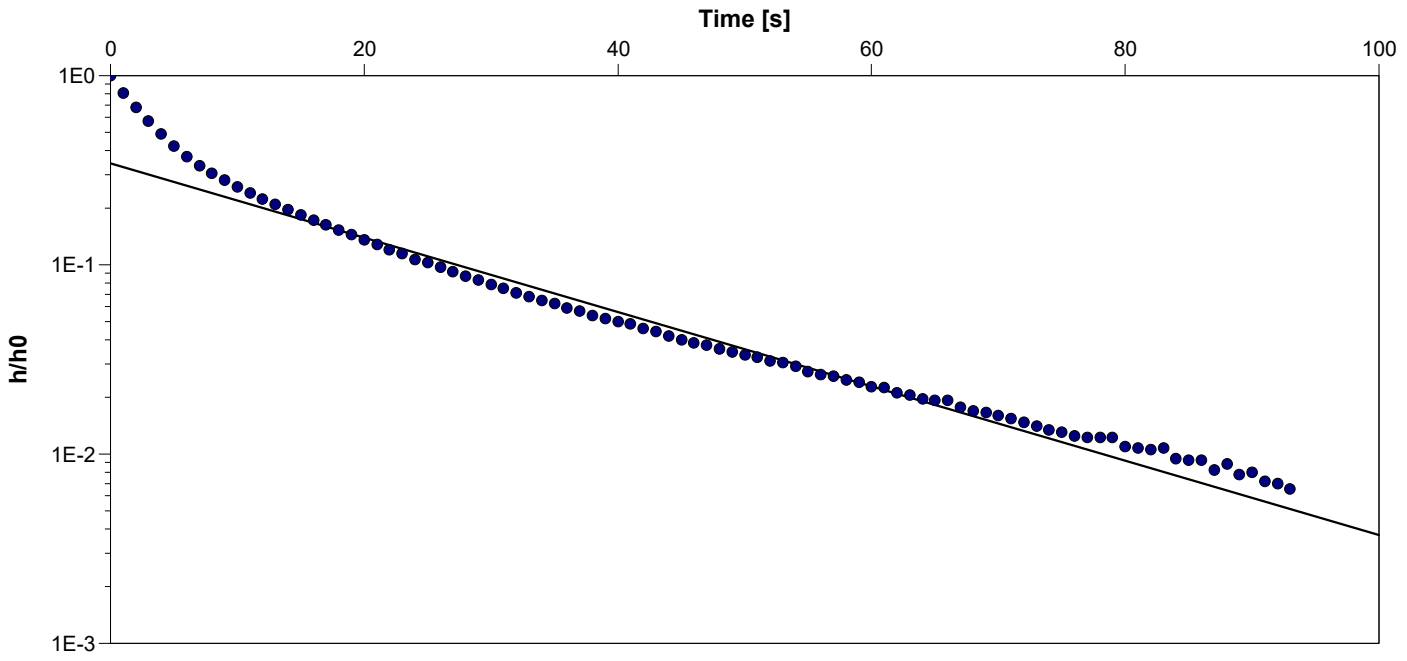
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-03A R2	Test Well: MW21-03A
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: KS	MW21-03A R2	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-03A	1.60×10^{-5}	

Omni-McCann

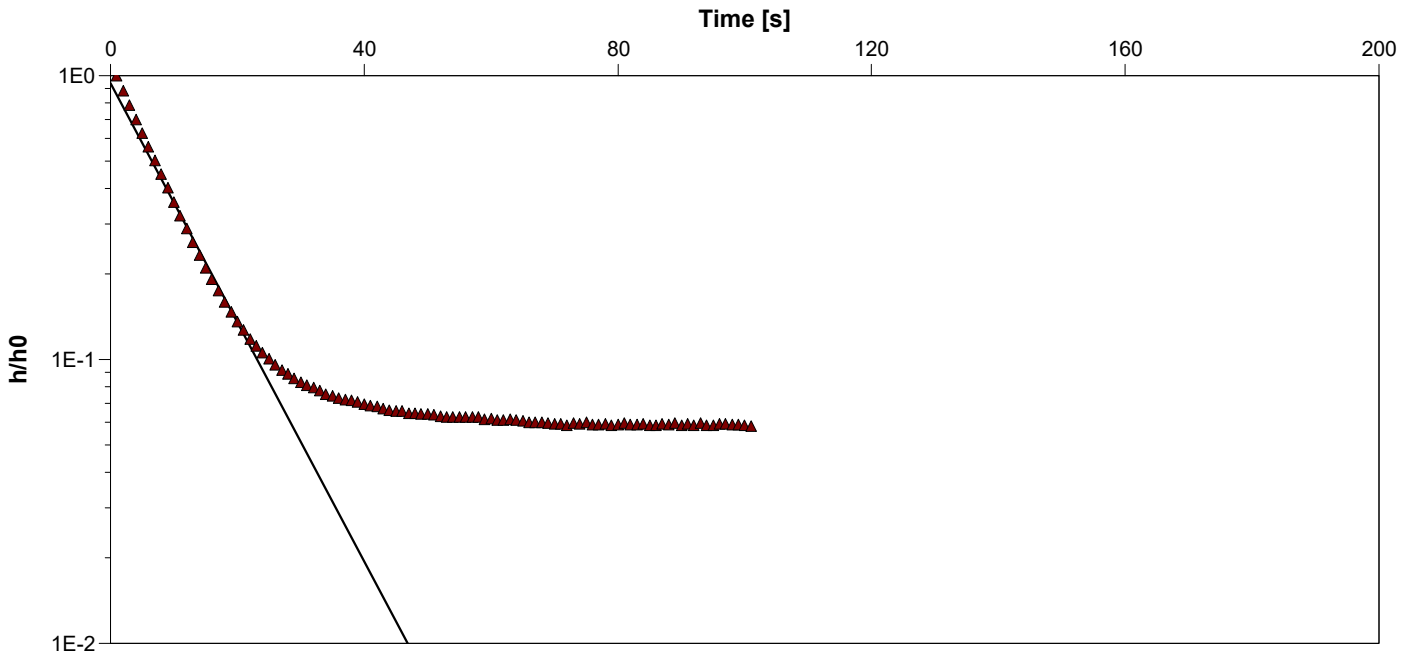
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-3B R2	Test Well: MW21-03B
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: KS	MW21-03B R2	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-03B	3.91×10^{-5}	

Omni-McCann

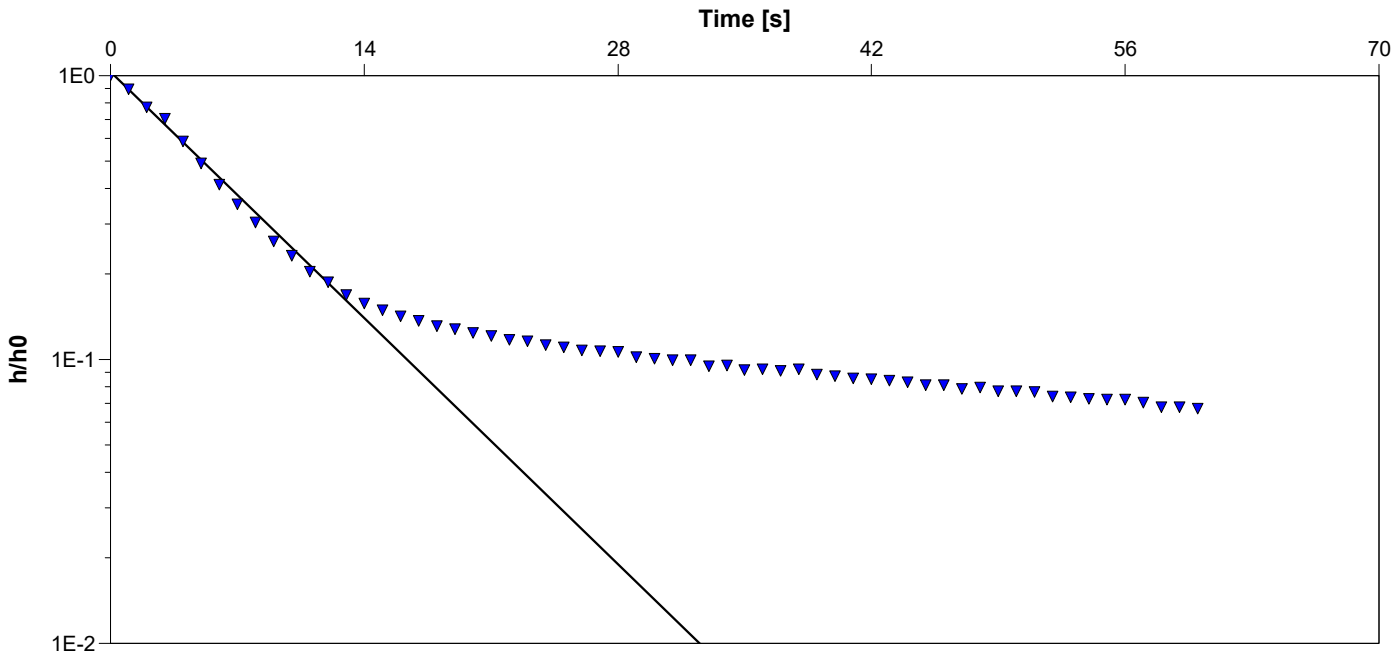
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-03C R1	Test Well: MW21-03C
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: DE	MW22-03C R1	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-03C	6.01×10^{-5}	

Omni-McCann

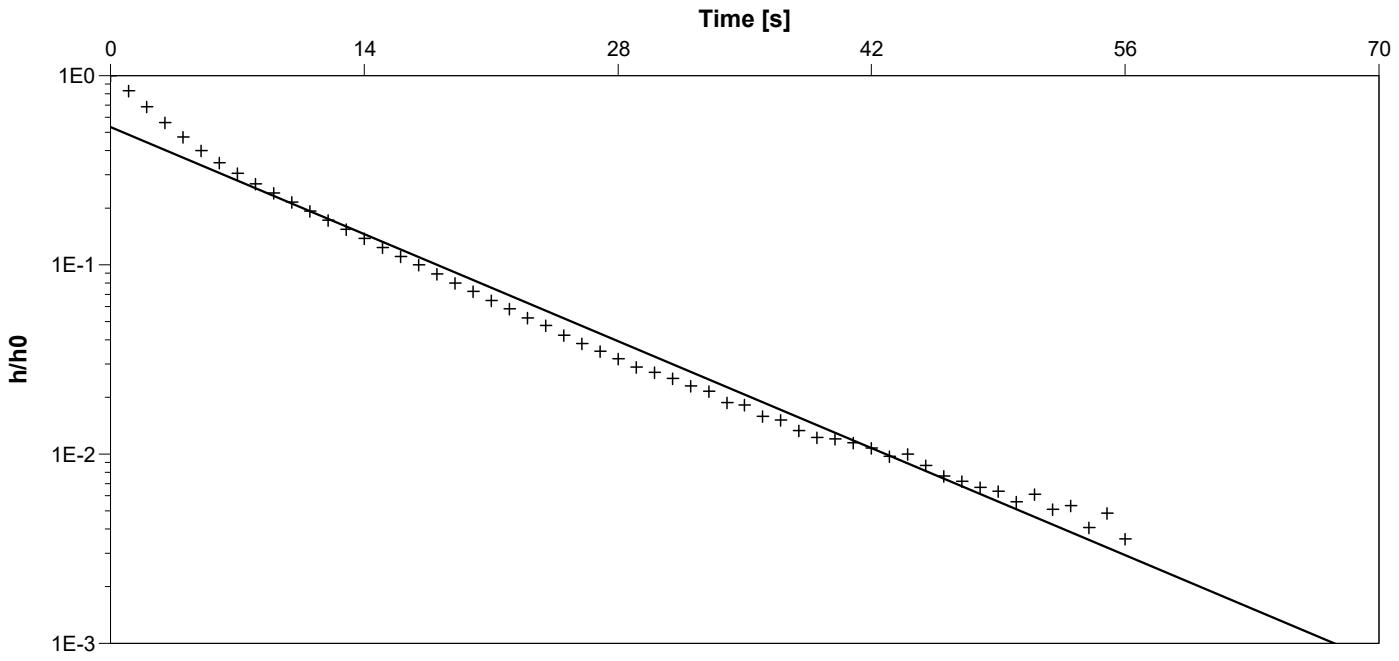
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-04A R2	Test Well: MW21-04A
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by:	MW21-04A R2	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-04A	3.38×10^{-5}	

Omni-McCann

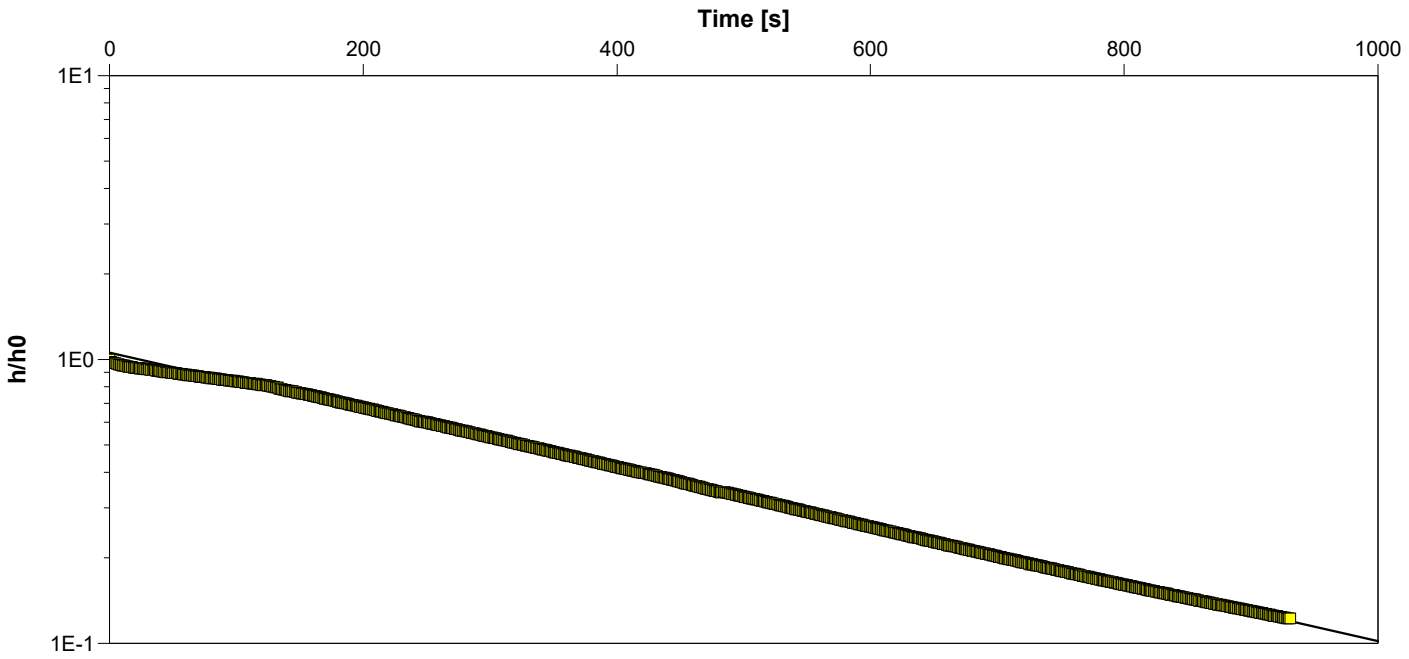
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW21-04B R1	Test Well: MW21-04B
Test Conducted by:		Test Date: 2023-01-19
Analysis Performed by:	MW21-04B R1	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-04B	8.85×10^{-7}	

Omni-McCann

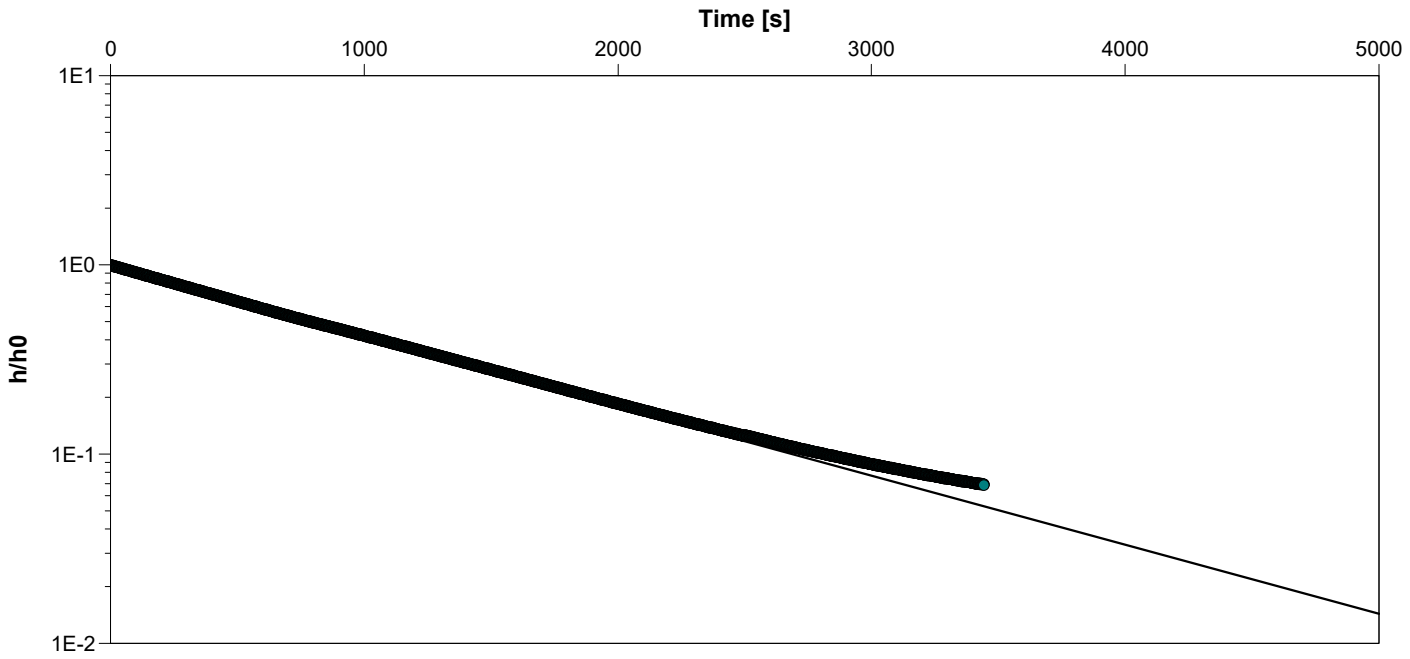
Slug Test Analysis Report

Project: Phase Two ESA

Number: 006-01-03

Client: March and Main

Location: 555 March Road	Slug Test: MW22-04C	Test Well: MW21-04C
Test Conducted by:		Test Date: 2022-12-19
Analysis Performed by: DE	MW22-04C R1	Analysis Date: 2023-03-31
Aquifer Thickness: 40.00 m		



Calculation using Bouwer & Rice

Observation Well	Hydraulic Conductivity [m/s]	
MW21-04C	3.54×10^{-7}	

CERTIFICATE OF CALIBRATION

The Instrument listed below has been inspected and calibrated following the Manufacturer's specifications and methods.

Instrument Model: **MiniRae 3000 11.7eV** *Serial Number:* **592-906454** *Calibration Date:* **November 2, 2022**

SENSOR	CALIBRATION GAS STANDARD	CALIBRATION GAS CONCENTRATION	READING PRIOR TO ADJUSTMENT	INSTRUMENT SPAN SETTINGS	ALARM LEVEL SETTING
TVOC	Isobutylene Lot: 1509978 Exp: July 2026	100 PPM	100 PPM	100 PPM	50 & 100 PPM
	Zero Air Lot: 302-402450316-53 Exp: July 2017				

The calibration gas standard used is considered to be a certified standard and is traceable to the National Institute of Standards and Technology (NIST). Certificate of Analysis is available upon request.

The instrument indicated above is now certified to be operating within the Manufacturer's specifications. This does not eliminate the requirement for regular maintenance and pre-use sensor response checks in order to ensure continued complete and accurate operating condition.

Certified By: Jeff Loney

Maxim **Environmental and Safety Inc.**

sales@maximenvironmental.com
www.maximenvironmental.com

Head Office:
9 - 170 Ambassador Dr., Mississauga, ON L5T 2H9
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Ottawa Office:
9 - 148 Colonnade Rd., Ottawa, ON K2E 7R4
(613)224-4747 | Toll Free (888)285-2324

CERTIFICATE OF CALIBRATION

The YSI Instrument listed below has been inspected and calibrated following the Manufacturer's specifications and methods.

Instrument Model: **YSI PRO** *Serial Number:* **22G102484** *Calibration Date:* **November 28, 2022**

3-POINT pH	CONDUCTIVITY	OXIDIZATION - REDUCTION POTENTIAL	DISSOLVED OXYGEN
4.00 pH, 7.00 pH, 10.00 pH	1413uS/cm	240mV	8.92 @ 21 DegC SODIUM SULFITE ZERO
4.00 pH LOT # 1GE539	LOT # 1GE261	LOT# 6658	LOT # 727039
Expiry Date: June 1, 2023	Expiry Date: June 1, 2023	Expiry Date: July 1, 2026	Expiry Date: June 1, 2023
7.00 pH LOT # 2GK014	@25 DegC LOT # 1GE261		
Expiry Date: November 1, 2024	Expiry Date: June 1, 2023		
10.00 pH LOT # 1GI516			
Expiry Date: September 1, 2023			

The calibration standard used is considered to be a certified standard and is traceable to the National Institute of Standards and Technology (NIST). Certificate of Analysis is available upon request.

The instrument indicated above is now certified to be operating within the Manufacturer's specifications. This does not eliminate the requirement for regular maintenance and pre-use sensor response checks in order to ensure continued complete and accurate operating condition.

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(613)224-4747 | Toll Free (888)285-2324

CERTIFICATE OF CALIBRATION

The YSI Instrument listed below has been inspected and calibrated following the Manufacturer's specifications and methods.

Instrument Model: **YSI PRO** *Serial Number:* **22G102484** *Calibration Date:* **December 2, 2022**

3-POINT pH	CONDUCTIVITY	OXIDIZATION - REDUCTION POTENTIAL	DISSOLVED OXYGEN
4.00 pH, 7.00 pH, 10.00 pH	1413uS/cm	240mV	8.92 @ 21 DegC SODIUM SULFITE ZERO
4.00 pH LOT # 1GE539 Expiry Date: June 1, 2023	LOT # 1GE261 Expiry Date: June 1, 2023	LOT# 6658 Expiry Date: July 1, 2026	LOT # 727039 Expiry Date: June 1, 2023
7.00 pH LOT # 2GK014 Expiry Date: November 1, 2024	@25 DegC LOT # 1GE261 Expiry Date: June 1, 2023		
10.00 pH LOT # 1GI516 Expiry Date: September 1, 2023			

The calibration standard used is considered to be a certified standard and is traceable to the National Institute of Standards and Technology (NIST). Certificate of Analysis is available upon request.

The instrument indicated above is now certified to be operating within the Manufacturer's specifications. This does not eliminate the requirement for regular maintenance and pre-use sensor response checks in order to ensure continued complete and accurate operating condition.

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(613)224-4747 | Toll Free (888)285-2324

CERTIFICATE OF CALIBRATION

The YSI Instrument listed below has been inspected and calibrated following the Manufacturer's specifications and methods.

Instrument Model: **YSI PRO** *Serial Number:* **18K100425** *Calibration Date:* **December 2, 2022**

3-POINT pH	CONDUCTIVITY	OXIDIZATION - REDUCTION POTENTIAL	DISSOLVED OXYGEN
4.00 pH, 7.00 pH, 10.00 pH	1413uS/cm	240mV	8.92 @ 21 DegC SODIUM SULFITE ZERO
4.00 pH LOT # 1GE539 Expiry Date: June 1, 2023	LOT # 1GE261 Expiry Date: June 1, 2023	LOT# 6658 Expiry Date: July 1, 2026	LOT # 727039 Expiry Date: June 1, 2023
7.00 pH LOT # 2GK014 Expiry Date: November 1, 2024	@25 DegC LOT # 1GE261 Expiry Date: June 1, 2023		
10.00 pH LOT # 1GI516 Expiry Date: September 1, 2023			

The calibration standard used is considered to be a certified standard and is traceable to the National Institute of Standards and Technology (NIST). Certificate of Analysis is available upon request.

The instrument indicated above is now certified to be operating within the Manufacturer's specifications. This does not eliminate the requirement for regular maintenance and pre-use sensor response checks in order to ensure continued complete and accurate operating condition.

Certified By: Jeff Loney

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APPENDIX C

Certificates of Analysis

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2219243**	Page	: 1 of 34
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 21-Oct-2022 09:00
PO	: ----	Date Analysis Commenced	: 26-Oct-2022
C-O-C number	: 20-1009747; 20-1009748	Issue Date	: 08-Nov-2022 18:28
Sampler	: Antonia Cass		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 17		
No. of samples analysed	: 11		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Centralized Prep, Waterloo, Ontario
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Inorganics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Metals, Waterloo, Ontario
Hedy Lai	Team Leader - Inorganics	Sask Soils, Saskatoon, Saskatchewan
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
%	percent
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
pH units	pH units

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-18 0-1 Sampling date/time: 17-Oct-2022 00:00 WT2219243-001	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	7.53	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	0.98	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	61.7	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.15	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.16	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	7.1	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	<0.020	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	9.39	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	1.93	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	3.86	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	5.79	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0102	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.60	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	6.30	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.066	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.386	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	7.33	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	9.2	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	0.100	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2219243-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	13.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	14	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	132	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	149	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	13.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	132	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	308	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	NO	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	84.6	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	95.9	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	107	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	111	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	82.4	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	108	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	81.9	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	84.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-19 2-3.5 Sampling date/time: 17-Oct-2022 00:00 WT2219243-003	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	16.4	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	79.5	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	95.0	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	108	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2219243-003 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	86.1	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	83.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-20 0-1 Sampling date/time: 17-Oct-2022 00:00 WT2219243-004	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	16.4	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.84	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	231	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.65	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	<0.10	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	6.9	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.073	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	47.8	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	8.54	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	19.6	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	6.80	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0256	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.33	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	23.5	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	0.11	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.264	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.788	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	49.7	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	62.6	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-004 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	64	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	67	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	64	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	131	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	84.6	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	73.4	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	103	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	110	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	0.062	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	0.134	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	0.084	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	0.086	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--
phenanthrene	E641A	0.050	mg/kg	0.126	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-004 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
pyrene	E641A	0.050	mg/kg	0.092	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	94.8	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	128	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	92.4	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	97.4	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-21 0-0.5 Sampling date/time: 18-Oct-2022 00:00 WT2219243-006	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	7.14	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	123	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	285	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	408	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	NO	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	77.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	84.6	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	111	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	118	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-22 0-1.25 Sampling date/time: 18-Oct-2022 00:00 WT2219243-008	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	9.26	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	0.39	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.35	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	66.1	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.19	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.18	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	5.6	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.081	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	15.0	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	3.17	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	10.5	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	11.0	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0139	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.56	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	7.10	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.095	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.500	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	18.0	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	39.0	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-008 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	63	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	69	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	63	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	132	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	85.6	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	86.6	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	108	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	116	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-008 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	92.3	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	120	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	88.1	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	93.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-23 0-1 Sampling date/time: 19-Oct-2022 00:00 WT2219243-010	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	19.1	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	2.45	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	175	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.62	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.26	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	5.6	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.175	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	40.0	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	9.29	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	16.6	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	10.6	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0315	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.62	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	20.7	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	0.27	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.206	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.874	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	52.4	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	77.1	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-010 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	<50	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	80.3	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	84.0	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	108	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-010 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	88.8	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	117	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	84.2	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	89.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-24 0-1.25 Sampling date/time: 19-Oct-2022 00:00 WT2219243-012	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	24.6	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.98	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	328	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.85	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.32	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	6.1	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.140	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	62.3	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	11.4	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	20.5	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	9.66	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0308	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.36	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	31.3	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	0.24	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.289	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.992	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	73.5	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	94.3	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-012 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2219243-012 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	<50	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	83.6	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	79.8	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	95.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	101	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-012 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	92.0	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	129	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	91.8	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	94.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-25 3-4.5 Sampling date/time: 19-Oct-2022 00:00 WT2219243-014	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	24.1	--	--	--	--	--	--
Particle Size										
passing (9.5 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (4.75 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (19 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (25.4 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (38.1 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (50.8 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (76.2 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (1.0 mm)	E182	1.0	%	98.3	--	--	--	--	--	--
passing (0.841 mm)	E182	1.0	%	98.0	--	--	--	--	--	--
passing (0.50 mm)	E182	1.0	%	95.4	--	--	--	--	--	--
passing (0.420 mm)	E182	1.0	%	94.7	--	--	--	--	--	--
passing (0.250 mm)	E182	1.0	%	90.7	--	--	--	--	--	--
passing (0.149 mm)	E182	1.0	%	86.2	--	--	--	--	--	--
passing (0.125 mm)	E182	1.0	%	85.3	--	--	--	--	--	--
passing (0.075 mm)	E182	1.0	%	83.3	--	--	--	--	--	--
passing (0.063 mm)	E182	1.0	%	74.9	--	--	--	--	--	--
passing (0.05 mm)	E182	1.0	%	65.8	--	--	--	--	--	--
passing (0.0312 mm)	E183	1.0	%	56.8	--	--	--	--	--	--
passing (0.020 mm)	E183	1.0	%	51.3	--	--	--	--	--	--
passing (0.005 mm)	E183	1.0	%	38.0	--	--	--	--	--	--
passing (0.004 mm)	E183	1.0	%	36.6	--	--	--	--	--	--
passing (0.002 mm)	E183	1.0	%	32.5	--	--	--	--	--	--
grain size curve	E185		-	See Attached	--	--	--	--	--	--
passing (2.0 mm)	E181	1.0	%	100	--	--	--	--	--	--
Metals										
calcium, soluble ion content	E484	0.50	mg/L	17.6	--	--	--	--	--	--
magnesium, soluble ion content	E484	0.50	mg/L	3.05	--	--	--	--	--	--
sodium, soluble ion content	E484	0.50	mg/L	53.1	--	--	--	--	--	--
sodium adsorption ratio [SAR]	E484	0.10	-	3.07	**12 -**	**12 -**	**5 -**	**5 -**	--	--

Analyte	Method	LOR	Unit	WT2219243-014 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	72.7	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	87.0	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	93.1	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	102	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	86.9	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	84.2	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-25 7-8.5 Sampling date/time: 19-Oct-2022 00:00 WT2219243-015	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	23.4	--	--	--	--	--	--
pH (1:2 soil:CaCl2-aq)	E108A	0.10	pH units	6.92	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	75.2	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	84.2	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	92.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	99.7	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2219243-015 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	81.7	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	79.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)			Client sample ID	22-26 0-1						
			Sampling date/time	20-Oct-2022 00:00						
Analyte	Method	LOR	Unit	WT2219243-016	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	18.6	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	40 mg/kg	50 mg/kg	7.5 mg/kg	7.5 mg/kg	--	--
arsenic	E440	0.10	mg/kg	2.16	18 mg/kg	18 mg/kg	18 mg/kg	18 mg/kg	--	--
barium	E440	0.50	mg/kg	170	670 mg/kg	670 mg/kg	390 mg/kg	390 mg/kg	--	--
beryllium	E440	0.10	mg/kg	0.63	8 mg/kg	10 mg/kg	4 mg/kg	5 mg/kg	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.14	2 mg/kg	2 mg/kg	1.5 mg/kg	1.5 mg/kg	--	--
boron	E440	5.0	mg/kg	<5.0	120 mg/kg	120 mg/kg	120 mg/kg	120 mg/kg	--	--
cadmium	E440	0.020	mg/kg	0.071	1.9 mg/kg	1.9 mg/kg	1.2 mg/kg	1.2 mg/kg	--	--
chromium	E440	0.50	mg/kg	40.4	160 mg/kg	160 mg/kg	160 mg/kg	160 mg/kg	--	--
cobalt	E440	0.10	mg/kg	8.79	80 mg/kg	100 mg/kg	22 mg/kg	22 mg/kg	--	--
copper	E440	0.50	mg/kg	20.4	230 mg/kg	300 mg/kg	140 mg/kg	180 mg/kg	--	--
lead	E440	0.50	mg/kg	7.55	120 mg/kg	120 mg/kg	120 mg/kg	120 mg/kg	--	--
mercury	E510	0.0050	mg/kg	0.0375	3.9 mg/kg	20 mg/kg	0.27 mg/kg	1.8 mg/kg	--	--
molybdenum	E440	0.10	mg/kg	0.41	40 mg/kg	40 mg/kg	6.9 mg/kg	6.9 mg/kg	--	--
nickel	E440	0.50	mg/kg	20.4	270 mg/kg	340 mg/kg	100 mg/kg	130 mg/kg	--	--
selenium	E440	0.20	mg/kg	0.23	5.5 mg/kg	5.5 mg/kg	2.4 mg/kg	2.4 mg/kg	--	--
silver	E440	0.10	mg/kg	<0.10	40 mg/kg	50 mg/kg	20 mg/kg	25 mg/kg	--	--
thallium	E440	0.050	mg/kg	0.156	3.3 mg/kg	3.3 mg/kg	1 mg/kg	1 mg/kg	--	--
uranium	E440	0.050	mg/kg	0.766	33 mg/kg	33 mg/kg	23 mg/kg	23 mg/kg	--	--
vanadium	E440	0.20	mg/kg	49.8	86 mg/kg	86 mg/kg	86 mg/kg	86 mg/kg	--	--
zinc	E440	2.0	mg/kg	50.3	340 mg/kg	340 mg/kg	340 mg/kg	340 mg/kg	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	8 mg/kg	10 mg/kg	8 mg/kg	10 mg/kg	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	16 mg/kg	28 mg/kg	16 mg/kg	28 mg/kg	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	0.32 mg/kg	0.4 mg/kg	0.21 mg/kg	0.17 mg/kg	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	18 mg/kg	18 mg/kg	13 mg/kg	13 mg/kg	--	--
bromoform	E611D	0.050	mg/kg	<0.050	0.61 mg/kg	1.7 mg/kg	0.27 mg/kg	0.26 mg/kg	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	0.21 mg/kg	1.5 mg/kg	0.05 mg/kg	0.12 mg/kg	--	--

Analyte	Method	LOR	Unit	WT2219243-016 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2219243-016 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	74.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	85.5	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	0.10	%	63.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	98.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-27 0-1 Sampling date/time: 20-Oct-2022 00:00 WT2219243-017	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	16.3	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	0.87	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	70.1	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.29	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.14	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	<5.0	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.071	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	20.1	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	4.71	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	6.33	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	3.72	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0172	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.25	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	10.9	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.077	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.448	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	25.4	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	30.8	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.50	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2219243-017 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2219243-017 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	79.6	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	75.2	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	0.10	%	61.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	99.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2219243**	Page	: 1 of 20
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 21-Oct-2022 09:00
PO	: ----	Issue Date	: 08-Nov-2022 18:25
C-O-C number	: 20-1009747; 20-1009748		
Sampler	: Antonia Cass		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 17		
No. of samples analysed	: 11		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Metals	QC-MRG2-719351002	----	silver	7440-22-4	E440	56.2 % RRQC	80.0-120%	Recovery less than lower control limit
Speciated Metals	QC-719248-002	----	chromium, hexavalent [Cr VI]	18540-29-9	E532	73.9 % LCS-ND	80.0-120%	Recovery less than lower control limit
Volatile Organic Compounds	QC-719029-002	----	vinyl chloride	75-01-4	E611D	57.2 % MES	60.0-140%	Recovery less than lower control limit

Result Qualifiers

Qualifier	Description
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-21 0-0.5	E581.F1	18-Oct-2022	27-Oct-2022	14 days	10 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-22 0-1.25	E581.F1	18-Oct-2022	27-Oct-2022	14 days	10 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-18 0-1	E581.F1	17-Oct-2022	27-Oct-2022	14 days	11 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-19 2-3.5	E581.F1	17-Oct-2022	27-Oct-2022	14 days	11 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-20 0-1	E581.F1	17-Oct-2022	27-Oct-2022	14 days	11 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-26 0-1	E581.F1	20-Oct-2022	27-Oct-2022	14 days	8 days	✓	28-Oct-2022	40 days	1 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-27 0-1	E581.F1	20-Oct-2022	27-Oct-2022	14 days	8 days	✓	28-Oct-2022	40 days	1 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-23 0-1	E581.F1	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-24 0-1.25	E581.F1	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-25 3-4.5	E581.F1	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-25 7-8.5	E581.F1	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap 22-21 0-0.5	E601.SG-L	18-Oct-2022	28-Oct-2022	14 days	10 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap 22-22 0-1.25	E601.SG-L	18-Oct-2022	28-Oct-2022	14 days	10 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap 22-18 0-1	E601.SG-L	17-Oct-2022	28-Oct-2022	14 days	11 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap 22-19 2-3.5	E601.SG-L	17-Oct-2022	28-Oct-2022	14 days	11 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap 22-20 0-1	E601.SG-L	17-Oct-2022	28-Oct-2022	14 days	11 days	✓	07-Nov-2022	40 days	10 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-26 0-1	E601.SG-L	20-Oct-2022	28-Oct-2022	14 days	8 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-27 0-1	E601.SG-L	20-Oct-2022	28-Oct-2022	14 days	8 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-23 0-1	E601.SG-L	19-Oct-2022	28-Oct-2022	14 days	9 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E601.SG-L	19-Oct-2022	28-Oct-2022	14 days	9 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E601.SG-L	19-Oct-2022	28-Oct-2022	14 days	9 days	✓	07-Nov-2022	40 days	10 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-25 7-8.5	E601.SG-L	19-Oct-2022	28-Oct-2022	14 days	9 days	✓	07-Nov-2022	40 days	10 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-22 0-1.25	E487	18-Oct-2022	28-Oct-2022	180 days	10 days	✓	01-Nov-2022	180 days	4 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-18 0-1	E487	17-Oct-2022	28-Oct-2022	180 days	11 days	✓	01-Nov-2022	180 days	4 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-20 0-1	E487	17-Oct-2022	28-Oct-2022	180 days	11 days	✓	01-Nov-2022	180 days	4 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-26 0-1	E487	20-Oct-2022	28-Oct-2022	180 days	8 days	✓	01-Nov-2022	180 days	4 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-27 0-1	E487	20-Oct-2022	28-Oct-2022	180 days	8 days	✓	01-Nov-2022	180 days	4 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-23 0-1	E487	19-Oct-2022	28-Oct-2022	180 days	9 days	✓	01-Nov-2022	180 days	4 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E487	19-Oct-2022	28-Oct-2022	180 days	9 days	✓	01-Nov-2022	180 days	4 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-26 0-1	E510	20-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	13 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-27 0-1	E510	20-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	13 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-23 0-1	E510	19-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	14 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E510	19-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	14 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-22 0-1.25	E510	18-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	15 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-18 0-1	E510	17-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	16 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-20 0-1	E510	17-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	28 days	16 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-26 0-1	E440	20-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	13 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-27 0-1	E440	20-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	13 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-23 0-1	E440	19-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	14 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E440	19-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	14 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-22 0-1.25	E440	18-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	15 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-18 0-1	E440	17-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	16 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-20 0-1	E440	17-Oct-2022	28-Oct-2022	----	----		02-Nov-2022	180 days	16 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E484	19-Oct-2022	28-Oct-2022	180 days	9 days	✓	02-Nov-2022	180 days	5 days	✓
Particle Size : Grain Size Report (Attachment) Hydrometer/Sieve Method										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E185	19-Oct-2022	----	----	----		04-Nov-2022	----	----	
Particle Size : Particle Size Analysis - Hydrometer										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E183	19-Oct-2022	01-Nov-2022	----	----		01-Nov-2022	365 days	14 days	✓
Particle Size : Particle Size Analysis - Sieve <2mm										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E182	19-Oct-2022	01-Nov-2022	----	----		01-Nov-2022	365 days	14 days	✓
Particle Size : Particle Size Analysis - Sieve >2mm										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E181	19-Oct-2022	01-Nov-2022	----	----		01-Nov-2022	365 days	14 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-18 0-1	E144	17-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-19 2-3.5	E144	17-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-20 0-1	E144	17-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-21 0-0.5	E144	18-Oct-2022	----	----	----		27-Oct-2022	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-22 0-1.25	E144	18-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-23 0-1	E144	19-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E144	19-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E144	19-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-25 7-8.5	E144	19-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-26 0-1	E144	20-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-27 0-1	E144	20-Oct-2022	----	----	----		27-Oct-2022	----	----	
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap										
22-25 7-8.5	E108A	19-Oct-2022	28-Oct-2022	----	----		29-Oct-2022	30 days	10 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-19 2-3.5	E687	17-Oct-2022	28-Oct-2022	----	----		07-Nov-2022	40 days	10 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-25 3-4.5	E687	19-Oct-2022	28-Oct-2022	----	----		07-Nov-2022	40 days	10 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-25 7-8.5	E687	19-Oct-2022	28-Oct-2022	----	----		07-Nov-2022	40 days	10 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-22 0-1.25	E641A	18-Oct-2022	28-Oct-2022	14 days	10 days	✓	03-Nov-2022	40 days	6 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-18 0-1	E641A	17-Oct-2022	28-Oct-2022	14 days	11 days	✓	03-Nov-2022	40 days	6 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-20 0-1	E641A	17-Oct-2022	28-Oct-2022	14 days	11 days	✓	03-Nov-2022	40 days	6 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-23 0-1	E641A	19-Oct-2022	28-Oct-2022	14 days	9 days	✓	03-Nov-2022	40 days	6 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E641A	19-Oct-2022	28-Oct-2022	14 days	9 days	✓	03-Nov-2022	40 days	6 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-22 0-1.25	E532	18-Oct-2022	28-Oct-2022	30 days	10 days	✓	02-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-18 0-1	E532	17-Oct-2022	28-Oct-2022	30 days	11 days	✓	02-Nov-2022	7 days	5 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-20 0-1	E532	17-Oct-2022	28-Oct-2022	30 days	11 days	✓	02-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-26 0-1	E532	20-Oct-2022	28-Oct-2022	30 days	8 days	✓	02-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-27 0-1	E532	20-Oct-2022	28-Oct-2022	30 days	8 days	✓	02-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-23 0-1	E532	19-Oct-2022	28-Oct-2022	30 days	9 days	✓	02-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-24 0-1.25	E532	19-Oct-2022	28-Oct-2022	30 days	9 days	✓	02-Nov-2022	7 days	5 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-21 0-0.5	E611A	18-Oct-2022	27-Oct-2022	14 days	10 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-22 0-1.25	E611A	18-Oct-2022	27-Oct-2022	14 days	10 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-18 0-1	E611A	17-Oct-2022	27-Oct-2022	14 days	11 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-19 2-3.5	E611A	17-Oct-2022	27-Oct-2022	14 days	11 days	✓	28-Oct-2022	40 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-20 0-1	E611A	17-Oct-2022	27-Oct-2022	14 days	11 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-23 0-1	E611A	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-24 0-1.25	E611A	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-25 3-4.5	E611A	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-25 7-8.5	E611A	19-Oct-2022	27-Oct-2022	14 days	9 days	✓	28-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-24 0-1.25	E611D	19-Oct-2022	07-Nov-2022	14 days	20 days	× EHT	07-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-18 0-1	E611D	17-Oct-2022	07-Nov-2022	14 days	22 days	× EHT	07-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-26 0-1	E611D	20-Oct-2022	27-Oct-2022	14 days	8 days	✓	28-Oct-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-27 0-1	E611D	20-Oct-2022	27-Oct-2022	14 days	8 days	✓	28-Oct-2022	40 days	1 days	✓

Legend & Qualifier Definitions

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Boron-Hot Water Extractable by ICPOES	E487	719350	1	9	11.1	5.0	✓
BTEX by Headspace GC-MS	E611A	717796	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	717797	2	40	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	719353	1	16	6.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	719248	1	20	5.0	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	719351	1	9	11.1	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	719352	1	9	11.1	5.0	✓
Moisture Content by Gravimetry	E144	718802	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	719354	1	7	14.2	5.0	✓
Particle Size Analysis - Hydrometer	E183	725346	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve <2mm	E182	725345	1	1	100.0	5.0	✓
PCB Aroclors by GC-MS	E687	719355	1	3	33.3	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	719357	1	1	100.0	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	719356	1	1	100.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	719029	2	38	5.2	5.0	✓
Laboratory Control Samples (LCS)							
Boron-Hot Water Extractable by ICPOES	E487	719350	2	9	22.2	10.0	✓
BTEX by Headspace GC-MS	E611A	717796	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	717797	2	40	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	719353	1	16	6.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	719248	2	20	10.0	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	719351	2	9	22.2	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	719352	2	9	22.2	10.0	✓
Moisture Content by Gravimetry	E144	718802	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	719354	1	7	14.2	5.0	✓
Particle Size Analysis - Hydrometer	E183	725346	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve <2mm	E182	725345	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve >2mm	E181	725344	1	1	100.0	5.0	✓
PCB Aroclors by GC-MS	E687	719355	1	3	33.3	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	719357	1	1	100.0	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	719356	2	1	200.0	10.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	719029	2	38	5.2	5.0	✓
Method Blanks (MB)							
Boron-Hot Water Extractable by ICPOES	E487	719350	1	9	11.1	5.0	✓
BTEX by Headspace GC-MS	E611A	717796	1	20	5.0	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Method Blanks (MB) - Continued							
CCME PHC - F1 by Headspace GC-FID	E581.F1	717797	2	40	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	719353	1	16	6.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	719248	1	20	5.0	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	719351	1	9	11.1	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	719352	1	9	11.1	5.0	✓
Moisture Content by Gravimetry	E144	718802	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	719354	1	7	14.2	5.0	✓
PCB Aroclors by GC-MS	E687	719355	1	3	33.3	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	719356	1	1	100.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	719029	2	38	5.2	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	717796	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	717797	2	40	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	719353	1	16	6.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	719354	1	7	14.2	5.0	✓
PCB Aroclors by GC-MS	E687	719355	1	3	33.3	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	719029	2	38	5.2	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A Waterloo - Environmental	Soil/Solid	MOEE E3137A	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C) and is carried out in accordance with procedures described in the Analytical Protocol (prescriptive method). A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling, or decanting and then analyzed using a pH meter and electrode.
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Particle Size Analysis - Sieve >2mm	E181 Saskatoon - Environmental	Soil/Solid	ASTM D6913-17 (mod)	Soil samples are disaggregated and sieved through a 2mm sieve. Material retained on the sieve is then further sieved through a series of sieves. The amount passing through the sieves is measured gravimetrically.
Particle Size Analysis - Sieve <2mm	E182 Saskatoon - Environmental	Soil/Solid	ASTM D6913-17 (mod)	Soil samples are disaggregated and sieved through a 2mm sieve. Material passed through the sieve is then further disaggregated using calgon solution and passed through a series of sieves. The amount passing through the sieves is measured gravimetrically.
Particle Size Analysis - Hydrometer	E183 Saskatoon - Environmental	Soil/Solid	ASTM D7928-21 (mod)	Soil material is separated from coarse material (>2mm). A specimen is then disaggregated through mixing with Calgon solution. The material is then suspended in solution wherein regular hydrometer readings are taken at specific time intervals. The principles of Stokes' Law are applied to determine the amount of material remaining in solution as well as the maximum particle size remaining in solution at the specified time.
Grain Size Report (Attachment) Hydrometer/Sieve Method	E185 Saskatoon - Environmental	Soil/Solid	ASTM D6913/D7928	A grain size curve is a graphical representation of the particle sizing of a sample representing the percent passing against the effective particle size.
Metals in Soil/Solid by CRC ICPMS	E440 Waterloo - Environmental	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484 Waterloo - Environmental	Soil/Solid	SW846 6010C	A dried, disaggregated solid sample is extracted with deionized water, the aqueous extract is separated from the solid, acidified and then analyzed using a ICP/OES. The concentrations of Na, Ca and Mg are reported as per CALA requirements for calculated parameters. These individual parameters are not for comparison to any guideline.
Boron-Hot Water Extractable by ICPOES	E487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS	E510 Waterloo - Environmental	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 Waterloo - Environmental	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
BTEX by Headspace GC-MS	E611A Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hex:Ace GC-MS	E641A Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with hexane/acetone and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
PCB Aroclors by GC-MS	E687 Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	PCB Aroclors are analyzed by GC-MS

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
F1-BTEX	EC580 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.
F2 to F3 minus PAH	EC600 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F2-PAH = CCME Fraction 2 (C10-C16) minus Naphthalene F3-PAH = CCME Fraction 3 (C16-C34) minus select Polycyclic Aromatic Hydrocarbons (PAH) as per CCME Soil Tier 1

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 Waterloo - Environmental	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Leach 1:2 Soil : 0.01CaCl2 - As Received for pH	EP108A Waterloo - Environmental	Soil/Solid	MOEE E3137A	A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling or decanting and then analyzed using a pH meter and electrode.
Digestion for Metals and Mercury	EP440 Waterloo - Environmental	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 Waterloo - Environmental	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Pesticides, PCB, PAH, and Neutral Extractable Chlorinated Hydrocarbons Extraction	EP660 Waterloo - Environmental	Soil/Solid	EPA 3570 (mod)	A homogenized subsample is extracted with organic solvents using a mechanical shaker.
Dry and Grind in Soil/Solid <60°C	EPP442 Waterloo - Environmental	Soil/Solid	Soil Sampling and Methods of Analysis, Carter 2008	After removal of any coarse fragments and reservation of wet subsamples a portion of homogenized sample is set in a tray and dried at less than 60°C until dry. The sample is then particle size reduced with an automated crusher or mortar and pestle, typically to <2 mm. Further size reduction may be needed for particular tests.

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QUALITY CONTROL REPORT

Work Order	: **WT2219243**	Page	: 1 of 24
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 21-Oct-2022 09:00
PO	: ----	Date Analysis Commenced	: 26-Oct-2022
C-O-C number	: 20-1009747; 20-1009748	Issue Date	: 08-Nov-2022 18:24
Sampler	: Antonia Cass 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 17		
No. of samples analysed	: 11		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Waterloo Centralized Prep, Waterloo, Ontario
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Waterloo Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Waterloo Inorganics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Waterloo Metals, Waterloo, Ontario
Hedy Lai	Team Leader - Inorganics	Saskatoon Sask Soils, Saskatoon, Saskatchewan
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 718802)											
WT2219761-002	Anonymous	moisture	----	E144	0.25	%	4.80	4.66	2.83%	20%	----
Physical Tests (QC Lot: 719357)											
WT2219243-015	22-25 7-8.5	pH (1:2 soil:CaCl2-aq)	----	E108A	0.10	pH units	6.92	6.93	0.144%	5%	----
Particle Size (QC Lot: 725345)											
WT2219243-014	22-25 3-4.5	passing (0.05 mm)	----	E182	1.0	%	65.8	65.8	0.00%	15%	----
		passing (0.063 mm)	----	E182	1.0	%	74.9	74.9	0.00%	15%	----
		passing (0.075 mm)	----	E182	1.0	%	83.3	83.3	0.00%	15%	----
		passing (0.125 mm)	----	E182	1.0	%	85.3	85.3	0.00%	15%	----
		passing (0.149 mm)	----	E182	1.0	%	86.2	86.2	0.00%	15%	----
		passing (0.250 mm)	----	E182	1.0	%	90.7	90.7	0.00%	15%	----
		passing (0.420 mm)	----	E182	1.0	%	94.7	94.7	0.00%	15%	----
		passing (0.50 mm)	----	E182	1.0	%	95.4	95.4	0.00%	15%	----
		passing (0.841 mm)	----	E182	1.0	%	98.0	98.0	0.00%	15%	----
		passing (1.0 mm)	----	E182	1.0	%	98.3	98.3	0.00%	15%	----
Particle Size (QC Lot: 725346)											
WT2219243-014	22-25 3-4.5	passing (0.002 mm)	----	E183	1.0	%	32.5	32.5	0.00%	20%	----
		passing (0.004 mm)	----	E183	1.0	%	36.6	36.6	0.00%	20%	----
		passing (0.005 mm)	----	E183	1.0	%	38.0	38.0	0.00%	20%	----
		passing (0.020 mm)	----	E183	1.0	%	51.3	51.3	0.00%	20%	----
		passing (0.0312 mm)	----	E183	1.0	%	56.8	56.8	0.00%	20%	----
Metals (QC Lot: 719350)											
WT2219142-001	Anonymous	boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	0.53	0.55	3.64%	40%	----
Metals (QC Lot: 719351)											
WT2219142-001	Anonymous	mercury	7439-97-6	E510	0.0050	mg/kg	0.0571	0.0652	13.2%	40%	----
Metals (QC Lot: 719352)											
WT2219142-001	Anonymous	antimony	7440-36-0	E440	0.10	mg/kg	2.87	2.88	0.355%	30%	----
		arsenic	7440-38-2	E440	0.10	mg/kg	25.3	25.9	2.16%	30%	----
		barium	7440-39-3	E440	0.50	mg/kg	441	417	5.46%	40%	----
		beryllium	7440-41-7	E440	0.10	mg/kg	0.88	0.86	1.40%	30%	----
		boron	7440-42-8	E440	5.0	mg/kg	14.1	14.4	0.3	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 719352) - continued											
WT2219142-001	Anonymous	cadmium	7440-43-9	E440	0.020	mg/kg	0.704	0.698	0.856%	30%	----
		chromium	7440-47-3	E440	0.50	mg/kg	28.8	28.9	0.212%	30%	----
		cobalt	7440-48-4	E440	0.10	mg/kg	14.8	15.0	1.19%	30%	----
		copper	7440-50-8	E440	0.50	mg/kg	65.4	67.1	2.46%	30%	----
		lead	7439-92-1	E440	0.50	mg/kg	146	151	3.64%	40%	----
		molybdenum	7439-98-7	E440	0.10	mg/kg	2.06	2.08	0.567%	40%	----
		nickel	7440-02-0	E440	0.50	mg/kg	36.9	37.4	1.50%	30%	----
		selenium	7782-49-2	E440	0.20	mg/kg	1.91	1.82	4.83%	30%	----
		silver	7440-22-4	E440	0.10	mg/kg	0.17	0.18	0.004	Diff <2x LOR	----
		thallium	7440-28-0	E440	0.050	mg/kg	0.268	0.278	0.011	Diff <2x LOR	----
		uranium	7440-61-1	E440	0.050	mg/kg	1.07	1.09	1.35%	30%	----
		vanadium	7440-62-2	E440	0.20	mg/kg	34.5	34.5	0.0904%	30%	----
		zinc	7440-66-6	E440	2.0	mg/kg	5170	5210	0.674%	30%	----
Metals (QC Lot: 719356)											
WT2219243-014	22-25 3-4.5	calcium, soluble ion content	7440-70-2	E484	0.50	mg/L	17.6	17.0	3.47%	30%	----
		magnesium, soluble ion content	7439-95-4	E484	0.50	mg/L	3.05	2.78	0.27	Diff <2x LOR	----
		sodium, soluble ion content	17341-25-2	E484	0.50	mg/L	53.1	52.2	1.71%	30%	----
Speciated Metals (QC Lot: 719248)											
TY2203231-001	Anonymous	chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 717796)											
WT2219689-001	Anonymous	benzene	71-43-2	E611A	0.0050	mg/kg	<0.0050 µg/g	<0.0050	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015 µg/g	<0.015	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.030	mg/kg	<0.030 µg/g	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.030	mg/kg	<0.030 µg/g	<0.030	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 719029)											
WT2219761-002	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 719029) - continued											
WT2219761-002	Anonymous	dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 733554)											
WT2220771-001	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50 µg/g	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 733554) - continued											
WT2220771-001	Anonymous	benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050 µg/g	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045 µg/g	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030 µg/g	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030 µg/g	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015 µg/g	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50 µg/g	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50 µg/g	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040 µg/g	<0.040	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 733554) - continued											
WT2220771-001	Anonymous	trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010 µg/g	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050 µg/g	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020 µg/g	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030 µg/g	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030 µg/g	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 717797)											
WT2219689-001	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0 µg/g	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 719030)											
WT2219761-002	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 719353)											
WT2219142-001	Anonymous	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	12	10	2	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	199	150	49	Diff <2x LOR	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	137	110	27	Diff <2x LOR	----
Polycyclic Aromatic Hydrocarbons (QC Lot: 719354)											
WT2219142-001	Anonymous	acenaphthene	83-32-9	E641A	0.075	mg/kg	<0.075	<0.075	0	Diff <2x LOR	----
		acenaphthylene	208-96-8	E641A	0.075	mg/kg	0.312	0.213	0.099	Diff <2x LOR	J
		anthracene	120-12-7	E641A	0.075	mg/kg	0.323	0.228	0.095	Diff <2x LOR	J
		benz(a)anthracene	56-55-3	E641A	0.075	mg/kg	1.34	0.922	37.0%	50%	----
		benzo(a)pyrene	50-32-8	E641A	0.075	mg/kg	1.83	1.16	44.5%	50%	----
		benzo(b+j)fluoranthene	n/a	E641A	0.075	mg/kg	2.43	1.63	39.1%	50%	----
		benzo(g,h,i)perylene	191-24-2	E641A	0.075	mg/kg	1.17	0.792	38.6%	50%	----
		benzo(k)fluoranthene	207-08-9	E641A	0.075	mg/kg	1.14	0.742	42.4%	50%	----
		chrysene	218-01-9	E641A	0.075	mg/kg	1.92	1.29	39.6%	50%	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.075	mg/kg	0.307	0.205	0.103	Diff <2x LOR	J
		fluoranthene	206-44-0	E641A	0.075	mg/kg	3.97	2.52	44.5%	50%	----
		fluorene	86-73-7	E641A	0.075	mg/kg	0.160	0.113	0.047	Diff <2x LOR	J
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.075	mg/kg	1.31	0.868	40.3%	50%	----
		methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	0.326	0.265	20.7%	50%	----
		methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	0.364	0.308	16.6%	50%	----
		naphthalene	91-20-3	E641A	0.015	mg/kg	0.273	0.212	25.0%	50%	----
		phenanthrene	85-01-8	E641A	0.075	mg/kg	2.10	1.30	47.2%	50%	----
		pyrene	129-00-0	E641A	0.075	mg/kg	3.20	2.05	43.7%	50%	----
Polychlorinated Biphenyls (QC Lot: 719355)											
WT2219243-003	22-19 2-3.5	Aroclor 1016	12674-11-2	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Polychlorinated Biphenyls (QC Lot: 719355) - continued											
WT2219243-003	22-19 2-3.5	Aroclor 1221	11104-28-2	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1232	11141-16-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1242	53469-21-9	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1248	12672-29-6	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1254	11097-69-1	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1260	11096-82-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1262	37324-23-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1268	11100-14-4	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----

Qualifiers

Qualifier	*Description*
J	*Duplicate results and limits are expressed in terms of absolute difference.*

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 718802)						
moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 719350)						
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Metals (QCLot: 719351)						
mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 719352)						
antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
boron	7440-42-8	E440	5	mg/kg	<5.0	----
cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Metals (QCLot: 719356)						
calcium, soluble ion content	7440-70-2	E484	0.5	mg/L	<0.50	----
magnesium, soluble ion content	7439-95-4	E484	0.5	mg/L	<0.50	----
sodium, soluble ion content	17341-25-2	E484	0.5	mg/L	<0.50	----
Speciated Metals (QCLot: 719248)						
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 717796)						
benzene	71-43-2	E611A	0.005	mg/kg	<0.0050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 717796) - continued						
ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015	----
toluene	108-88-3	E611A	0.05	mg/kg	<0.050	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	<0.030	----
Volatile Organic Compounds (QCLot: 719029)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 719029) - continued						
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----
Volatile Organic Compounds (QCLot: 733554)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 733554) - continued						
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----
Hydrocarbons (QCLot: 717797)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 719030)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 719353)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Polycyclic Aromatic Hydrocarbons (QCLot: 719354)						
acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----
chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 719354) - continued						
fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----
Polychlorinated Biphenyls (QCLot: 719355)						
Aroclor 1016	12674-11-2	E687	0.01	mg/kg	<0.010	----
Aroclor 1221	11104-28-2	E687	0.01	mg/kg	<0.010	----
Aroclor 1232	11141-16-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1242	53469-21-9	E687	0.01	mg/kg	<0.010	----
Aroclor 1248	12672-29-6	E687	0.01	mg/kg	<0.010	----
Aroclor 1254	11097-69-1	E687	0.01	mg/kg	<0.010	----
Aroclor 1260	11096-82-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1262	37324-23-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1268	11100-14-4	E687	0.01	mg/kg	<0.010	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 718802)									
moisture	----	E144	0.25	%	50 %	100	90.0	110	----
Physical Tests (QCLot: 719357)									
pH (1:2 soil:CaCl2-aq)	----	E108A	----	pH units	7 pH units	100	98.0	102	----
Metals (QCLot: 719350)									
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	1.33333 mg/kg	106	70.0	130	----
Metals (QCLot: 719351)									
mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	108	80.0	120	----
Metals (QCLot: 719352)									
antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	114	80.0	120	----
arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	108	80.0	120	----
barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	109	80.0	120	----
beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	99.6	80.0	120	----
boron	7440-42-8	E440	5	mg/kg	100 mg/kg	95.6	80.0	120	----
cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	108	80.0	120	----
chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	104	80.0	120	----
cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	104	80.0	120	----
copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	102	80.0	120	----
lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	107	80.0	120	----
molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	110	80.0	120	----
nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	105	80.0	120	----
selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	107	80.0	120	----
silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	# 56.2	80.0	120	RRQC
thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	102	80.0	120	----
uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	101	80.0	120	----
vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	107	80.0	120	----
zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	104	80.0	120	----
Metals (QCLot: 719356)									
calcium, soluble ion content	7440-70-2	E484	0.5	mg/L	300 mg/L	108	80.0	120	----
magnesium, soluble ion content	7439-95-4	E484	0.5	mg/L	50 mg/L	101	80.0	120	----
sodium, soluble ion content	17341-25-2	E484	0.5	mg/L	50 mg/L	102	80.0	120	----
Speciated Metals (QCLot: 719248)									

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Speciated Metals (QCLot: 719248) - continued									
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	# 73.9	80.0	120	LCS-ND
Volatile Organic Compounds (QCLot: 717796)									
benzene	71-43-2	E611A	0.005	mg/kg	3.475 mg/kg	103	70.0	130	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg	3.475 mg/kg	100	70.0	130	----
toluene	108-88-3	E611A	0.05	mg/kg	3.475 mg/kg	104	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	6.95 mg/kg	104	70.0	130	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	3.475 mg/kg	102	70.0	130	----
Volatile Organic Compounds (QCLot: 719029)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	99.2	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	92.8	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	87.5	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	72.3	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	84.8	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	87.8	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	84.9	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	96.3	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	85.6	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	87.7	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	87.3	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	84.6	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	50.4	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	88.4	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	91.8	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	67.2	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	80.4	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	77.5	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	77.2	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	80.6	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	72.6	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	79.7	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	99.7	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	82.6	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	87.1	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	78.0	60.0	140	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 719029) - continued									
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	87.2	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	105	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	80.8	60.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	103	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	92.8	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	80.3	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	95.7	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	70.1	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	74.2	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	# 57.2	60.0	140	MES
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	108	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	104	70.0	130	----
Volatile Organic Compounds (QCLot: 733554)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	113	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	110	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	110	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	97.6	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	109	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	99.5	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	104	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	101	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	106	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	93.9	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	108	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	105	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	103	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	103	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	108	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	112	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	102	70.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 733554) - continued									
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	97.4	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	98.6	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	105	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	86.6	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	103	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	99.7	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	96.6	60.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	108	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	98.1	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	104	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	100	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	107	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	100	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	104	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	94.6	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	106	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	96.2	70.0	130	----
Hydrocarbons (QCLot: 717797)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	97.2	80.0	120	----
Hydrocarbons (QCLot: 719030)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	97.7	80.0	120	----
Hydrocarbons (QCLot: 719353)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	924.49 mg/kg	86.2	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1108.95 mg/kg	91.5	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	1071.36 mg/kg	88.3	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 719354)									
acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	85.7	60.0	130	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	93.6	60.0	130	----
anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	98.2	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	98.0	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	94.4	60.0	130	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	93.9	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	79.2	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 719354) - continued									
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	95.9	60.0	130	----
chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	106	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	85.5	60.0	130	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	93.1	60.0	130	----
fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	93.1	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	81.6	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	79.9	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	78.6	60.0	130	----
naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	69.8	60.0	130	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	92.1	60.0	130	----
pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	93.7	60.0	130	----
Polychlorinated Biphenyls (QCLot: 719355)									
Aroclor 1016	12674-11-2	E687	0.01	mg/kg	0.01 mg/kg	93.9	60.0	140	----
Aroclor 1221	11104-28-2	E687	0.01	mg/kg	0.01 mg/kg	93.9	60.0	140	----
Aroclor 1232	11141-16-5	E687	0.01	mg/kg	0.01 mg/kg	93.9	60.0	140	----
Aroclor 1242	53469-21-9	E687	0.01	mg/kg	0.01 mg/kg	93.9	60.0	140	----
Aroclor 1248	12672-29-6	E687	0.01	mg/kg	0.01 mg/kg	77.7	60.0	140	----
Aroclor 1254	11097-69-1	E687	0.01	mg/kg	0.01 mg/kg	78.5	60.0	140	----
Aroclor 1260	11096-82-5	E687	0.01	mg/kg	0.01 mg/kg	90.6	60.0	140	----
Aroclor 1262	37324-23-5	E687	0.01	mg/kg	0.01 mg/kg	90.6	60.0	140	----
Aroclor 1268	11100-14-4	E687	0.01	mg/kg	0.01 mg/kg	90.6	60.0	140	----

Qualifiers

Qualifier	Description
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 717796)										
WT2219689-001	Anonymous	benzene	71-43-2	E611A	2.70 mg/kg	3.125 mg/kg	99.9	60.0	140	----
		ethylbenzene	100-41-4	E611A	2.44 mg/kg	3.125 mg/kg	90.5	60.0	140	----
		toluene	108-88-3	E611A	2.62 mg/kg	3.125 mg/kg	97.0	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	5.13 mg/kg	6.25 mg/kg	94.9	60.0	140	----
		xylene, o-	95-47-6	E611A	2.57 mg/kg	3.125 mg/kg	95.1	60.0	140	----
Volatile Organic Compounds (QCLot: 719029)										
WT2219761-002	Anonymous	Acetone	67-64-1	E611D	2.41 mg/kg	3.125 mg/kg	98.4	50.0	140	----
		benzene	71-43-2	E611D	2.45 mg/kg	3.125 mg/kg	100	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.36 mg/kg	3.125 mg/kg	96.3	50.0	140	----
		bromoform	75-25-2	E611D	2.33 mg/kg	3.125 mg/kg	95.2	50.0	140	----
		bromomethane	74-83-9	E611D	1.96 mg/kg	3.125 mg/kg	80.1	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.34 mg/kg	3.125 mg/kg	95.8	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.38 mg/kg	3.125 mg/kg	97.4	50.0	140	----
		chloroform	67-66-3	E611D	2.26 mg/kg	3.125 mg/kg	92.5	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.26 mg/kg	3.125 mg/kg	92.2	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.00 mg/kg	3.125 mg/kg	81.6	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.31 mg/kg	3.125 mg/kg	94.3	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.42 mg/kg	3.125 mg/kg	99.1	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.42 mg/kg	3.125 mg/kg	98.9	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.61 mg/kg	3.125 mg/kg	65.7	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.22 mg/kg	3.125 mg/kg	90.6	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.28 mg/kg	3.125 mg/kg	93.2	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.26 mg/kg	3.125 mg/kg	92.5	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.01 mg/kg	3.125 mg/kg	82.2	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.28 mg/kg	3.125 mg/kg	93.1	50.0	140	----
		dichloromethane	75-09-2	E611D	2.21 mg/kg	3.125 mg/kg	90.2	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.32 mg/kg	3.125 mg/kg	95.1	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.37 mg/kg	3.125 mg/kg	96.9	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.42 mg/kg	3.125 mg/kg	99.1	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.37 mg/kg	3.125 mg/kg	96.8	50.0	140	----
		hexane, n-	110-54-3	E611D	2.26 mg/kg	3.125 mg/kg	92.3	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 719029) - continued										
WT2219761-002	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	2.44 mg/kg	3.125 mg/kg	99.8	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.19 mg/kg	3.125 mg/kg	89.7	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.44 mg/kg	3.125 mg/kg	99.9	50.0	140	----
		styrene	100-42-5	E611D	2.47 mg/kg	3.125 mg/kg	101	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.13 mg/kg	3.125 mg/kg	87.0	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.22 mg/kg	3.125 mg/kg	90.6	50.0	140	----
		tetrachloroethylene	127-18-4	E611D	2.67 mg/kg	3.125 mg/kg	109	50.0	140	----
		toluene	108-88-3	E611D	2.50 mg/kg	3.125 mg/kg	102	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.18 mg/kg	3.125 mg/kg	89.1	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.04 mg/kg	3.125 mg/kg	83.6	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.24 mg/kg	3.125 mg/kg	91.6	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.11 mg/kg	3.125 mg/kg	86.2	50.0	140	----
		vinyl chloride	75-01-4	E611D	1.87 mg/kg	3.125 mg/kg	76.4	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.84 mg/kg	6.25 mg/kg	99.0	50.0	140	----
		xylene, o-	95-47-6	E611D	2.36 mg/kg	3.125 mg/kg	96.3	50.0	140	----
Volatile Organic Compounds (QCLot: 733554)										
WT2220771-001	Anonymous	Acetone	67-64-1	E611D	3.06 mg/kg	3.125 mg/kg	129	50.0	140	----
		benzene	71-43-2	E611D	2.60 mg/kg	3.125 mg/kg	110	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.63 mg/kg	3.125 mg/kg	111	50.0	140	----
		bromoform	75-25-2	E611D	2.15 mg/kg	3.125 mg/kg	90.6	50.0	140	----
		bromomethane	74-83-9	E611D	2.61 mg/kg	3.125 mg/kg	110	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.32 mg/kg	3.125 mg/kg	97.8	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.39 mg/kg	3.125 mg/kg	100	50.0	140	----
		chloroform	67-66-3	E611D	2.53 mg/kg	3.125 mg/kg	107	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.30 mg/kg	3.125 mg/kg	96.8	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.30 mg/kg	3.125 mg/kg	97.0	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.46 mg/kg	3.125 mg/kg	104	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.42 mg/kg	3.125 mg/kg	102	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.44 mg/kg	3.125 mg/kg	102	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	3.13 mg/kg	3.125 mg/kg	132	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.58 mg/kg	3.125 mg/kg	109	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.46 mg/kg	3.125 mg/kg	104	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.51 mg/kg	3.125 mg/kg	106	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.46 mg/kg	3.125 mg/kg	103	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.54 mg/kg	3.125 mg/kg	107	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 733554) - continued										
WT2220771-001	Anonymous	dichloromethane	75-09-2	E611D	2.71 mg/kg	3.125 mg/kg	114	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.58 mg/kg	3.125 mg/kg	108	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.15 mg/kg	3.125 mg/kg	90.8	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.01 mg/kg	3.125 mg/kg	84.6	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.25 mg/kg	3.125 mg/kg	94.7	50.0	140	----
		hexane, n-	110-54-3	E611D	2.54 mg/kg	3.125 mg/kg	107	50.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	2.35 mg/kg	3.125 mg/kg	98.8	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	1.98 mg/kg	3.125 mg/kg	83.5	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.41 mg/kg	3.125 mg/kg	102	50.0	140	----
		styrene	100-42-5	E611D	2.22 mg/kg	3.125 mg/kg	93.6	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.23 mg/kg	3.125 mg/kg	94.0	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.49 mg/kg	3.125 mg/kg	105	50.0	140	----
		tetrachloroethylene	127-18-4	E611D	2.22 mg/kg	3.125 mg/kg	93.4	50.0	140	----
		toluene	108-88-3	E611D	2.40 mg/kg	3.125 mg/kg	101	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.33 mg/kg	3.125 mg/kg	98.2	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.48 mg/kg	3.125 mg/kg	105	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.32 mg/kg	3.125 mg/kg	97.9	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.62 mg/kg	3.125 mg/kg	110	50.0	140	----
		vinyl chloride	75-01-4	E611D	2.44 mg/kg	3.125 mg/kg	103	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.86 mg/kg	6.25 mg/kg	102	50.0	140	----
		xylene, o-	95-47-6	E611D	2.19 mg/kg	3.125 mg/kg	92.1	50.0	140	----
Hydrocarbons (QCLot: 717797)										
WT2219689-001	Anonymous	F1 (C6-C10)	----	E581.F1	46.1 mg/kg	62.5 mg/kg	85.3	60.0	140	----
Hydrocarbons (QCLot: 719030)										
WT2219761-002	Anonymous	F1 (C6-C10)	----	E581.F1	57.2 mg/kg	62.5 mg/kg	117	60.0	140	----
Hydrocarbons (QCLot: 719353)										
WT2219142-001	Anonymous	F2 (C10-C16)	----	E601.SG-L	614 mg/kg	924.49 mg/kg	83.4	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	757 mg/kg	1108.95 mg/kg	85.7	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	693 mg/kg	1071.36 mg/kg	81.2	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 719354)										
WT2219142-001	Anonymous	acenaphthene	83-32-9	E641A	0.331 mg/kg	0.5 mg/kg	82.9	50.0	140	----
		acenaphthylene	208-96-8	E641A	0.283 mg/kg	0.5 mg/kg	70.9	50.0	140	----
		anthracene	120-12-7	E641A	0.310 mg/kg	0.5 mg/kg	77.6	50.0	140	----
		benz(a)anthracene	56-55-3	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 719354) - continued										
WT2219142-001	Anonymous	benzo(a)pyrene	50-32-8	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		benzo(b+j)fluoranthene	n/a	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		benzo(g,h,i)perylene	191-24-2	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		benzo(k)fluoranthene	207-08-9	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		chrysene	218-01-9	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		dibenz(a,h)anthracene	53-70-3	E641A	0.203 mg/kg	0.5 mg/kg	50.9	50.0	140	----
		fluoranthene	206-44-0	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		fluorene	86-73-7	E641A	0.343 mg/kg	0.5 mg/kg	85.8	50.0	140	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		methylnaphthalene, 1-	90-12-0	E641A	0.310 mg/kg	0.5 mg/kg	77.7	50.0	140	----
		methylnaphthalene, 2-	91-57-6	E641A	0.305 mg/kg	0.5 mg/kg	76.3	50.0	140	----
		naphthalene	91-20-3	E641A	0.296 mg/kg	0.5 mg/kg	74.2	50.0	140	----
		phenanthrene	85-01-8	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		pyrene	129-00-0	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
Polychlorinated Biphenyls (QCLot: 719355)										
WT2219243-003	22-19 2-3.5	Aroclor 1016	12674-11-2	E687	0.009 mg/kg	0.01 mg/kg	93.5	50.0	150	----
		Aroclor 1221	11104-28-2	E687	0.009 mg/kg	0.01 mg/kg	93.5	50.0	150	----
		Aroclor 1232	11141-16-5	E687	0.009 mg/kg	0.01 mg/kg	93.5	50.0	150	----
		Aroclor 1242	53469-21-9	E687	0.009 mg/kg	0.01 mg/kg	92.4	50.0	150	----
		Aroclor 1248	12672-29-6	E687	0.009 mg/kg	0.01 mg/kg	93.5	50.0	150	----
		Aroclor 1254	11097-69-1	E687	0.008 mg/kg	0.01 mg/kg	78.2	50.0	150	----
		Aroclor 1260	11096-82-5	E687	0.009 mg/kg	0.01 mg/kg	94.6	50.0	150	----
		Aroclor 1262	37324-23-5	E687	0.010 mg/kg	0.01 mg/kg	95.5	50.0	150	----
		Aroclor 1268	11100-14-4	E687	0.010 mg/kg	0.01 mg/kg	95.5	50.0	150	----

Qualifiers

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

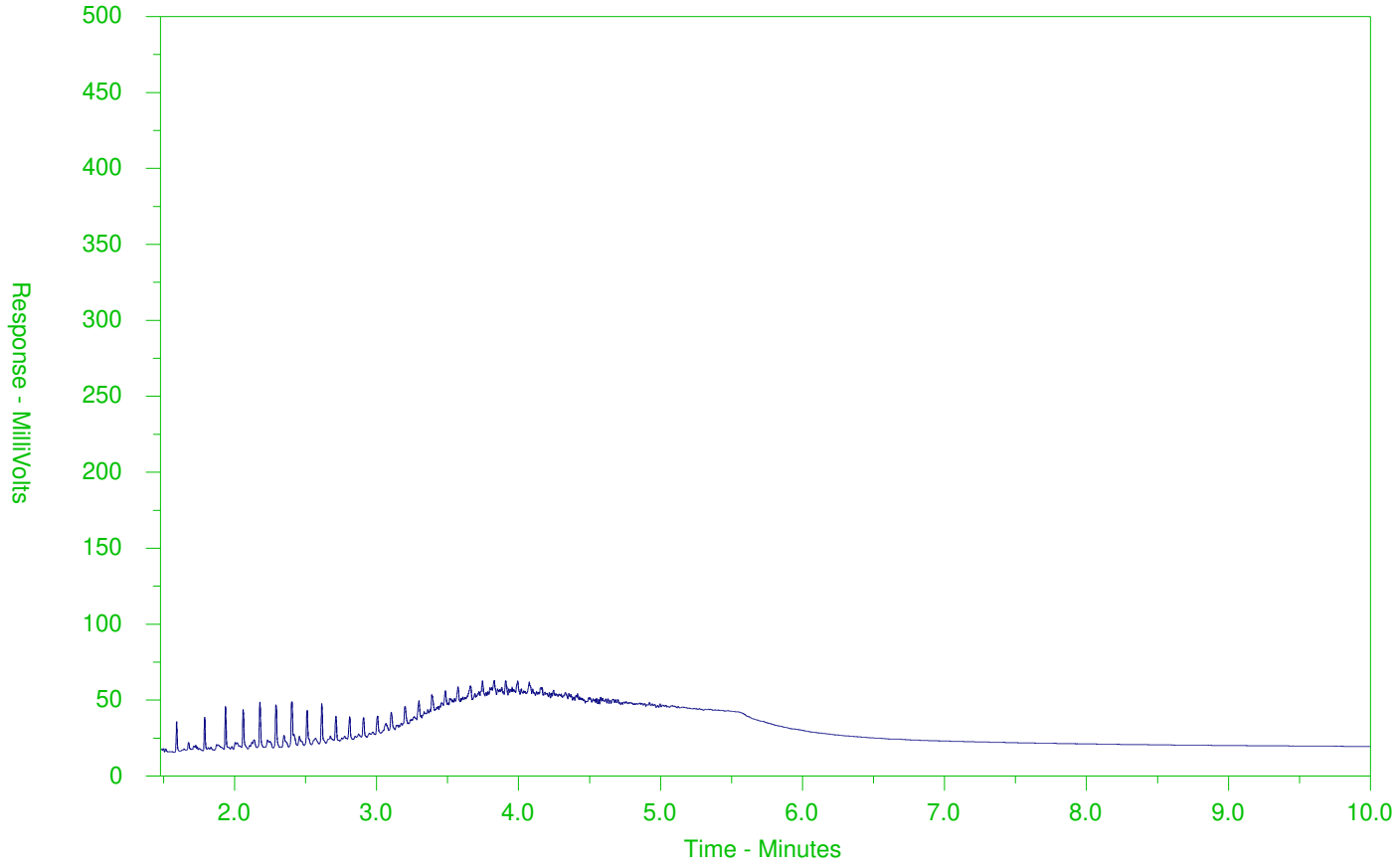
					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Particle Size (QCLot: 725344)									
	RM	passing (19 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (2.0 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (25.4 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (38.1 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (4.75 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (50.8 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (76.2 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (9.5 mm)	----	E181	100 %	100	90.0	110	----
Particle Size (QCLot: 725345)									
	RM	passing (0.05 mm)	----	E182	49.81 %	99.0	90.0	110	----
	RM	passing (0.063 mm)	----	E182	54.27 %	98.8	90.8	109	----
	RM	passing (0.075 mm)	----	E182	58.38 %	98.5	91.4	109	----
	RM	passing (0.125 mm)	----	E182	68.06 %	98.5	92.7	107	----
	RM	passing (0.149 mm)	----	E182	72.71 %	98.4	93.1	107	----
	RM	passing (0.250 mm)	----	E182	85.38 %	99.4	94.1	106	----
	RM	passing (0.420 mm)	----	E182	92.78 %	100.0	94.6	105	----
	RM	passing (0.50 mm)	----	E182	93.78 %	100.0	94.7	105	----
	RM	passing (0.841 mm)	----	E182	97.34 %	99.8	94.9	105	----
	RM	passing (1.0 mm)	----	E182	97.77 %	99.8	94.9	105	----
Particle Size (QCLot: 725346)									
	RM	passing (0.002 mm)	----	E183	21.14 %	97.0	76.0	124	----
	RM	passing (0.004 mm)	----	E183	24.64 %	99.1	80.0	120	----
	RM	passing (0.005 mm)	----	E183	25.91 %	100	82.0	118	----
	RM	passing (0.020 mm)	----	E183	37.12 %	110	87.0	113	----
	RM	passing (0.0312 mm)	----	E183	42.58 %	105	88.0	112	----
Metals (QCLot: 719350)									
	RM	boron, hot water soluble	7440-42-8	E487	1.4938 mg/kg	93.3	60.0	140	----
Metals (QCLot: 719351)									

Sub-Matrix:

Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Reference Material (RM) Report: RM Target Concentration	Recovery (%): RM	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Metals (QCLot: 719351) - continued									
	RM	mercury	7439-97-6	E510	0.0585 mg/kg	113	70.0	130	----
Metals (QCLot: 719352)									
	RM	antimony	7440-36-0	E440	3.99 mg/kg	113	70.0	130	----
	RM	arsenic	7440-38-2	E440	3.73 mg/kg	106	70.0	130	----
	RM	barium	7440-39-3	E440	105 mg/kg	106	70.0	130	----
	RM	beryllium	7440-41-7	E440	0.349 mg/kg	105	70.0	130	----
	RM	boron	7440-42-8	E440	8.5 mg/kg	114	40.0	160	----
	RM	cadmium	7440-43-9	E440	0.91 mg/kg	100	70.0	130	----
	RM	chromium	7440-47-3	E440	101 mg/kg	108	70.0	130	----
	RM	cobalt	7440-48-4	E440	6.9 mg/kg	107	70.0	130	----
	RM	copper	7440-50-8	E440	123 mg/kg	103	70.0	130	----
	RM	lead	7439-92-1	E440	267 mg/kg	103	70.0	130	----
	RM	molybdenum	7439-98-7	E440	1.03 mg/kg	108	70.0	130	----
	RM	nickel	7440-02-0	E440	26.7 mg/kg	110	70.0	130	----
	RM	silver	7440-22-4	E440	4.06 mg/kg	108	70.0	130	----
	RM	thallium	7440-28-0	E440	0.0786 mg/kg	104	40.0	160	----
	RM	uranium	7440-61-1	E440	0.52 mg/kg	103	70.0	130	----
	RM	vanadium	7440-62-2	E440	32.7 mg/kg	107	70.0	130	----
	RM	zinc	7440-66-6	E440	297 mg/kg	105	70.0	130	----
Metals (QCLot: 719356)									
	RM	calcium, soluble ion content	7440-70-2	E484	86.59 mg/L	106	70.0	130	----
	RM	magnesium, soluble ion content	7439-95-4	E484	25.74 mg/L	106	70.0	130	----
	RM	sodium, soluble ion content	17341-25-2	E484	30.05 mg/L	100	70.0	130	----
Speciated Metals (QCLot: 719248)									
	RM	chromium, hexavalent [Cr VI]	18540-29-9	E532	172 mg/kg	97.0	70.0	130	----

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-001-E601.SG-L
Client Sample ID: 22-18 0-1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

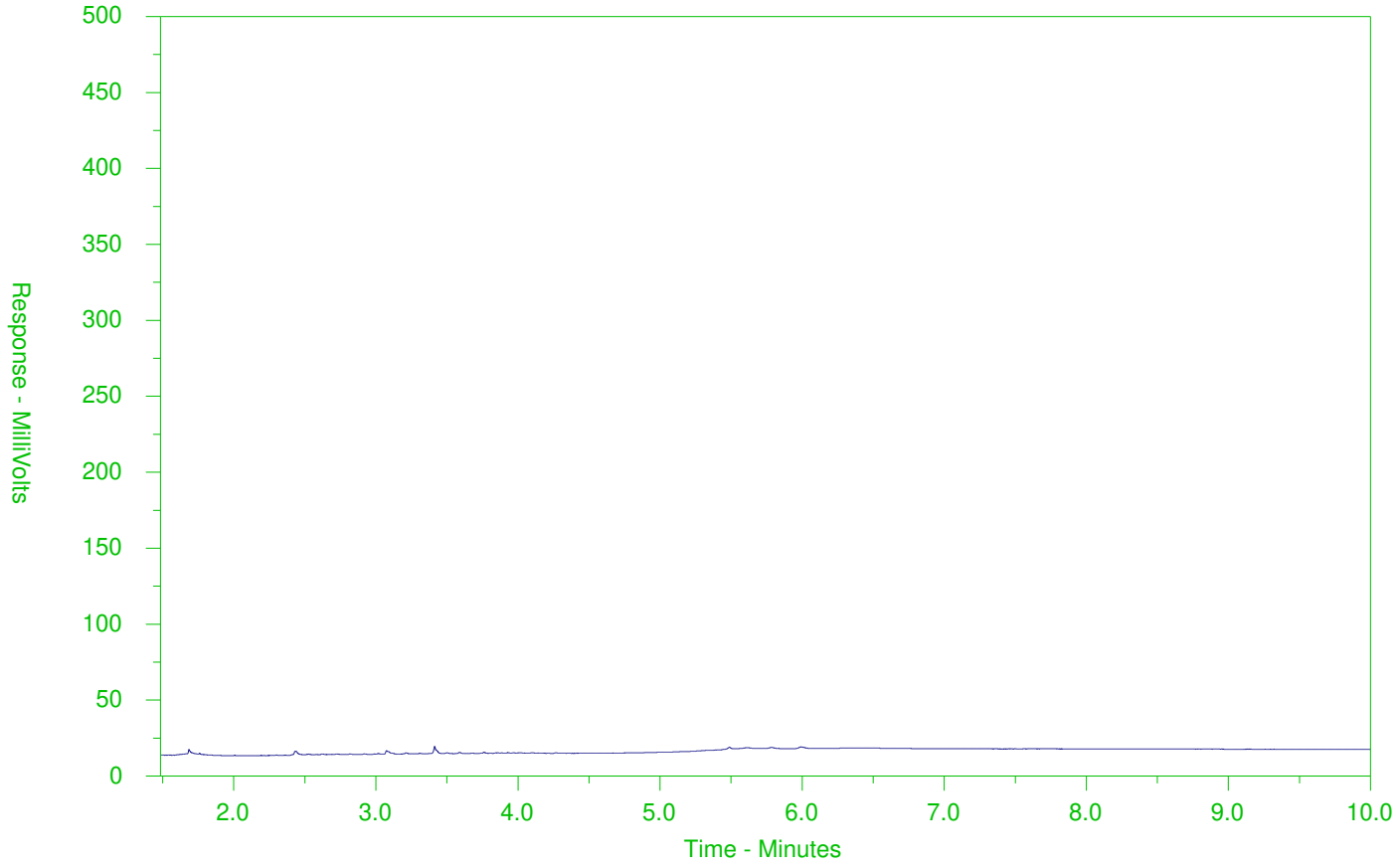
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-003-E601.SG-L
Client Sample ID: 22-19 2-3.5



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

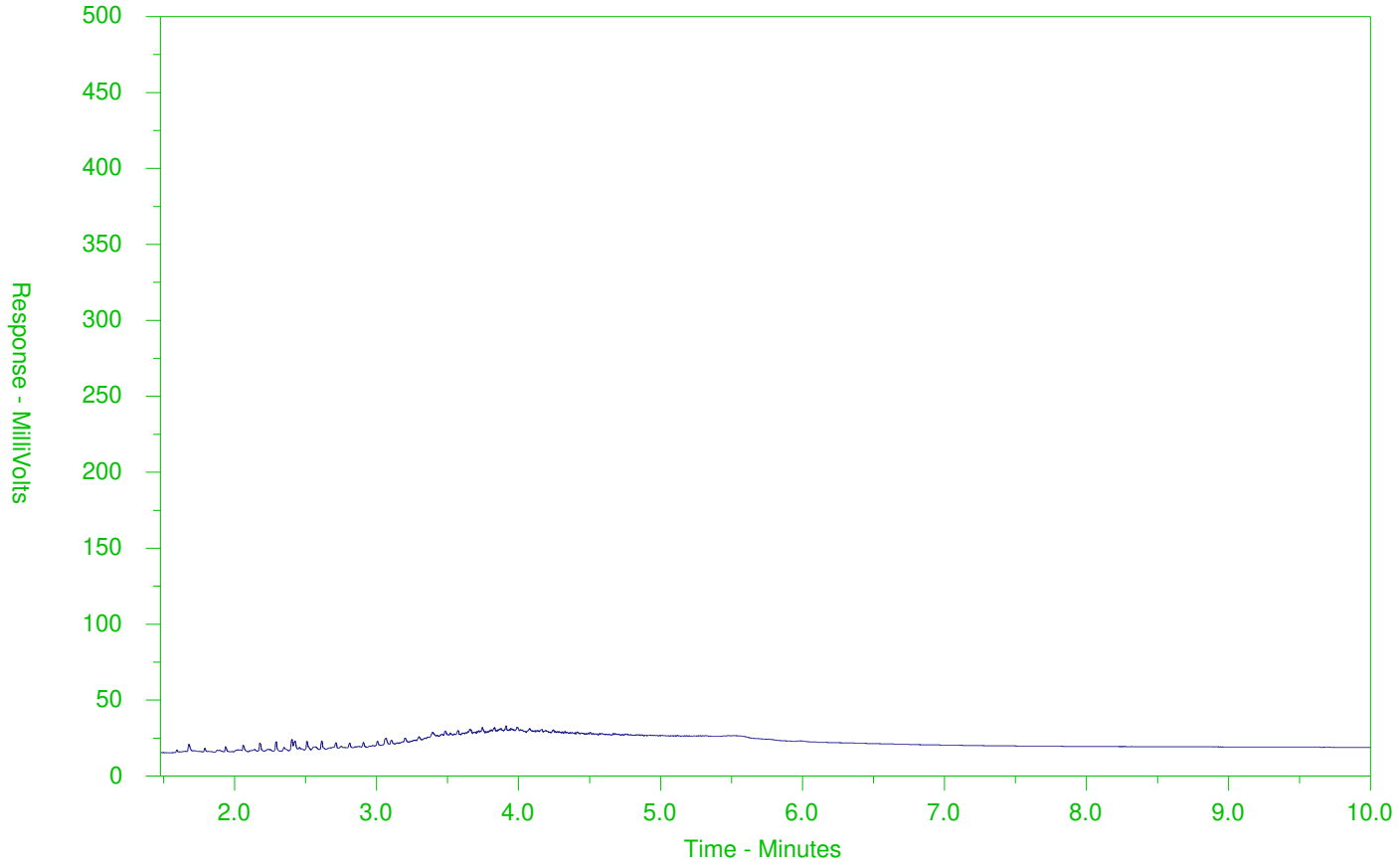
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-004-E601.SG-L
Client Sample ID: 22-20 0-1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

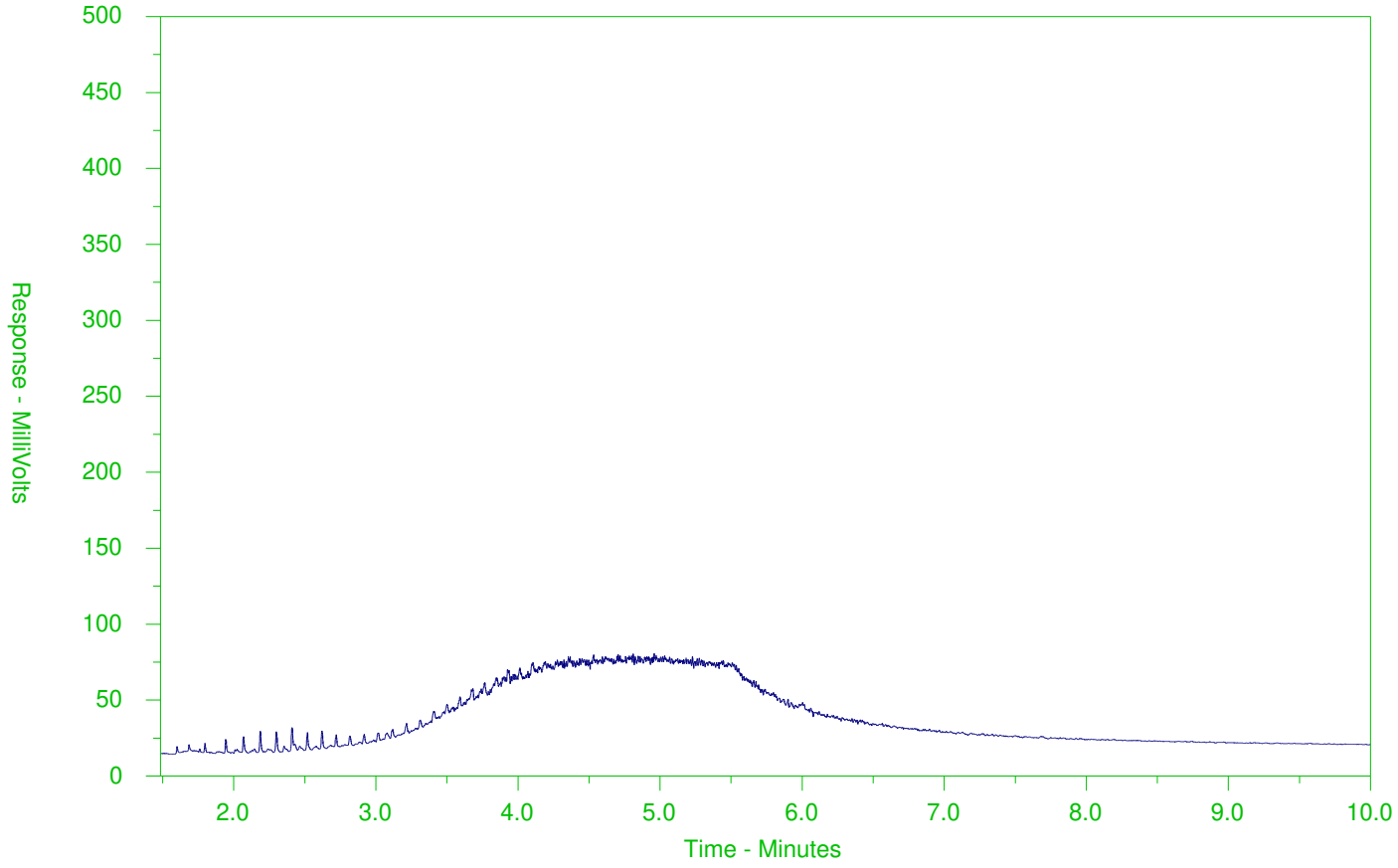
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-006-E601.SG-L
Client Sample ID: 22-21 0-0.5



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

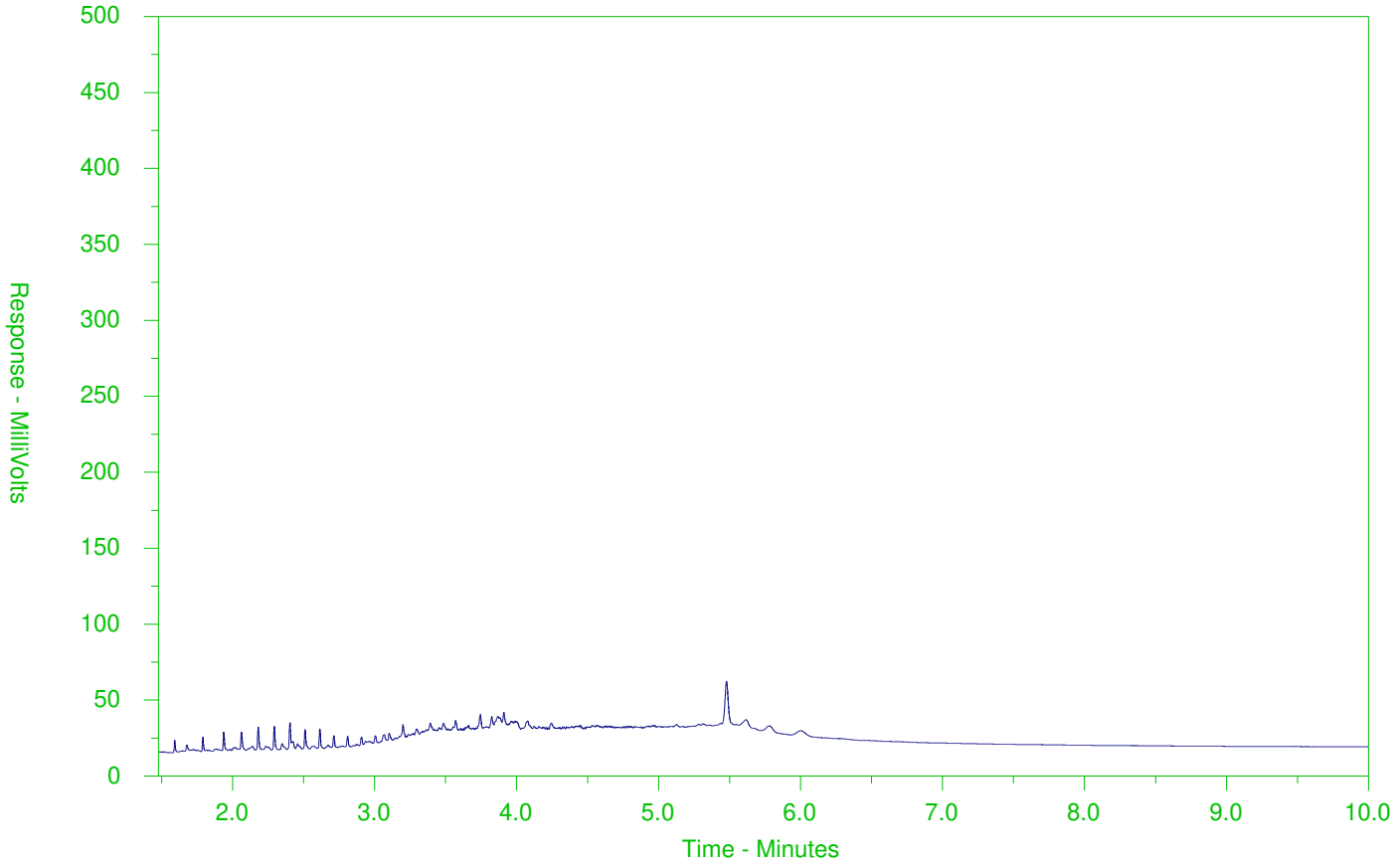
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-008-E601.SG-L
Client Sample ID: 22-22 0-1.25



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

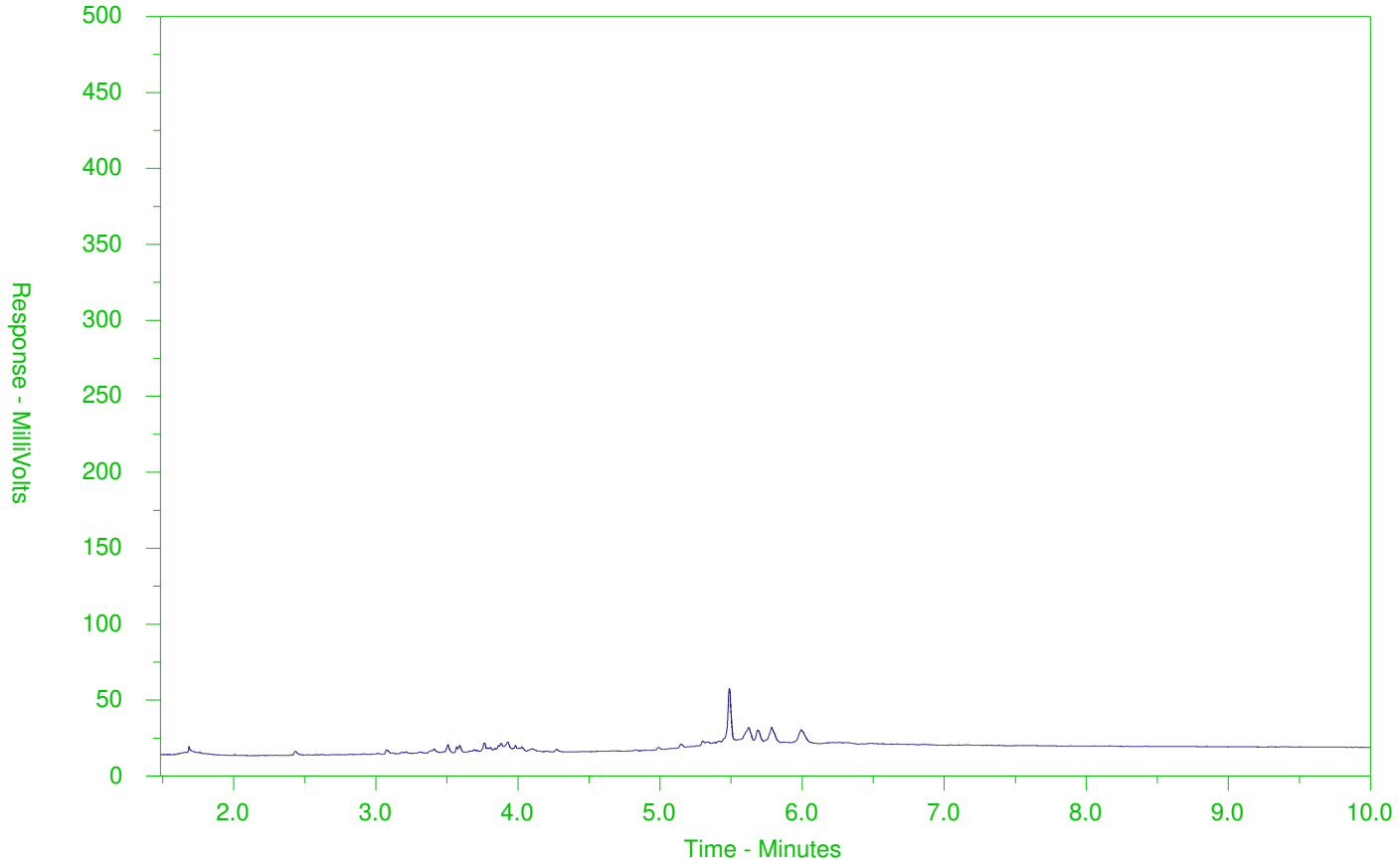
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-010-E601.SG-L
Client Sample ID: 22-23 0-1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

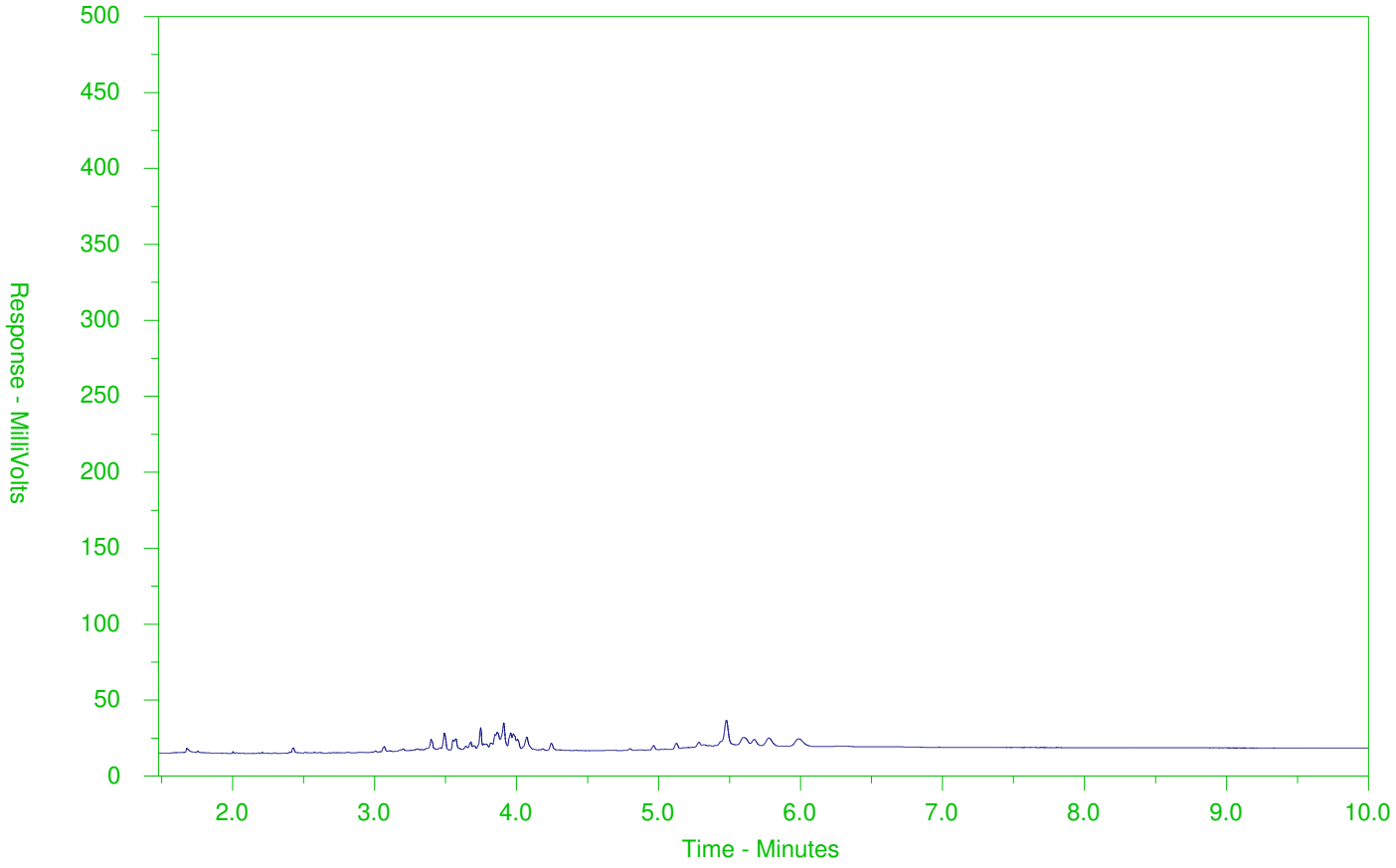
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-012-E601.SG-L
Client Sample ID: 22-24 0-1.25



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

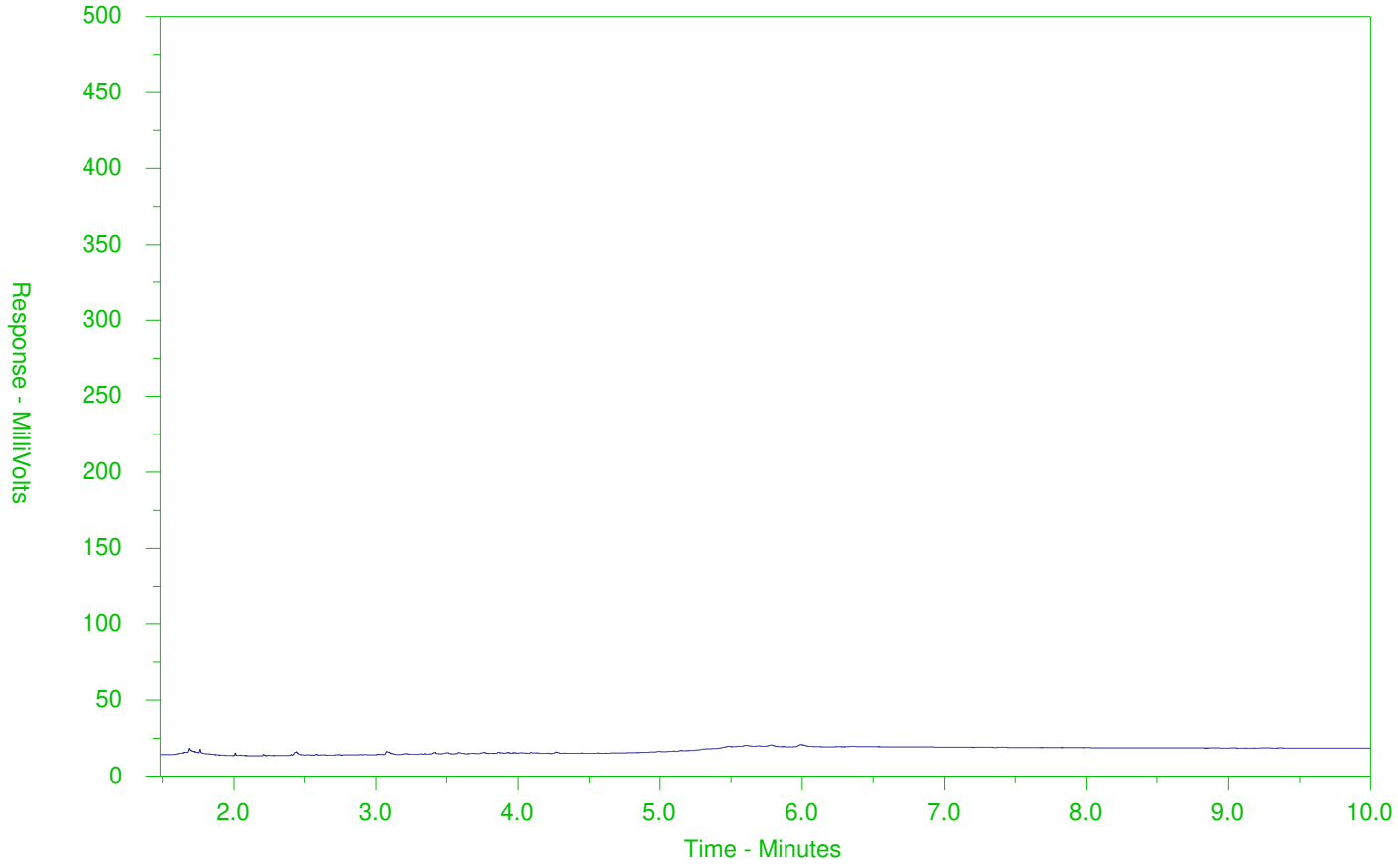
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-014-E601.SG-L
Client Sample ID: 22-25 3-4.5



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

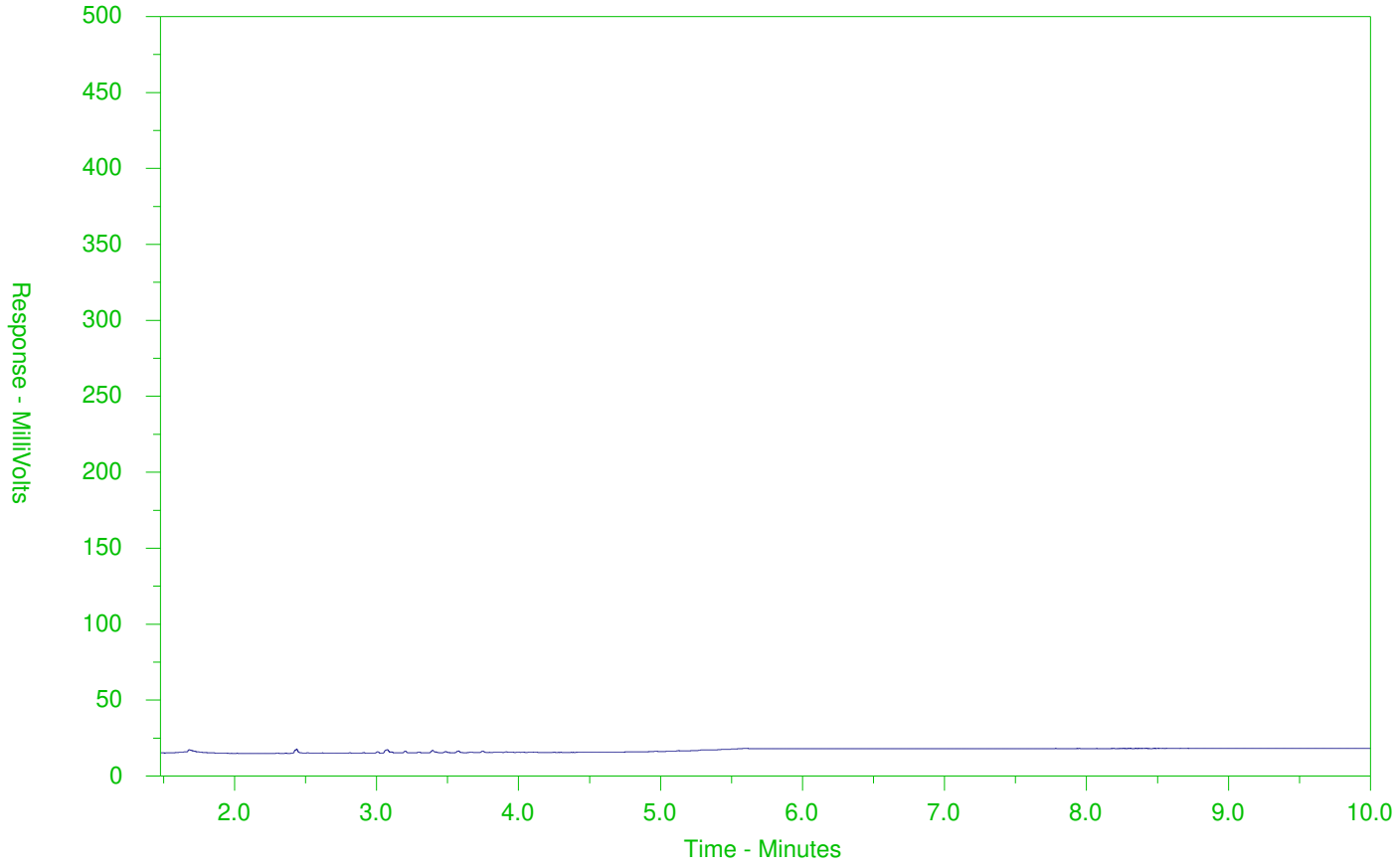
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-015-E601.SG-L
Client Sample ID: 22-25 7-8.5



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

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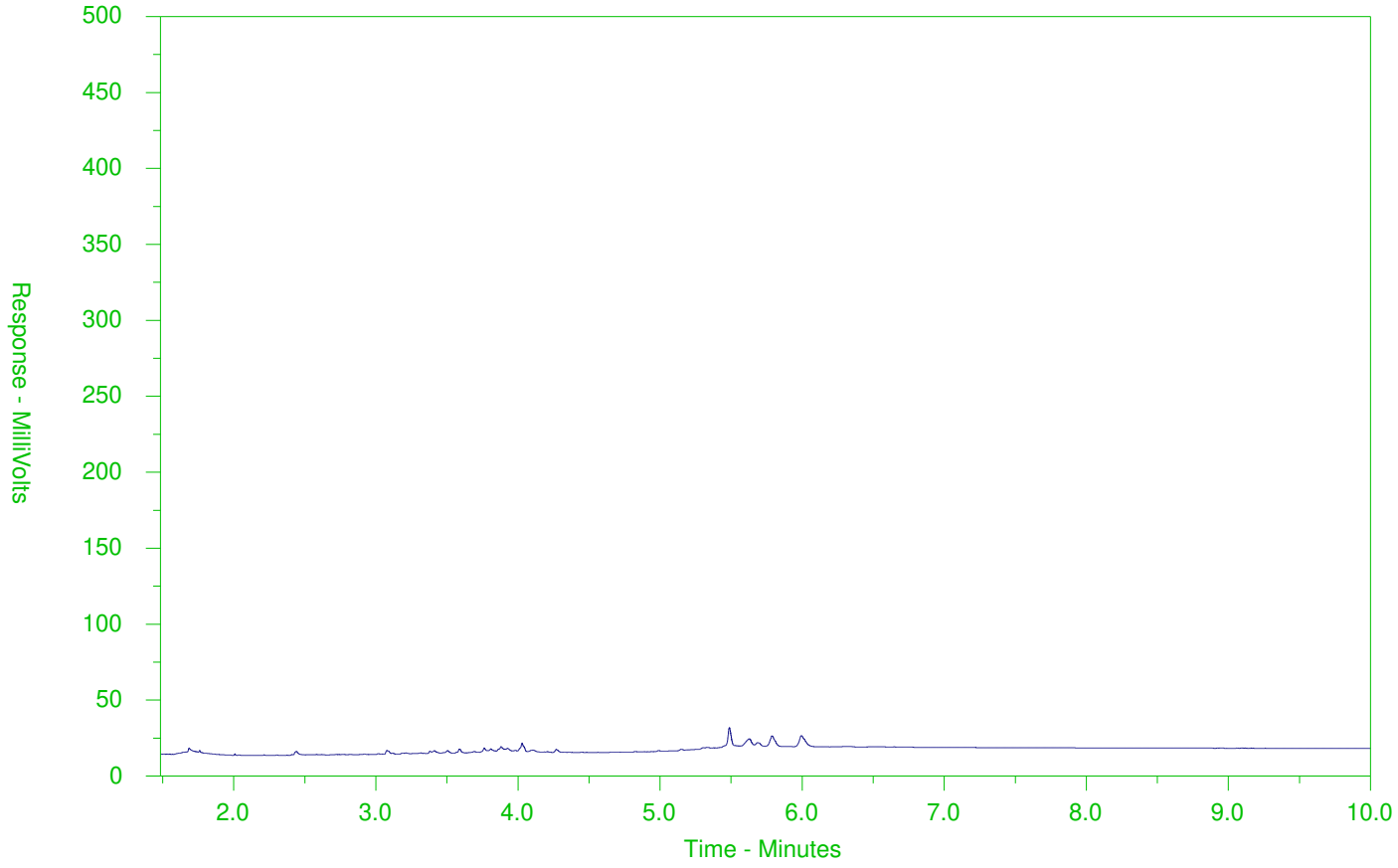
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-016-E601.SG-L
Client Sample ID: 22-26 0-1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

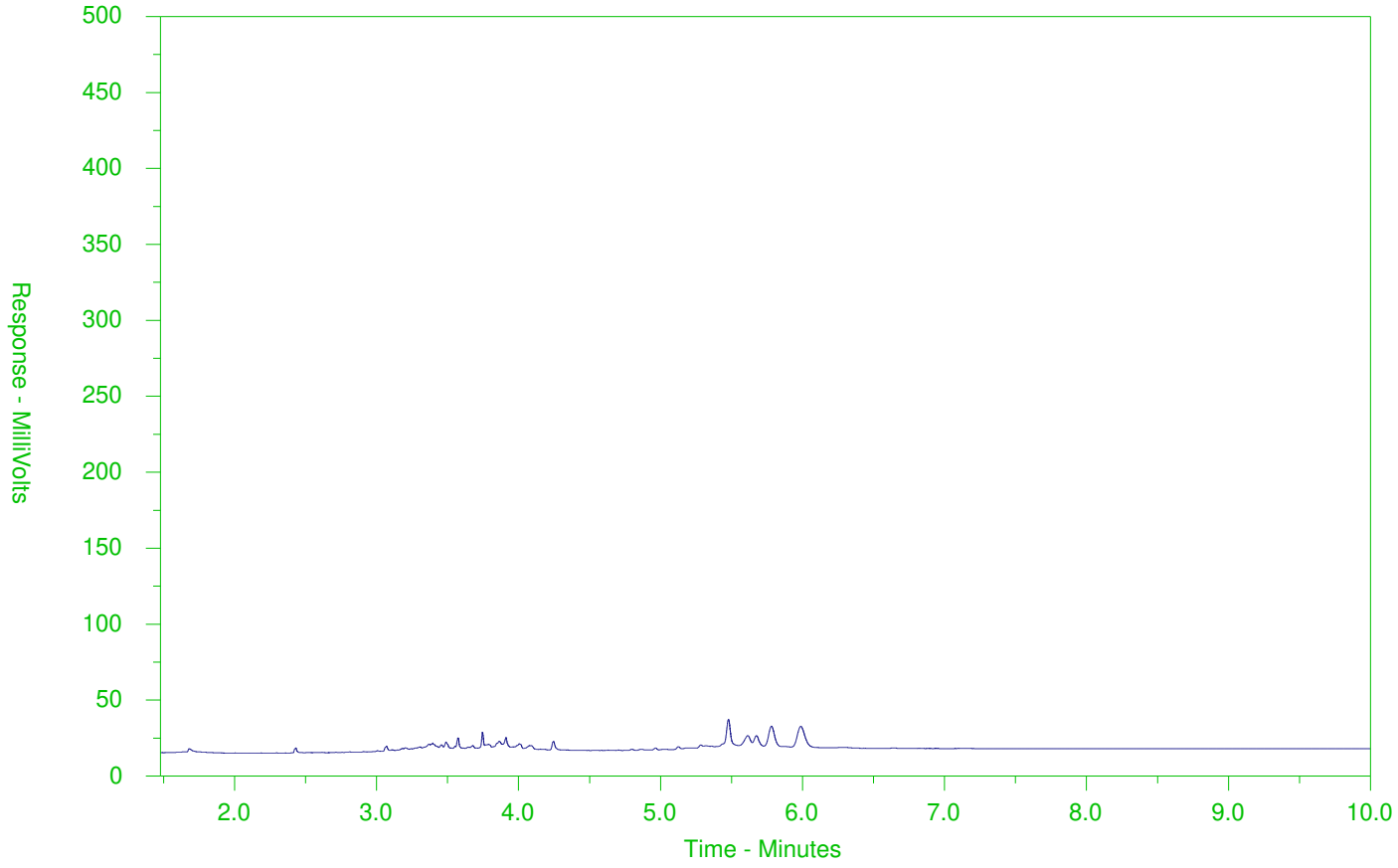
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2219243-017-E601.SG-L
Client Sample ID: 22-27 0-1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009747

Page 1 of 2

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Environmental Division Waterloo

Work Order Reference WT2219243

Telephone : +1 519 886 69 0

Report To	Contact and company name below will appear on the final report
Company:	Omni-McLann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4926
	Company address below will appear on the final report
Street:	1755 Woodward Drive, unit 200
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To [X] YES [ ] NO
	Copy of Invoice with Report [ ] YES [ ] NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: [X] PDF [X] EXCEL [ ] EDD (DIGITAL)

Merge QC/QCI Reports with COA [X] YES [ ] NO [ ] N/A

[X] Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: [X] EMAIL [ ] MAIL [ ] FAX

Email 1 or Fax: Antonia@omnimcconn.com

Email 2: Dan@omnimcconn.com

Email 3: Kristina@omnimcconn.com

Invoice Recipients

Select Invoice Distribution: [X] EMAIL [ ] MAIL [ ] FAX

Email 1 or Fax: invoicing@omnimcconn.com

Email 2:

Turnaround Time (TAT) Requested

[X] Routine [R] if received by 3pm M-F - no surcharges apply

[ ] 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

[ ] 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

[ ] 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

[ ] 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

[ ] Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fe may apply to rush requests on weekends, statutory holidays and non-routine te

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contact

Analysis Reques

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q90026	AFE/Cost Center:	PO#:
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):	WT2219843	ALS Contact: Eric Dobbins	Sampler: Antonia Cass

Indicate Filtered (F), Preserved (P) or Filtered and Pres

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC	BTEX	VOC	PAH	Metals	Cr (6)	Hg	PCBs	SAMPLES ON HOLD	EXTENDED STORAGE REQUI	SUSPECTED HAZARD (see n
	22-18 0-1	17-Oct-22			4	X	X		X	X	X	X				
	22-19 2.5-3.75	17-Oct-22			2			X								
	22-19 2-3.5	17-Oct-22			4	X	X						X			
	22-20 0-1	17-Oct-22			4	X	X		X	X	X	X				
	22-20 2-4	17-Oct-22			2			X								
	22-21 0-0.5	18-Oct-22			3	X	X									
	22-21 2.5-4.5	18-Oct-22			2			X								
	22-22 0-1.25	18-Oct-22			4	X	X		X	X	X	X				
	22-22 2.5-3	18-Oct-22			2			X								
	22-23 0-1	19-Oct-22			4	X	X		X	X	X	X				
	22-23 1-2	19-Oct-22			2			X								
	22-24 0-1.25	19-Oct-22			4	X	X		X	X	X	X				

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? [ ] YES [ ] NO	RSC O. Reg. 153/04 - Table 7
Are samples for human consumption/ use? [ ] YES [ ] NO	Samples for RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: [ ] NONE [ ] ICE [X] ICE PACKS [ ] FROZEN [ ] COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: [ ] YES [ ] NO

Cooler Custody Seals Intact: [ ] YES [ ] N/A Sample Custody Seals Intact: [ ] YES [ ] N/A

INITIAL COOLER TEMPERATURES °C	FINAL COOLER TEMPERATURES °C
7.4	11.0

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Antonia Cass	Date: 20-Oct-22	Time: 22:00	Received by: Costas F	Date: 10/21/22	Time: 9:00	Received by: MA	Date: 2022-10-22	Time: 10:30

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

VS193 SOL-798/799

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009748

Page 2 of 2

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-837-4936
Company address below will appear on the final report	
Street:	1755 Woodward Drive
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: antonia@omnimccann.com

Email 2: dan@omnimccann.com

Email 3: kristina@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: invoicing@omnimccann.com

Email 2:

Turnaround Time (TAT) Requested

- ☐ Routine [R] if received by 3pm M-F - no surcharges apply
- ☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
- ☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
- ☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
- ☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
- ☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information

ALS Account # / Quote #	Q90026
Job #:	0006-0103
PO / AFE:	
LSD:	
ALS Lab Work Order # (ALS use only):	WT2219243

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Contact: Eric Dobbins Sampler: Antonia Cass

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC	BTEX	VOC	PAH	Metals	Cr(6)	Hg	PCBs	SAR	RSC grain size	pH	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	22-24 6-7	19-Oct-22			2			X											
	22-25 3-4.5	19-Oct-22			4	X	X						X	X	X				
	22-25 7-8.5	19-Oct-22			4	X	X						X			X			
	22-26 0-1	20-Oct-22			4	X		X		X	X	X							
	22-270-1	20-Oct-22			4	X		X		X	X	X							

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

RSC O.Reg. 153/04 - Table 7

Samples for RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☒ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C					FINAL COOLER TEMPERATURES °C				
7.4					11.0				

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:
Antonia Cass	20-Oct-22	22:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
CAITLAT F	10/21/22	9:00

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
MA	2022-10-22	10:30

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

CERTIFICATE OF ANALYSIS

Work Order	: **WT2219916**	Page	: 1 of 17
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 28-Oct-2022 10:00
PO	: ----	Date Analysis Commenced	: 01-Nov-2022
C-O-C number	: ----	Issue Date	: 14-Nov-2022 17:18
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 19		
No. of samples analysed	: 19		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Hedy Lai	Team Leader - Inorganics	Sask Soils, Saskatoon, Saskatchewan
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Inorganics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Metals, Waterloo, Ontario
Joseph Scharbach		Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances

LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no unit
%	percent
mg/kg	milligrams per kilogram
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
AI	*Analytical interferences may be present. Result may be biased high.*
DLM	*Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).*

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-28 0.25-1.5	22-29 0.25-1.5	22-29 2.5-3.75	22-30 0-1.75	DUP1
					Client sampling date / time	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022
						WT2219916-001	WT2219916-002	WT2219916-003	WT2219916-004	WT2219916-005
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		11.1	8.67	16.4	17.9	17.6
Metals										
antimony	7440-36-0	E440	0.10	mg/kg		<0.10	<0.10	<0.10	0.20	0.14
arsenic	7440-38-2	E440	0.10	mg/kg		1.67	2.51	2.87	2.28	2.07
barium	7440-39-3	E440	0.50	mg/kg		70.1	173	120	114	105
beryllium	7440-41-7	E440	0.10	mg/kg		0.23	0.33	0.46	0.44	0.40
boron	7440-42-8	E440	5.0	mg/kg		<5.0	8.5	<5.0	5.2	5.0
boron, hot water soluble	7440-42-8	E487	0.10	mg/kg		0.11	0.40	0.16	0.29	0.30
cadmium	7440-43-9	E440	0.020	mg/kg		0.035	0.087	0.143	0.593	0.507
chromium	7440-47-3	E440	0.50	mg/kg		11.1	13.9	20.3	23.9	22.8
cobalt	7440-48-4	E440	0.10	mg/kg		4.46	5.36	7.23	6.30	5.82
copper	7440-50-8	E440	0.50	mg/kg		<20.0	<20.0	<20.0	<20.0	<20.0
lead	7439-92-1	E440	0.50	mg/kg		4.18	7.30	8.21	30.2	22.3
mercury	7439-97-6	E510	0.0050	mg/kg		0.0068	0.0272	0.0445	0.0619	0.0557
molybdenum	7439-98-7	E440	0.10	mg/kg		0.42	0.55	0.52	0.59	0.52
nickel	7440-02-0	E440	0.50	mg/kg		7.77	10.1	12.9	12.6	11.5
selenium	7782-49-2	E440	0.20	mg/kg		<0.20	<0.20	0.24	0.35	0.36
silver	7440-22-4	E440	0.10	mg/kg		<0.10	<0.10	0.12	0.11	0.11
thallium	7440-28-0	E440	0.050	mg/kg		0.101	0.154	0.147	0.127	0.117
uranium	7440-61-1	E440	0.050	mg/kg		0.477	0.559	0.785	0.858	0.806
vanadium	7440-62-2	E440	0.20	mg/kg		22.5	21.6	33.8	35.4	33.9
zinc	7440-66-6	E440	2.0	mg/kg		15.4	20.4	31.8	106	87.2
Speciated Metals										
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg		<0.10	<0.10	0.22	<0.10	<0.10
Volatile Organic Compounds										
benzene	71-43-2	E611A	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
ethylbenzene	100-41-4	E611A	0.015	mg/kg		<0.015	<0.015	<0.015	<0.015	<0.015
toluene	108-88-3	E611A	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
xylene, m+p-	179601-23-1	E611A	0.030	mg/kg		<0.030	<0.030	<0.030	<0.030	<0.030
xylene, o-	95-47-6	E611A	0.030	mg/kg		<0.030	<0.030	<0.030	<0.030	<0.030

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-28 0.25-1.5	22-29 0.25-1.5	22-29 2.5-3.75	22-30 0-1.75	DUP1
					Client sampling date / time	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022
						WT2219916-001	WT2219916-002	WT2219916-003	WT2219916-004	WT2219916-005
						Result	Result	Result	Result	Result
Volatile Organic Compounds										
xylenes, total	1330-20-7	E611A	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
BTEX, total	----	E611A	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Hydrocarbons										
F1 (C6-C10)	----	E581.F1	5.0	mg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	----	E601.SG-L	10	mg/kg		<10	<10	<10	<10	<10
F3 (C16-C34)	----	E601.SG-L	50	mg/kg		<50	58	<50	<50	55
F4 (C34-C50)	----	E601.SG-L	50	mg/kg		<50	76	<50	<50	53
F1-BTEX	----	EC580	5.0	mg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
hydrocarbons, total (C6-C50)	----	EC581	80	mg/kg		<80	134	<80	<80	108
chromatogram to baseline at nC50	n/a	E601.SG-L	-	-		YES	YES	YES	YES	YES
Hydrocarbons Surrogates										
bromobenzotrifluoride, 2- (F2-F4 surr)	392-83-6	E601.SG-L	1.0	%		80.3	82.8	84.3	84.8	85.3
dichlorotoluene, 3,4-	97-75-0	E581.F1	1.0	%		115	99.3	96.2	82.3	85.2
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	460-00-4	E611A	0.10	%		113	98.8	91.0	90.6	87.4
difluorobenzene, 1,4-	540-36-3	E611A	0.10	%		129	111	102	102	99.2
Polycyclic Aromatic Hydrocarbons										
acenaphthene	83-32-9	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
acenaphthylene	208-96-8	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
anthracene	120-12-7	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
benz(a)anthracene	56-55-3	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
benzo(a)pyrene	50-32-8	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
benzo(b+j)fluoranthene	n/a	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
benzo(g,h,i)perylene	191-24-2	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
benzo(k)fluoranthene	207-08-9	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
chrysene	218-01-9	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
dibenz(a,h)anthracene	53-70-3	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
fluoranthene	206-44-0	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
fluorene	86-73-7	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050

Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	22-28 0.25-1.5	22-29 0.25-1.5	22-29 2.5-3.75	22-30 0-1.75	DUP1
					Client sampling date / time	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022	21-Oct-2022
Analyte	CAS Number	Method	LOR	Unit		WT2219916-001	WT2219916-002	WT2219916-003	WT2219916-004	WT2219916-005
						Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons										
methylnaphthalene, 1-	90-12-0	E642F	0.030	mg/kg		<0.030	<0.030	<0.030	<0.030	<0.030
methylnaphthalene, 1+2-	----	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
methylnaphthalene, 2-	91-57-6	E642F	0.030	mg/kg		<0.030	<0.030	<0.030	<0.030	<0.030
naphthalene	91-20-3	E642F	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
phenanthrene	85-01-8	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
pyrene	129-00-0	E642F	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates										
fluorobiphenyl, 2-	321-60-8	E642F	0.1	%		88.5	90.6	90.4	91.4	92.2
terphenyl-d14, p-	1718-51-0	E642F	0.1	%		84.6	88.4	90.3	93.1	94.1

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-31 0-1	22-31 2.5-3.5	22-14B 0-2	22-14B 2.5-4	DUP 2
					Client sampling date / time	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022
						WT2219916-006	WT2219916-007	WT2219916-008	WT2219916-009	WT2219916-010
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		10.2	----	9.14	14.3	12.0
pH (1:2 soil:CaCl2-aq)	----	E108A	0.10	pH units		----	7.88	----	----	----
Particle Size										
passing (9.5 mm)	----	E181	1.0	%		----	99.2	----	----	----
passing (4.75 mm)	----	E181	1.0	%		----	98.6	----	----	----
passing (19 mm)	----	E181	1.0	%		----	100	----	----	----
passing (25.4 mm)	----	E181	1.0	%		----	100	----	----	----
passing (38.1 mm)	----	E181	1.0	%		----	100	----	----	----
passing (50.8 mm)	----	E181	1.0	%		----	100	----	----	----
passing (76.2 mm)	----	E181	1.0	%		----	100	----	----	----
passing (1.0 mm)	----	E182	1.0	%		----	90.5	----	----	----
passing (0.841 mm)	----	E182	1.0	%		----	89.3	----	----	----
passing (0.50 mm)	----	E182	1.0	%		----	82.9	----	----	----
passing (0.420 mm)	----	E182	1.0	%		----	81.2	----	----	----
passing (0.250 mm)	----	E182	1.0	%		----	71.5	----	----	----
passing (0.149 mm)	----	E182	1.0	%		----	60.0	----	----	----
passing (0.125 mm)	----	E182	1.0	%		----	55.8	----	----	----
passing (0.075 mm)	----	E182	1.0	%		----	47.1	----	----	----
passing (0.063 mm)	----	E182	1.0	%		----	44.2	----	----	----
passing (0.05 mm)	----	E182	1.0	%		----	41.0	----	----	----
passing (0.0312 mm)	----	E183	1.0	%		----	35.4	----	----	----
passing (0.020 mm)	----	E183	1.0	%		----	30.3	----	----	----
passing (0.005 mm)	----	E183	1.0	%		----	15.4	----	----	----
passing (0.004 mm)	----	E183	1.0	%		----	13.7	----	----	----
passing (0.002 mm)	----	E183	1.0	%		----	9.0	----	----	----
grain size curve	----	E185	-	-		----	See Attached	----	----	----
passing (2.0 mm)	----	E181	1.0	%		----	97.1	----	----	----
Metals										
antimony	7440-36-0	E440	0.10	mg/kg		<0.10	----	<0.10	<0.10	<0.10
arsenic	7440-38-2	E440	0.10	mg/kg		1.92	----	1.68	2.73	1.76

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-31 0-1	22-31 2.5-3.5	22-14B 0-2	22-14B 2.5-4	DUP 2
					Client sampling date / time	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022
						WT2219916-006	WT2219916-007	WT2219916-008	WT2219916-009	WT2219916-010
						Result	Result	Result	Result	Result
Metals										
barium	7440-39-3	E440	0.50	mg/kg		103	----	195	142	188
beryllium	7440-41-7	E440	0.10	mg/kg		0.29	----	0.31	0.48	0.34
boron	7440-42-8	E440	5.0	mg/kg		<5.0	----	7.8	<5.0	7.4
boron, hot water soluble	7440-42-8	E487	0.10	mg/kg		0.14	----	0.21	0.12	0.17
cadmium	7440-43-9	E440	0.020	mg/kg		0.112	----	0.069	0.142	0.074
chromium	7440-47-3	E440	0.50	mg/kg		18.2	----	14.8	24.0	15.4
cobalt	7440-48-4	E440	0.10	mg/kg		5.59	----	4.64	7.95	4.94
copper	7440-50-8	E440	0.50	mg/kg		<20.0	----	<20.0	20.7	<20.0
lead	7439-92-1	E440	0.50	mg/kg		8.24	----	7.21	9.05	7.83
mercury	7439-97-6	E510	0.0050	mg/kg		0.0137	----	0.0178	0.0299	0.0180
molybdenum	7439-98-7	E440	0.10	mg/kg		0.43	----	0.48	0.62	0.49
nickel	7440-02-0	E440	0.50	mg/kg		9.86	----	10.1	14.7	10.8
selenium	7782-49-2	E440	0.20	mg/kg		<0.20	----	<0.20	<0.20	<0.20
silver	7440-22-4	E440	0.10	mg/kg		<0.10	----	<0.10	0.13	<0.10
thallium	7440-28-0	E440	0.050	mg/kg		0.103	----	0.147	0.168	0.152
uranium	7440-61-1	E440	0.050	mg/kg		0.535	----	0.488	0.777	0.504
vanadium	7440-62-2	E440	0.20	mg/kg		26.9	----	24.2	38.6	25.3
zinc	7440-66-6	E440	2.0	mg/kg		29.4	----	20.7	42.6	22.0
Speciated Metals										
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg		<0.10	----	<0.10	<0.10	<0.10
Volatile Organic Compounds										
benzene	71-43-2	E611A	0.0050	mg/kg		<0.0050	----	<0.0050	<0.0050	<0.0050
ethylbenzene	100-41-4	E611A	0.015	mg/kg		<0.015	----	<0.015	<0.015	<0.015
toluene	108-88-3	E611A	0.050	mg/kg		<0.050	----	<0.050	<0.050	<0.050
xylene, m+p-	179601-23-1	E611A	0.030	mg/kg		<0.030	----	<0.030	<0.030	<0.030
xylene, o-	95-47-6	E611A	0.030	mg/kg		<0.030	----	<0.030	<0.030	<0.030
xylenes, total	1330-20-7	E611A	0.050	mg/kg		<0.050	----	<0.050	<0.050	<0.050
BTEX, total	----	E611A	0.10	mg/kg		<0.10	----	<0.10	<0.10	<0.10
Hydrocarbons										
F1 (C6-C10)	----	E581.F1	5.0	mg/kg		<5.0	----	<5.0	<5.0	<5.0

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-31 0-1	22-31 2.5-3.5	22-14B 0-2	22-14B 2.5-4	DUP 2
					Client sampling date / time	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022
						WT2219916-006	WT2219916-007	WT2219916-008	WT2219916-009	WT2219916-010
						Result	Result	Result	Result	Result
Hydrocarbons										
F2 (C10-C16)	----	E601.SG-L	10	mg/kg		<10	----	<10	<10	<10
F3 (C16-C34)	----	E601.SG-L	50	mg/kg		<50	----	536	70	628
F4 (C34-C50)	----	E601.SG-L	50	mg/kg		119	----	1070	101	1290
F4G-sg	----	E601.F4G-L	250	mg/kg		720	----	3900	----	4950
F1-BTEX	----	EC580	5.0	mg/kg		<5.0	----	<5.0	<5.0	<5.0
hydrocarbons, total (C6-C50)	----	EC581	80	mg/kg		119	----	1610	171	1920
chromatogram to baseline at nC50	n/a	E601.SG-L	-	-		NO	----	NO	YES	NO
Hydrocarbons Surrogates										
bromobenzotrifluoride, 2- (F2-F4 surr)	392-83-6	E601.SG-L	1.0	%		84.3	----	85.4	89.8	83.4
dichlorotoluene, 3,4-	97-75-0	E581.F1	1.0	%		86.5	----	80.9	84.2	85.4
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	460-00-4	E611A	0.10	%		87.8	----	97.5	94.9	95.3
difluorobenzene, 1,4-	540-36-3	E611A	0.10	%		100	----	114	108	110
Polycyclic Aromatic Hydrocarbons										
acenaphthene	83-32-9	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
acenaphthylene	208-96-8	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
anthracene	120-12-7	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
benz(a)anthracene	56-55-3	E642F	0.050	mg/kg		0.057	----	<0.050 DLM	<0.050	<0.050 DLM
benzo(a)pyrene	50-32-8	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
benzo(b+j)fluoranthene	n/a	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
benzo(g,h,i)perylene	191-24-2	E642F	0.050	mg/kg		<0.050	----	0.096	<0.050	0.088
benzo(k)fluoranthene	207-08-9	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
chrysene	218-01-9	E642F	0.050	mg/kg		0.051	----	0.097 AI	<0.050	0.089 AI
dibenz(a,h)anthracene	53-70-3	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
fluoranthene	206-44-0	E642F	0.050	mg/kg		0.112	----	<0.050 DLM	<0.050	<0.050 DLM
fluorene	86-73-7	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	<0.050	<0.050 DLM
methylnaphthalene, 1-	90-12-0	E642F	0.030	mg/kg		<0.030	----	0.042	<0.030	0.033
methylnaphthalene, 1+2-	----	E642F	0.050	mg/kg		<0.050	----	0.096	<0.050	0.071
methylnaphthalene, 2-	91-57-6	E642F	0.030	mg/kg		<0.030	----	0.054	<0.030	0.038

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-31 0-1	22-31 2.5-3.5	22-14B 0-2	22-14B 2.5-4	DUP 2
					Client sampling date / time	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022	24-Oct-2022
						WT2219916-006	WT2219916-007	WT2219916-008	WT2219916-009	WT2219916-010
						Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons										
naphthalene	91-20-3	E642F	0.010	mg/kg		<0.010	----	<0.020 DLM	<0.010	<0.020 DLM
phenanthrene	85-01-8	E642F	0.050	mg/kg		0.105	----	0.071	<0.050	0.057
pyrene	129-00-0	E642F	0.050	mg/kg		0.083	----	<0.050 DLM	<0.050	<0.050 DLM
Polycyclic Aromatic Hydrocarbons Surrogates										
fluorobiphenyl, 2-	321-60-8	E642F	0.1	%		92.0	----	77.5	91.6	79.6
terphenyl-d14, p-	1718-51-0	E642F	0.1	%		93.7	----	78.0	94.4	80.6

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-15B 0-1	22-15B 4-4.25	22-16B 0-1	22-16B 2.5-3	22-17B 0-0.75
					Client sampling date / time	25-Oct-2022	25-Oct-2022	25-Oct-2022	25-Oct-2022	26-Oct-2022
						WT2219916-011	WT2219916-012	WT2219916-013	WT2219916-014	WT2219916-015
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		12.6	9.52	5.12	11.2	3.06
Metals										
antimony	7440-36-0	E440	0.10	mg/kg		0.47	----	<0.10	----	<0.10
arsenic	7440-38-2	E440	0.10	mg/kg		2.15	----	2.02	----	1.73
barium	7440-39-3	E440	0.50	mg/kg		89.9	----	122	----	84.2
beryllium	7440-41-7	E440	0.10	mg/kg		0.28	----	0.22	----	0.23
boron	7440-42-8	E440	5.0	mg/kg		<5.0	----	9.1	----	6.7
boron, hot water soluble	7440-42-8	E487	0.10	mg/kg		0.28	----	0.21	----	0.19
cadmium	7440-43-9	E440	0.020	mg/kg		0.279	----	0.030	----	0.040
chromium	7440-47-3	E440	0.50	mg/kg		16.5	----	8.10	----	8.22
cobalt	7440-48-4	E440	0.10	mg/kg		4.59	----	4.38	----	2.99
copper	7440-50-8	E440	0.50	mg/kg		<20.0	----	<20.0	----	<20.0
lead	7439-92-1	E440	0.50	mg/kg		59.6	----	9.63	----	7.53
mercury	7439-97-6	E510	0.0050	mg/kg		0.0230	----	0.0099	----	0.0074
molybdenum	7439-98-7	E440	0.10	mg/kg		0.51	----	0.77	----	0.60
nickel	7440-02-0	E440	0.50	mg/kg		14.0	----	10.1	----	8.75
selenium	7782-49-2	E440	0.20	mg/kg		<0.20	----	<0.20	----	<0.20
silver	7440-22-4	E440	0.10	mg/kg		0.12	----	<0.10	----	<0.10
thallium	7440-28-0	E440	0.050	mg/kg		0.084	----	0.211	----	0.103
uranium	7440-61-1	E440	0.050	mg/kg		0.582	----	0.299	----	0.308
vanadium	7440-62-2	E440	0.20	mg/kg		22.1	----	12.0	----	20.9
zinc	7440-66-6	E440	2.0	mg/kg		46.7	----	10.2	----	12.6
Speciated Metals										
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg		<0.10	----	<0.10	----	<0.10
Volatile Organic Compounds										
Acetone	67-64-1	E611D	0.50	mg/kg		----	<0.50	----	<0.50	----
benzene	71-43-2	E611A	0.0050	mg/kg		<0.0050	----	<0.0050	----	<0.0050
benzene	71-43-2	E611D	0.0050	mg/kg		----	<0.0050	----	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
bromoform	75-25-2	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-15B 0-1	22-15B 4-4.25	22-16B 0-1	22-16B 2.5-3	22-17B 0-0.75
					Client sampling date / time	25-Oct-2022	25-Oct-2022	25-Oct-2022	25-Oct-2022	26-Oct-2022
						WT2219916-011	WT2219916-012	WT2219916-013	WT2219916-014	WT2219916-015
						Result	Result	Result	Result	Result
Volatile Organic Compounds										
bromomethane	74-83-9	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
chlorobenzene	108-90-7	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
chloroform	67-66-3	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dibromochloromethane	124-48-1	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg		----	<0.045	----	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloropropylene, cis+trans-1,3-	542-75-6	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg		----	<0.030	----	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg		----	<0.030	----	<0.030	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg		<0.015	----	<0.015	----	<0.015
ethylbenzene	100-41-4	E611D	0.015	mg/kg		----	<0.015	----	<0.015	----
hexane, n-	110-54-3	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg		----	<0.50	----	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg		----	<0.50	----	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg		----	<0.040	----	<0.040	----
styrene	100-42-5	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-15B 0-1	22-15B 4-4.25	22-16B 0-1	22-16B 2.5-3	22-17B 0-0.75
					Client sampling date / time	25-Oct-2022	25-Oct-2022	25-Oct-2022	25-Oct-2022	26-Oct-2022
						WT2219916-011	WT2219916-012	WT2219916-013	WT2219916-014	WT2219916-015
						Result	Result	Result	Result	Result
Volatile Organic Compounds										
toluene	108-88-3	E611A	0.050	mg/kg		<0.050	----	<0.050	----	<0.050
toluene	108-88-3	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
trichloroethylene	79-01-6	E611D	0.010	mg/kg		----	<0.010	----	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
vinyl chloride	75-01-4	E611D	0.020	mg/kg		----	<0.020	----	<0.020	----
xylene, m+p-	179601-23-1	E611A	0.030	mg/kg		<0.030	----	<0.030	----	<0.030
xylene, m+p-	179601-23-1	E611D	0.030	mg/kg		----	<0.030	----	<0.030	----
xylene, o-	95-47-6	E611A	0.030	mg/kg		<0.030	----	<0.030	----	<0.030
xylene, o-	95-47-6	E611D	0.030	mg/kg		----	<0.030	----	<0.030	----
xylenes, total	1330-20-7	E611A	0.050	mg/kg		<0.050	----	<0.050	----	<0.050
xylenes, total	1330-20-7	E611D	0.050	mg/kg		----	<0.050	----	<0.050	----
BTEX, total	----	E611A	0.10	mg/kg		<0.10	----	<0.10	----	<0.10
BTEX, total	----	E611D	0.10	mg/kg		----	<0.10	----	<0.10	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1	5.0	mg/kg		<5.0	----	<5.0	----	<5.0
F2 (C10-C16)	----	E601.SG-L	10	mg/kg		<10	----	<20 DLM	----	<50 DLM
F3 (C16-C34)	----	E601.SG-L	50	mg/kg		52	----	365 DLM	----	1540 DLM
F4 (C34-C50)	----	E601.SG-L	50	mg/kg		82	----	1530 DLM	----	5020 DLM
F4G-sg	----	E601.F4G-L	250	mg/kg		----	----	7040	----	18100
F1-BTEX	----	EC580	5.0	mg/kg		<5.0	----	<5.0	----	<5.0
hydrocarbons, total (C6-C50)	----	EC581	80	mg/kg		134	----	1900	----	6560
chromatogram to baseline at nC50	n/a	E601.SG-L	-	-		YES	----	NO	----	NO
Hydrocarbons Surrogates										
bromobenzotrifluoride, 2- (F2-F4 surr)	392-83-6	E601.SG-L	1.0	%		87.1	----	82.8	----	83.6
dichlorotoluene, 3,4-	97-75-0	E581.F1	1.0	%		89.8	----	77.8	----	63.2
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	460-00-4	E611A	0.10	%		96.4	----	96.9	----	95.3
bromofluorobenzene, 4-	460-00-4	E611D	0.10	%		----	112	----	108	----

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-15B 0-1	22-15B 4-4.25	22-16B 0-1	22-16B 2.5-3	22-17B 0-0.75
					Client sampling date / time	25-Oct-2022	25-Oct-2022	25-Oct-2022	25-Oct-2022	26-Oct-2022
						WT2219916-011	WT2219916-012	WT2219916-013	WT2219916-014	WT2219916-015
						Result	Result	Result	Result	Result
Volatile Organic Compounds Surrogates										
difluorobenzene, 1,4-	540-36-3	E611A	0.10	%		110	----	112	----	113
difluorobenzene, 1,4-	540-36-3	E611D	0.10	%		----	95.4	----	90.9	----
Polycyclic Aromatic Hydrocarbons										
acenaphthene	83-32-9	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	<0.050 DLM
acenaphthylene	208-96-8	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	<0.050 DLM
anthracene	120-12-7	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	<0.050 DLM
benz(a)anthracene	56-55-3	E642F	0.050	mg/kg		0.074	----	<0.050 DLM	----	<0.050 DLM
benzo(a)pyrene	50-32-8	E642F	0.050	mg/kg		0.092	----	<0.050 DLM	----	0.072
benzo(b+j)fluoranthene	n/a	E642F	0.050	mg/kg		0.114	----	<0.050 DLM	----	0.081
benzo(g,h,i)perylene	191-24-2	E642F	0.050	mg/kg		0.069	----	<0.050 DLM	----	0.177
benzo(k)fluoranthene	207-08-9	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	<0.050 DLM
chrysene	218-01-9	E642F	0.050	mg/kg		0.081	----	<0.050 DLM	----	0.198 AI
dibenz(a,h)anthracene	53-70-3	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	0.050
fluoranthene	206-44-0	E642F	0.050	mg/kg		0.081	----	<0.050 DLM	----	<0.050 DLM
fluorene	86-73-7	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	<0.050 DLM
indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.050	mg/kg		0.060	----	<0.050 DLM	----	0.055
methylnaphthalene, 1-	90-12-0	E642F	0.030	mg/kg		<0.030	----	<0.030 DLM	----	<0.030 DLM
methylnaphthalene, 1+2-	----	E642F	0.050	mg/kg		<0.050	----	<0.050	----	<0.050
methylnaphthalene, 2-	91-57-6	E642F	0.030	mg/kg		<0.030	----	<0.030 DLM	----	<0.030 DLM
naphthalene	91-20-3	E642F	0.010	mg/kg		<0.010	----	<0.020 DLM	----	<0.020 DLM
phenanthrene	85-01-8	E642F	0.050	mg/kg		<0.050	----	<0.050 DLM	----	0.053
pyrene	129-00-0	E642F	0.050	mg/kg		0.068	----	<0.050 DLM	----	<0.050 DLM
Polycyclic Aromatic Hydrocarbons Surrogates										
fluorobiphenyl, 2-	321-60-8	E642F	0.1	%		92.0	----	78.5	----	74.2
terphenyl-d14, p-	1718-51-0	E642F	0.1	%		96.8	----	78.6	----	76.6

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	22-17B 2.5-3.5	DUP3	22-03C 0-1	22-03C 2.5-2.75	----
					Client sampling date / time	26-Oct-2022	26-Oct-2022	26-Oct-2022	26-Oct-2022	----
						WT2219916-016	WT2219916-017	WT2219916-018	WT2219916-019	--------
						Result	Result	Result	Result	----
Physical Tests										
moisture	----	E144	0.25	%		10.6	11.2	16.1	22.6	----
Metals										
antimony	7440-36-0	E440	0.10	mg/kg		----	----	0.26	----	----
arsenic	7440-38-2	E440	0.10	mg/kg		----	----	2.17	----	----
barium	7440-39-3	E440	0.50	mg/kg		----	----	96.4	----	----
beryllium	7440-41-7	E440	0.10	mg/kg		----	----	0.37	----	----
boron	7440-42-8	E440	5.0	mg/kg		----	----	5.8	----	----
boron, hot water soluble	7440-42-8	E487	0.10	mg/kg		----	----	0.23	----	----
cadmium	7440-43-9	E440	0.020	mg/kg		----	----	0.258	----	----
chromium	7440-47-3	E440	0.50	mg/kg		----	----	25.2	----	----
cobalt	7440-48-4	E440	0.10	mg/kg		----	----	6.15	----	----
copper	7440-50-8	E440	0.50	mg/kg		----	----	20.4	----	----
lead	7439-92-1	E440	0.50	mg/kg		----	----	24.1	----	----
mercury	7439-97-6	E510	0.0050	mg/kg		----	----	0.0216	----	----
molybdenum	7439-98-7	E440	0.10	mg/kg		----	----	0.68	----	----
nickel	7440-02-0	E440	0.50	mg/kg		----	----	13.4	----	----
selenium	7782-49-2	E440	0.20	mg/kg		----	----	0.21	----	----
silver	7440-22-4	E440	0.10	mg/kg		----	----	<0.10	----	----
thallium	7440-28-0	E440	0.050	mg/kg		----	----	0.135	----	----
uranium	7440-61-1	E440	0.050	mg/kg		----	----	0.598	----	----
vanadium	7440-62-2	E440	0.20	mg/kg		----	----	36.0	----	----
zinc	7440-66-6	E440	2.0	mg/kg		----	----	65.2	----	----
Speciated Metals										
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg		----	----	<0.10	----	----
Volatile Organic Compounds										
Acetone	67-64-1	E611D	0.50	mg/kg		<0.50	<0.50	----	<0.50	----
benzene	71-43-2	E611A	0.0050	mg/kg		----	----	<0.0050	----	----
benzene	71-43-2	E611D	0.0050	mg/kg		<0.0050	<0.0050	----	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
bromoform	75-25-2	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----

Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	22-17B 2.5-3.5	DUP3	22-03C 0-1	22-03C 2.5-2.75	----
					Client sampling date / time	26-Oct-2022	26-Oct-2022	26-Oct-2022	26-Oct-2022	----
Analyte	CAS Number	Method	LOR	Unit		WT2219916-016	WT2219916-017	WT2219916-018	WT2219916-019	--------
						Result	Result	Result	Result	----
Volatile Organic Compounds										
bromomethane	74-83-9	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
chlorobenzene	108-90-7	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
chloroform	67-66-3	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dibromochloromethane	124-48-1	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg		<0.045	<0.045	----	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloropropylene, cis+trans-1,3-	542-75-6	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg		<0.030	<0.030	----	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg		<0.030	<0.030	----	<0.030	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg		----	----	<0.015	----	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg		<0.015	<0.015	----	<0.015	----
hexane, n-	110-54-3	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg		<0.50	<0.50	----	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg		<0.50	<0.50	----	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg		<0.040	<0.040	----	<0.040	----
styrene	100-42-5	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----

Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	22-17B 2.5-3.5	DUP3	22-03C 0-1	22-03C 2.5-2.75	----
					Client sampling date / time	26-Oct-2022	26-Oct-2022	26-Oct-2022	26-Oct-2022	----
Analyte	CAS Number	Method	LOR	Unit		WT2219916-016	WT2219916-017	WT2219916-018	WT2219916-019	--------
						Result	Result	Result	Result	----
Volatile Organic Compounds										
toluene	108-88-3	E611A	0.050	mg/kg		----	----	<0.050	----	----
toluene	108-88-3	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
trichloroethylene	79-01-6	E611D	0.010	mg/kg		<0.010	<0.010	----	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
vinyl chloride	75-01-4	E611D	0.020	mg/kg		<0.020	<0.020	----	<0.020	----
xylene, m+p-	179601-23-1	E611A	0.030	mg/kg		----	----	<0.030	----	----
xylene, m+p-	179601-23-1	E611D	0.030	mg/kg		<0.030	<0.030	----	<0.030	----
xylene, o-	95-47-6	E611A	0.030	mg/kg		----	----	<0.030	----	----
xylene, o-	95-47-6	E611D	0.030	mg/kg		<0.030	<0.030	----	<0.030	----
xylenes, total	1330-20-7	E611A	0.050	mg/kg		----	----	<0.050	----	----
xylenes, total	1330-20-7	E611D	0.050	mg/kg		<0.050	<0.050	----	<0.050	----
BTEX, total	----	E611A	0.10	mg/kg		----	----	<0.10	----	----
BTEX, total	----	E611D	0.10	mg/kg		<0.10	<0.10	----	<0.10	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1	5.0	mg/kg		----	----	<5.0	----	----
F2 (C10-C16)	----	E601.SG-L	10	mg/kg		----	----	<10	----	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg		----	----	106	----	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg		----	----	405	----	----
F4G-sg	----	E601.F4G-L	250	mg/kg		----	----	2370	----	----
F1-BTEX	----	EC580	5.0	mg/kg		----	----	<5.0	----	----
hydrocarbons, total (C6-C50)	----	EC581	80	mg/kg		----	----	511	----	----
chromatogram to baseline at nC50	n/a	E601.SG-L	-	-		----	----	NO	----	----
Hydrocarbons Surrogates										
bromobenzotrifluoride, 2- (F2-F4 surr)	392-83-6	E601.SG-L	1.0	%		----	----	80.3	----	----
dichlorotoluene, 3,4-	97-75-0	E581.F1	1.0	%		----	----	101	----	----
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	460-00-4	E611A	0.10	%		----	----	106	----	----
bromofluorobenzene, 4-	460-00-4	E611D	0.10	%		105	103	----	111	----

Analytical Results

Sub-Matrix: Soil/Solid (Matrix: Soil/Solid)					Client sample ID	22-17B 2.5-3.5	DUP3	22-03C 0-1	22-03C 2.5-2.75	----
					Client sampling date / time	26-Oct-2022	26-Oct-2022	26-Oct-2022	26-Oct-2022	----
Analyte	CAS Number	Method	LOR	Unit		WT2219916-016	WT2219916-017	WT2219916-018	WT2219916-019	--------
						Result	Result	Result	Result	----
Volatile Organic Compounds Surrogates										
difluorobenzene, 1,4-	540-36-3	E611A	0.10	%		----	----	118	----	----
difluorobenzene, 1,4-	540-36-3	E611D	0.10	%		88.6	85.9	----	92.9	----
Polycyclic Aromatic Hydrocarbons										
acenaphthene	83-32-9	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
acenaphthylene	208-96-8	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
anthracene	120-12-7	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
benz(a)anthracene	56-55-3	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
benzo(a)pyrene	50-32-8	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
benzo(b+j)fluoranthene	n/a	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
benzo(g,h,i)perylene	191-24-2	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
benzo(k)fluoranthene	207-08-9	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
chrysene	218-01-9	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
dibenz(a,h)anthracene	53-70-3	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
fluoranthene	206-44-0	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
fluorene	86-73-7	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
methylnaphthalene, 1-	90-12-0	E642F	0.030	mg/kg		----	----	<0.030 DLM	----	----
methylnaphthalene, 1+2-	----	E642F	0.050	mg/kg		----	----	<0.050	----	----
methylnaphthalene, 2-	91-57-6	E642F	0.030	mg/kg		----	----	<0.030 DLM	----	----
naphthalene	91-20-3	E642F	0.010	mg/kg		----	----	<0.020 DLM	----	----
phenanthrene	85-01-8	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
pyrene	129-00-0	E642F	0.050	mg/kg		----	----	<0.050 DLM	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
fluorobiphenyl, 2-	321-60-8	E642F	0.1	%		----	----	74.9	----	----
terphenyl-d14, p-	1718-51-0	E642F	0.1	%		----	----	77.4	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2219916**	Page	: 1 of 24
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 28-Oct-2022 10:00
PO	: ----	Issue Date	: 14-Nov-2022 17:19
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 19		
No. of samples analysed	: 19		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers occur - please see following pages for full details.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-726927-002	----	dichlorodifluoromethane	75-71-8	E611D	37.5 % LCS-L	50.0-140%	Recovery less than lower control limit

Result Qualifiers

Qualifier	*Description*
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-14B 0-2	E581.F1	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-14B 2.5-4	E581.F1	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-31 0-1	E581.F1	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] DUP 2	E581.F1	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-28 0.25-1.5	E581.F1	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-29 0.25-1.5	E581.F1	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-29 2.5-3.75	E581.F1	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-30 0-1.75	E581.F1	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
DUP1	E581.F1	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-03C 0-1	E581.F1	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-17B 0-0.75	E581.F1	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-15B 0-1	E581.F1	25-Oct-2022	02-Nov-2022	14 days	9 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-16B 0-1	E581.F1	25-Oct-2022	02-Nov-2022	14 days	9 days	✓	03-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E601.F4G-L	25-Oct-2022	04-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	3 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E601.F4G-L	24-Oct-2022	04-Nov-2022	14 days	11 days	✓	07-Nov-2022	40 days	3 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-31 0-1	E601.F4G-L	24-Oct-2022	04-Nov-2022	14 days	11 days	✓	07-Nov-2022	40 days	3 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
DUP 2	E601.F4G-L	24-Oct-2022	04-Nov-2022	14 days	11 days	✓	07-Nov-2022	40 days	3 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E601.F4G-L	26-Oct-2022	04-Nov-2022	14 days	9 days	✓	07-Nov-2022	40 days	3 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E601.F4G-L	26-Oct-2022	04-Nov-2022	14 days	9 days	✓	07-Nov-2022	40 days	3 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E601.SG-L	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E601.SG-L	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-31 0-1	E601.SG-L	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
DUP 2	E601.SG-L	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E601.SG-L	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E601.SG-L	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	4 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E601.SG-L	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E601.SG-L	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
DUP1	E601.SG-L	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E601.SG-L	26-Oct-2022	03-Nov-2022	14 days	8 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E601.SG-L	26-Oct-2022	03-Nov-2022	14 days	8 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E601.SG-L	25-Oct-2022	03-Nov-2022	14 days	9 days	✓	07-Nov-2022	40 days	4 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E601.SG-L	25-Oct-2022	03-Nov-2022	14 days	9 days	✓	07-Nov-2022	40 days	4 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E487	26-Oct-2022	11-Nov-2022	180 days	17 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E487	26-Oct-2022	11-Nov-2022	180 days	17 days	✓	11-Nov-2022	180 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E487	25-Oct-2022	11-Nov-2022	180 days	18 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E487	25-Oct-2022	11-Nov-2022	180 days	18 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E487	24-Oct-2022	11-Nov-2022	180 days	19 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E487	24-Oct-2022	11-Nov-2022	180 days	19 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-31 0-1	E487	24-Oct-2022	11-Nov-2022	180 days	19 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
DUP 2	E487	24-Oct-2022	11-Nov-2022	180 days	19 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E487	21-Oct-2022	11-Nov-2022	180 days	22 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E487	21-Oct-2022	11-Nov-2022	180 days	22 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E487	21-Oct-2022	11-Nov-2022	180 days	22 days	✓	11-Nov-2022	180 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E487	21-Oct-2022	11-Nov-2022	180 days	22 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
DUP1	E487	21-Oct-2022	11-Nov-2022	180 days	22 days	✓	11-Nov-2022	180 days	0 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E510	26-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	20 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E510	26-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	20 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E510	25-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	21 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E510	25-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	21 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E510	24-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	22 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E510	24-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	22 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-31 0-1	E510	24-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	22 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
DUP 2	E510	24-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	22 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E510	21-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	25 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E510	21-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	25 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E510	21-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	25 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E510	21-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	25 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
DUP1	E510	21-Oct-2022	11-Nov-2022	----	----		14-Nov-2022	28 days	25 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E440	26-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	17 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E440	26-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	17 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E440	25-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	18 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E440	25-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	18 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E440	24-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	19 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E440	24-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	19 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-31 0-1	E440	24-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	19 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
DUP 2	E440	24-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	19 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E440	21-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	22 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E440	21-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	22 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E440	21-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	22 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E440	21-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	22 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
DUP1	E440	21-Oct-2022	11-Nov-2022	----	----		11-Nov-2022	180 days	22 days	✓
Particle Size : Grain Size Report (Attachment) Hydrometer/Sieve Method										
Glass soil jar/Teflon lined cap										
22-31 2.5-3.5	E185	24-Oct-2022	----	----	----		07-Nov-2022	----	----	
Particle Size : Particle Size Analysis - Hydrometer										
Glass soil jar/Teflon lined cap										
22-31 2.5-3.5	E183	24-Oct-2022	02-Nov-2022	----	----		02-Nov-2022	365 days	10 days	✓
Particle Size : Particle Size Analysis - Sieve <2mm										
Glass soil jar/Teflon lined cap										
22-31 2.5-3.5	E182	24-Oct-2022	02-Nov-2022	----	----		02-Nov-2022	365 days	10 days	✓
Particle Size : Particle Size Analysis - Sieve >2mm										
Glass soil jar/Teflon lined cap										
22-31 2.5-3.5	E181	24-Oct-2022	02-Nov-2022	----	----		02-Nov-2022	365 days	10 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E144	26-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-03C 2.5-2.75	E144	26-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E144	24-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E144	24-Oct-2022	----	----	----		02-Nov-2022	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E144	25-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-15B 4-4.25	E144	25-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E144	25-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-16B 2.5-3	E144	25-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E144	26-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-17B 2.5-3.5	E144	26-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E144	21-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E144	21-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E144	21-Oct-2022	----	----	----		02-Nov-2022	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E144	21-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-31 0-1	E144	24-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP 2	E144	24-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP1	E144	21-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP3	E144	26-Oct-2022	----	----	----		02-Nov-2022	----	----	
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap										
22-31 2.5-3.5	E108A	24-Oct-2022	03-Nov-2022	----	----		03-Nov-2022	30 days	10 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E642F	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E642F	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-31 0-1	E642F	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	5 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
DUP 2	E642F	24-Oct-2022	03-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E642F	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E642F	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E642F	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E642F	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
DUP1	E642F	21-Oct-2022	03-Nov-2022	14 days	13 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E642F	26-Oct-2022	03-Nov-2022	14 days	8 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E642F	26-Oct-2022	03-Nov-2022	14 days	8 days	✓	07-Nov-2022	40 days	5 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E642F	25-Oct-2022	03-Nov-2022	14 days	9 days	✓	07-Nov-2022	40 days	5 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by MeOH:Tol GC-MS										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E642F	25-Oct-2022	03-Nov-2022	14 days	9 days	✓	07-Nov-2022	40 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-14B 0-2	E532	24-Oct-2022	03-Nov-2022	30 days	10 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-14B 2.5-4	E532	24-Oct-2022	03-Nov-2022	30 days	10 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-31 0-1	E532	24-Oct-2022	03-Nov-2022	30 days	10 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
DUP 2	E532	24-Oct-2022	03-Nov-2022	30 days	10 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-28 0.25-1.5	E532	21-Oct-2022	03-Nov-2022	30 days	13 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-29 0.25-1.5	E532	21-Oct-2022	03-Nov-2022	30 days	13 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-29 2.5-3.75	E532	21-Oct-2022	03-Nov-2022	30 days	13 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-30 0-1.75	E532	21-Oct-2022	03-Nov-2022	30 days	13 days	✓	08-Nov-2022	7 days	5 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
DUP1	E532	21-Oct-2022	03-Nov-2022	30 days	13 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-03C 0-1	E532	26-Oct-2022	03-Nov-2022	30 days	8 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-17B 0-0.75	E532	26-Oct-2022	03-Nov-2022	30 days	8 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-15B 0-1	E532	25-Oct-2022	03-Nov-2022	30 days	9 days	✓	08-Nov-2022	7 days	5 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-16B 0-1	E532	25-Oct-2022	03-Nov-2022	30 days	9 days	✓	08-Nov-2022	7 days	5 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-14B 0-2	E611A	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-14B 2.5-4	E611A	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-31 0-1	E611A	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
DUP 2	E611A	24-Oct-2022	02-Nov-2022	14 days	10 days	✓	03-Nov-2022	40 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-28 0.25-1.5	E611A	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-29 0.25-1.5	E611A	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-29 2.5-3.75	E611A	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-30 0-1.75	E611A	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] DUP1	E611A	21-Oct-2022	02-Nov-2022	14 days	13 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-03C 0-1	E611A	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-17B 0-0.75	E611A	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-15B 0-1	E611A	25-Oct-2022	02-Nov-2022	14 days	9 days	✓	03-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-16B 0-1	E611A	25-Oct-2022	02-Nov-2022	14 days	9 days	✓	03-Nov-2022	40 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-03C 2.5-2.75	E611D	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-17B 2.5-3.5	E611D	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] DUP3	E611D	26-Oct-2022	02-Nov-2022	14 days	8 days	✓	03-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-15B 4-4.25	E611D	25-Oct-2022	02-Nov-2022	14 days	9 days	✓	03-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-16B 2.5-3	E611D	25-Oct-2022	02-Nov-2022	14 days	9 days	✓	03-Nov-2022	40 days	1 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: ✗ = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Boron-Hot Water Extractable by ICPOES	E487	727657	1	19	5.2	5.0	✓
BTEX by Headspace GC-MS	E611A	726588	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	726589	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	733426	0	6	0.0	5.0	✗
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	727656	1	19	5.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	727655	1	19	5.2	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	727658	1	19	5.2	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	727659	1	19	5.2	5.0	✓
Moisture Content by Gravimetry	E144	726321	1	20	5.0	5.0	✓
PAHs by MeOH:Tol GC-MS	E642F	727654	1	13	7.6	5.0	✓
Particle Size Analysis - Hydrometer	E183	727095	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve <2mm	E182	727094	1	1	100.0	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	727660	1	7	14.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	726927	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Boron-Hot Water Extractable by ICPOES	E487	727657	2	19	10.5	10.0	✓
BTEX by Headspace GC-MS	E611A	726588	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	726589	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	733426	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	727656	1	19	5.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	727655	2	19	10.5	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	727658	2	19	10.5	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	727659	2	19	10.5	10.0	✓
Moisture Content by Gravimetry	E144	726321	1	20	5.0	5.0	✓
PAHs by MeOH:Tol GC-MS	E642F	727654	1	13	7.6	5.0	✓
Particle Size Analysis - Hydrometer	E183	727095	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve <2mm	E182	727094	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve >2mm	E181	727093	1	1	100.0	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	727660	1	7	14.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	726927	1	20	5.0	5.0	✓
Method Blanks (MB)							
Boron-Hot Water Extractable by ICPOES	E487	727657	1	19	5.2	5.0	✓
BTEX by Headspace GC-MS	E611A	726588	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	726589	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	733426	1	6	16.6	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Method Blanks (MB) - Continued							
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	727656	1	19	5.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	727655	1	19	5.2	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	727658	1	19	5.2	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	727659	1	19	5.2	5.0	✓
Moisture Content by Gravimetry	E144	726321	1	20	5.0	5.0	✓
PAHs by MeOH:Tol GC-MS	E642F	727654	1	13	7.6	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	726927	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	726588	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	726589	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	733426	0	6	0.0	5.0	×
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	727656	1	19	5.2	5.0	✓
PAHs by MeOH:Tol GC-MS	E642F	727654	1	13	7.6	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	726927	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A Waterloo - Environmental	Soil/Solid	MOEE E3137A	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C) and is carried out in accordance with procedures described in the Analytical Protocol (prescriptive method). A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling, or decanting and then analyzed using a pH meter and electrode.
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Particle Size Analysis - Sieve >2mm	E181 Saskatoon - Environmental	Soil/Solid	ASTM D6913-17 (mod)	Soil samples are disaggregated and sieved through a 2mm sieve. Material retained on the sieve is then further sieved through a series of sieves. The amount passing through the sieves is measured gravimetrically.
Particle Size Analysis - Sieve <2mm	E182 Saskatoon - Environmental	Soil/Solid	ASTM D6913-17 (mod)	Soil samples are disaggregated and sieved through a 2mm sieve. Material passed through the sieve is then further disaggregated using calgon solution and passed through a series of sieves. The amount passing through the sieves is measured gravimetrically.
Particle Size Analysis - Hydrometer	E183 Saskatoon - Environmental	Soil/Solid	ASTM D7928-21 (mod)	Soil material is separated from coarse material (>2mm). A specimen is then disaggregated through mixing with Calgon solution. The material is then suspended in solution wherein regular hydrometer readings are taken at specific time intervals. The principles of Stokes' Law are applied to determine the amount of material remaining in solution as well as the maximum particle size remaining in solution at the specified time.
Grain Size Report (Attachment) Hydrometer/Sieve Method	E185 Saskatoon - Environmental	Soil/Solid	ASTM D6913/D7928	A grain size curve is a graphical representation of the particle sizing of a sample representing the percent passing against the effective particle size.
Metals in Soil/Solid by CRC ICPMS	E440 Waterloo - Environmental	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Boron-Hot Water Extractable by ICPOES	E487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS	E510 Waterloo - Environmental	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 Waterloo - Environmental	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	A portion of the silica gel treated sample extract is filtered and dried at 105°C and the mass of the residual gravimetric heavy hydrocarbons (F4G) is determined gravimetrically.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
BTEX by Headspace GC-MS	E611A Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by MeOH:Tol GC-MS	E642F Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with methanol/toluene and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
F1-BTEX	EC580 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil : 0.01CaCl2 - As Received for pH	EP108A Waterloo - Environmental	Soil/Solid	MOEE E3137A	A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling or decanting and then analyzed using a pH meter and electrode.
Digestion for Metals and Mercury	EP440 Waterloo - Environmental	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 Waterloo - Environmental	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.
Pesticides, PCB, PAH, and Neutral Extractable Chlorinated Hydrocarbons Extraction (High Level)	EP660-H Waterloo - Environmental	Soil/Solid	EPA 3570 (mod)	A homogenized subsample is extracted with organic solvents using a mechanical shaker.
Dry and Grind in Soil/Solid <60°C	EPP442 Waterloo - Environmental	Soil/Solid	Soil Sampling and Methods of Analysis, Carter 2008	After removal of any coarse fragments and reservation of wet subsamples a portion of homogenized sample is set in a tray and dried at less than 60°C until dry. The sample is then particle size reduced with an automated crusher or mortar and pestle, typically to <2 mm. Further size reduction may be needed for particular tests.

QUALITY CONTROL REPORT

Work Order	: **WT2219916**	Page	: 1 of 19
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 28-Oct-2022 10:00
PO	: ----	Date Analysis Commenced	: 01-Nov-2022
C-O-C number	: ----	Issue Date	: 14-Nov-2022 17:19
Sampler	: ---- 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 19		
No. of samples analysed	: 19		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Hedy Lai	Team Leader - Inorganics	Saskatoon Sask Soils, Saskatoon, Saskatchewan
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Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Waterloo Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Joseph Scharbach		Waterloo Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 726321)											
WT2219916-001	22-28 0.25-1.5	moisture	----	E144	0.25	%	11.1	10.8	2.37%	20%	----
Physical Tests (QC Lot: 727660)											
WT2219916-007	22-31 2.5-3.5	pH (1:2 soil:CaCl2-aq)	----	E108A	0.10	pH units	7.88	7.92	0.506%	5%	----
Particle Size (QC Lot: 727094)											
WT2219916-007	22-31 2.5-3.5	passing (0.05 mm)	----	E182	1.0	%	41.0	40.1	2.36%	15%	----
		passing (0.063 mm)	----	E182	1.0	%	44.2	43.8	0.808%	15%	----
		passing (0.075 mm)	----	E182	1.0	%	47.1	47.3	0.421%	15%	----
		passing (0.125 mm)	----	E182	1.0	%	55.8	55.8	0.0848%	15%	----
		passing (0.149 mm)	----	E182	1.0	%	60.0	60.0	0.0422%	15%	----
		passing (0.250 mm)	----	E182	1.0	%	71.5	71.6	0.0496%	15%	----
		passing (0.420 mm)	----	E182	1.0	%	81.2	81.0	0.182%	15%	----
		passing (0.50 mm)	----	E182	1.0	%	82.9	82.7	0.180%	15%	----
		passing (0.841 mm)	----	E182	1.0	%	89.3	89.2	0.143%	15%	----
		passing (1.0 mm)	----	E182	1.0	%	90.5	90.4	0.122%	15%	----
Particle Size (QC Lot: 727095)											
WT2219916-007	22-31 2.5-3.5	passing (0.002 mm)	----	E183	1.0	%	9.0	8.3	0.7	Diff <2x LOR	----
		passing (0.004 mm)	----	E183	1.0	%	13.7	12.5	8.89%	20%	----
		passing (0.005 mm)	----	E183	1.0	%	15.4	14.0	9.74%	20%	----
		passing (0.020 mm)	----	E183	1.0	%	30.3	28.3	6.88%	20%	----
		passing (0.0312 mm)	----	E183	1.0	%	35.4	33.4	5.89%	20%	----
Metals (QC Lot: 727657)											
WT2219916-001	22-28 0.25-1.5	boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	0.11	0.11	0.0004	Diff <2x LOR	----
Metals (QC Lot: 727658)											
WT2219916-001	22-28 0.25-1.5	mercury	7439-97-6	E510	0.0050	mg/kg	0.0068	0.0076	0.0009	Diff <2x LOR	----
Metals (QC Lot: 727659)											
WT2219916-001	22-28 0.25-1.5	antimony	7440-36-0	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		arsenic	7440-38-2	E440	0.10	mg/kg	1.67	1.69	1.31%	30%	----
		barium	7440-39-3	E440	0.50	mg/kg	70.1	70.9	1.13%	40%	----
		beryllium	7440-41-7	E440	0.10	mg/kg	0.23	0.23	0.004	Diff <2x LOR	----
		boron	7440-42-8	E440	5.0	mg/kg	<5.0	5.0	0.007	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 727659) - continued											
WT2219916-001	22-28 0.25-1.5	cadmium	7440-43-9	E440	0.020	mg/kg	0.035	0.035	0.0001	Diff <2x LOR	----
		chromium	7440-47-3	E440	0.50	mg/kg	11.1	11.2	1.02%	30%	----
		cobalt	7440-48-4	E440	0.10	mg/kg	4.46	4.50	1.02%	30%	----
		copper	7440-50-8	E440	20.0	mg/kg	<20.0	<20.0	0	Diff <2x LOR	----
		lead	7439-92-1	E440	0.50	mg/kg	4.18	4.01	4.22%	40%	----
		molybdenum	7439-98-7	E440	0.10	mg/kg	0.42	0.40	0.02	Diff <2x LOR	----
		nickel	7440-02-0	E440	0.50	mg/kg	7.77	7.98	2.72%	30%	----
		selenium	7782-49-2	E440	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	----
		silver	7440-22-4	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		thallium	7440-28-0	E440	0.050	mg/kg	0.101	0.096	0.005	Diff <2x LOR	----
		uranium	7440-61-1	E440	0.050	mg/kg	0.477	0.442	7.46%	30%	----
		vanadium	7440-62-2	E440	0.20	mg/kg	22.5	21.9	2.63%	30%	----
		zinc	7440-66-6	E440	2.0	mg/kg	15.4	16.1	3.99%	30%	----
Speciated Metals (QC Lot: 727655)											
WT2219916-001	22-28 0.25-1.5	chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 726588)											
WT2219916-001	22-28 0.25-1.5	benzene	71-43-2	E611A	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 726927)											
WT2219913-006	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	0.0050	0.00005	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 726927) - continued											
WT2219913-006	Anonymous	dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 726589)											
WT2219916-001	22-28 0.25-1.5	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 727656)											
WT2219916-001	22-28 0.25-1.5	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	<10	0	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Polycyclic Aromatic Hydrocarbons (QC Lot: 727654)											
WT2219916-001	22-28 0.25-1.5	acenaphthene	83-32-9	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		acenaphthylene	208-96-8	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		anthracene	120-12-7	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benz(a)anthracene	56-55-3	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(a)pyrene	50-32-8	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(b+j)fluoranthene	n/a	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(g,h,i)perylene	191-24-2	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(k)fluoranthene	207-08-9	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chrysene	218-01-9	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibenz(a,h)anthracene	53-70-3	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluoranthene	206-44-0	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluorene	86-73-7	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methylnaphthalene, 1-	90-12-0	E642F	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		methylnaphthalene, 2-	91-57-6	E642F	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		naphthalene	91-20-3	E642F	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		phenanthrene	85-01-8	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		pyrene	129-00-0	E642F	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 726321)						
moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 727657)						
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Metals (QCLot: 727658)						
mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 727659)						
antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
boron	7440-42-8	E440	5	mg/kg	<5.0	----
cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Speciated Metals (QCLot: 727655)						
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 726588)						
benzene	71-43-2	E611A	0.005	mg/kg	<0.0050	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015	----
toluene	108-88-3	E611A	0.05	mg/kg	<0.050	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	<0.030	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 726927)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 726927) - continued						
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----
Hydrocarbons (QCLot: 726589)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 727656)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Hydrocarbons (QCLot: 733426)						
F4G-sg	----	E601.F4G-L	250	mg/kg	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 727654)						
acenaphthene	83-32-9	E642F	0.05	mg/kg	<0.050	----
acenaphthylene	208-96-8	E642F	0.05	mg/kg	<0.050	----
anthracene	120-12-7	E642F	0.05	mg/kg	<0.050	----
benz(a)anthracene	56-55-3	E642F	0.05	mg/kg	<0.050	----
benzo(a)pyrene	50-32-8	E642F	0.05	mg/kg	<0.050	----
benzo(b+j)fluoranthene	n/a	E642F	0.05	mg/kg	<0.050	----
benzo(g,h,i)perylene	191-24-2	E642F	0.05	mg/kg	<0.050	----
benzo(k)fluoranthene	207-08-9	E642F	0.05	mg/kg	<0.050	----
chrysene	218-01-9	E642F	0.05	mg/kg	<0.050	----
dibenz(a,h)anthracene	53-70-3	E642F	0.05	mg/kg	<0.050	----
fluoranthene	206-44-0	E642F	0.05	mg/kg	<0.050	----
fluorene	86-73-7	E642F	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.05	mg/kg	<0.050	----
methylnaphthalene, 1-	90-12-0	E642F	0.03	mg/kg	<0.030	----
methylnaphthalene, 2-	91-57-6	E642F	0.03	mg/kg	<0.030	----
naphthalene	91-20-3	E642F	0.01	mg/kg	<0.010	----
phenanthrene	85-01-8	E642F	0.05	mg/kg	<0.050	----
pyrene	129-00-0	E642F	0.05	mg/kg	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 726321)									
moisture	----	E144	0.25	%	50 %	100	90.0	110	----
Physical Tests (QCLot: 727660)									
pH (1:2 soil:CaCl2-aq)	----	E108A	----	pH units	7 pH units	101	98.0	102	----
Metals (QCLot: 727657)									
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	1.33333 mg/kg	104	70.0	130	----
Metals (QCLot: 727658)									
mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	104	80.0	120	----
Metals (QCLot: 727659)									
antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	99.8	80.0	120	----
arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	104	80.0	120	----
barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	103	80.0	120	----
beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	88.7	80.0	120	----
boron	7440-42-8	E440	5	mg/kg	100 mg/kg	88.2	80.0	120	----
cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	97.1	80.0	120	----
chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	96.6	80.0	120	----
cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	96.3	80.0	120	----
copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	94.2	80.0	120	----
lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	95.2	80.0	120	----
molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	104	80.0	120	----
nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	95.7	80.0	120	----
selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	99.0	80.0	120	----
silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	88.1	80.0	120	----
thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	92.8	80.0	120	----
uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	100	80.0	120	----
vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	99.5	80.0	120	----
zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	96.6	80.0	120	----
Speciated Metals (QCLot: 727655)									
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	87.4	80.0	120	----
Volatile Organic Compounds (QCLot: 726588)									
benzene	71-43-2	E611A	0.005	mg/kg	3.475 mg/kg	117	70.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 726588) - continued									
ethylbenzene	100-41-4	E611A	0.015	mg/kg	3.475 mg/kg	102	70.0	130	----
toluene	108-88-3	E611A	0.05	mg/kg	3.475 mg/kg	103	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	6.95 mg/kg	96.3	70.0	130	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	3.475 mg/kg	99.9	70.0	130	----
Volatile Organic Compounds (QCLot: 726927)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	101	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	113	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	122	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	80.0	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	78.8	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	122	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	99.4	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	114	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	101	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	88.5	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	95.6	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	98.6	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	99.6	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	# 37.5	50.0	140	LCS-L
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	107	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	103	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	102	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	107	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	103	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	105	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	91.1	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	101	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	96.7	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	102	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	95.7	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	101	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	98.4	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	104	60.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	95.4	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 726927) - continued									
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	103	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	98.1	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	108	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	88.0	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	116	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	94.0	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	72.6	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	104	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	98.0	70.0	130	----
Hydrocarbons (QCLot: 726589)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	100	80.0	120	----
Hydrocarbons (QCLot: 727656)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	875.7188 mg/kg	93.0	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1061.494 mg/kg	87.4	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	971.6625 mg/kg	71.7	70.0	130	----
Hydrocarbons (QCLot: 733426)									
F4G-sg	----	E601.F4G-L	250	mg/kg	1298.6 mg/kg	73.8	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 727654)									
acenaphthene	83-32-9	E642F	0.05	mg/kg	0.8 mg/kg	88.6	60.0	130	----
acenaphthylene	208-96-8	E642F	0.05	mg/kg	0.8 mg/kg	88.6	60.0	130	----
anthracene	120-12-7	E642F	0.05	mg/kg	0.8 mg/kg	94.8	60.0	130	----
benz(a)anthracene	56-55-3	E642F	0.05	mg/kg	0.8 mg/kg	93.4	60.0	130	----
benzo(a)pyrene	50-32-8	E642F	0.05	mg/kg	0.8 mg/kg	99.7	60.0	130	----
benzo(b+j)fluoranthene	n/a	E642F	0.05	mg/kg	0.8 mg/kg	83.4	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E642F	0.05	mg/kg	0.8 mg/kg	94.1	60.0	130	----
benzo(k)fluoranthene	207-08-9	E642F	0.05	mg/kg	0.8 mg/kg	105	60.0	130	----
chrysene	218-01-9	E642F	0.05	mg/kg	0.8 mg/kg	105	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E642F	0.05	mg/kg	0.8 mg/kg	91.0	60.0	130	----
fluoranthene	206-44-0	E642F	0.05	mg/kg	0.8 mg/kg	87.9	60.0	130	----
fluorene	86-73-7	E642F	0.05	mg/kg	0.8 mg/kg	87.2	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.05	mg/kg	0.8 mg/kg	81.4	60.0	130	----
methylnaphthalene, 1-	90-12-0	E642F	0.03	mg/kg	0.8 mg/kg	92.5	60.0	130	----
methylnaphthalene, 2-	91-57-6	E642F	0.03	mg/kg	0.8 mg/kg	90.4	60.0	130	----
naphthalene	91-20-3	E642F	0.01	mg/kg	0.8 mg/kg	90.4	60.0	130	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 727654) - continued									
phenanthrene	85-01-8	E642F	0.05	mg/kg	0.8 mg/kg	91.4	60.0	130	----
pyrene	129-00-0	E642F	0.05	mg/kg	0.8 mg/kg	88.6	60.0	130	----

Qualifiers

Qualifier	Description
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 726588)										
WT2219916-001	22-28 0.25-1.5	benzene	71-43-2	E611A	2.62 mg/kg	3.125 mg/kg	113	60.0	140	----
		ethylbenzene	100-41-4	E611A	2.36 mg/kg	3.125 mg/kg	102	60.0	140	----
		toluene	108-88-3	E611A	2.40 mg/kg	3.125 mg/kg	103	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	4.46 mg/kg	6.25 mg/kg	95.9	60.0	140	----
		xylene, o-	95-47-6	E611A	2.32 mg/kg	3.125 mg/kg	99.8	60.0	140	----
Volatile Organic Compounds (QCLot: 726927)										
WT2219913-006	Anonymous	Acetone	67-64-1	E611D	2.18 mg/kg	3.125 mg/kg	90.4	50.0	140	----
		benzene	71-43-2	E611D	2.32 mg/kg	3.125 mg/kg	95.9	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.66 mg/kg	3.125 mg/kg	110	50.0	140	----
		bromoform	75-25-2	E611D	1.99 mg/kg	3.125 mg/kg	82.5	50.0	140	----
		bromomethane	74-83-9	E611D	2.09 mg/kg	3.125 mg/kg	86.3	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.49 mg/kg	3.125 mg/kg	103	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.39 mg/kg	3.125 mg/kg	98.7	50.0	140	----
		chloroform	67-66-3	E611D	2.30 mg/kg	3.125 mg/kg	95.2	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.45 mg/kg	3.125 mg/kg	101	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.21 mg/kg	3.125 mg/kg	91.4	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.29 mg/kg	3.125 mg/kg	94.6	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.32 mg/kg	3.125 mg/kg	95.8	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.34 mg/kg	3.125 mg/kg	97.0	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.80 mg/kg	3.125 mg/kg	74.4	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.35 mg/kg	3.125 mg/kg	97.1	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.28 mg/kg	3.125 mg/kg	94.2	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.23 mg/kg	3.125 mg/kg	92.4	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.38 mg/kg	3.125 mg/kg	98.4	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.32 mg/kg	3.125 mg/kg	96.0	50.0	140	----
		dichloromethane	75-09-2	E611D	2.31 mg/kg	3.125 mg/kg	95.5	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.34 mg/kg	3.125 mg/kg	96.9	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.28 mg/kg	3.125 mg/kg	94.3	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.23 mg/kg	3.125 mg/kg	92.1	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.41 mg/kg	3.125 mg/kg	99.8	50.0	140	----
		hexane, n-	110-54-3	E611D	2.32 mg/kg	3.125 mg/kg	95.8	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 726927) - continued										
WT2219913-006	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	2.22 mg/kg	3.125 mg/kg	91.7	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.21 mg/kg	3.125 mg/kg	91.5	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.42 mg/kg	3.125 mg/kg	100	50.0	140	----
		styrene	100-42-5	E611D	2.38 mg/kg	3.125 mg/kg	98.5	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.49 mg/kg	3.125 mg/kg	103	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.38 mg/kg	3.125 mg/kg	98.4	50.0	140	----
		tetrachloroethylene	127-18-4	E611D	2.45 mg/kg	3.125 mg/kg	101	50.0	140	----
		toluene	108-88-3	E611D	2.36 mg/kg	3.125 mg/kg	97.8	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.44 mg/kg	3.125 mg/kg	101	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.20 mg/kg	3.125 mg/kg	90.9	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.34 mg/kg	3.125 mg/kg	96.7	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.30 mg/kg	3.125 mg/kg	95.3	50.0	140	----
		vinyl chloride	75-01-4	E611D	1.93 mg/kg	3.125 mg/kg	79.8	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.94 mg/kg	6.25 mg/kg	102	50.0	140	----
		xylene, o-	95-47-6	E611D	2.35 mg/kg	3.125 mg/kg	97.2	50.0	140	----
Hydrocarbons (QCLot: 726589)										
WT2219916-001	22-28 0.25-1.5	F1 (C6-C10)	----	E581.F1	37.5 mg/kg	62.5 mg/kg	80.8	60.0	140	----
Hydrocarbons (QCLot: 727656)										
WT2219916-001	22-28 0.25-1.5	F2 (C10-C16)	----	E601.SG-L	696 mg/kg	924.49 mg/kg	89.3	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	794 mg/kg	1108.95 mg/kg	84.9	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	765 mg/kg	1071.36 mg/kg	84.7	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 727654)										
WT2219916-001	22-28 0.25-1.5	acenaphthene	83-32-9	E642F	0.731 mg/kg	0.8 mg/kg	92.2	50.0	140	----
		acenaphthylene	208-96-8	E642F	0.772 mg/kg	0.8 mg/kg	97.4	50.0	140	----
		anthracene	120-12-7	E642F	0.803 mg/kg	0.8 mg/kg	101	50.0	140	----
		benz(a)anthracene	56-55-3	E642F	0.886 mg/kg	0.8 mg/kg	112	50.0	140	----
		benzo(a)pyrene	50-32-8	E642F	0.863 mg/kg	0.8 mg/kg	109	50.0	140	----
		benzo(b+j)fluoranthene	n/a	E642F	0.706 mg/kg	0.8 mg/kg	89.0	50.0	140	----
		benzo(g,h,i)perylene	191-24-2	E642F	0.751 mg/kg	0.8 mg/kg	94.7	50.0	140	----
		benzo(k)fluoranthene	207-08-9	E642F	0.819 mg/kg	0.8 mg/kg	103	50.0	140	----
		chrysene	218-01-9	E642F	0.812 mg/kg	0.8 mg/kg	102	50.0	140	----
		dibenz(a,h)anthracene	53-70-3	E642F	0.732 mg/kg	0.8 mg/kg	92.3	50.0	140	----
		fluoranthene	206-44-0	E642F	0.748 mg/kg	0.8 mg/kg	94.4	50.0	140	----
		fluorene	86-73-7	E642F	0.732 mg/kg	0.8 mg/kg	92.4	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 727654) - continued										
WT2219916-001	22-28 0.25-1.5	indeno(1,2,3-c,d)pyrene	193-39-5	E642F	0.639 mg/kg	0.8 mg/kg	80.6	50.0	140	----
		methylnaphthalene, 1-	90-12-0	E642F	0.753 mg/kg	0.8 mg/kg	94.9	50.0	140	----
		methylnaphthalene, 2-	91-57-6	E642F	0.736 mg/kg	0.8 mg/kg	92.9	50.0	140	----
		naphthalene	91-20-3	E642F	0.723 mg/kg	0.8 mg/kg	91.2	50.0	140	----
		phenanthrene	85-01-8	E642F	0.724 mg/kg	0.8 mg/kg	91.3	50.0	140	----
		pyrene	129-00-0	E642F	0.749 mg/kg	0.8 mg/kg	94.4	50.0	140	----

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Particle Size (QCLot: 727093)									
	RM	passing (19 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (2.0 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (25.4 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (38.1 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (4.75 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (50.8 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (76.2 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (9.5 mm)	----	E181	100 %	100	90.0	110	----
Particle Size (QCLot: 727094)									
	RM	passing (0.05 mm)	----	E182	49.81 %	96.8	90.0	110	----
	RM	passing (0.063 mm)	----	E182	54.27 %	97.5	90.8	109	----
	RM	passing (0.075 mm)	----	E182	58.38 %	98.1	91.4	109	----
	RM	passing (0.125 mm)	----	E182	68.06 %	96.2	92.7	107	----
	RM	passing (0.149 mm)	----	E182	72.71 %	95.6	93.1	107	----
	RM	passing (0.250 mm)	----	E182	85.38 %	97.3	94.1	106	----
	RM	passing (0.420 mm)	----	E182	92.78 %	99.1	94.6	105	----
	RM	passing (0.50 mm)	----	E182	93.78 %	99.2	94.7	105	----
	RM	passing (0.841 mm)	----	E182	97.34 %	99.4	94.9	105	----
	RM	passing (1.0 mm)	----	E182	97.77 %	99.5	94.9	105	----
Particle Size (QCLot: 727095)									
	RM	passing (0.002 mm)	----	E183	21.14 %	94.4	76.0	124	----
	RM	passing (0.004 mm)	----	E183	24.64 %	95.1	80.0	120	----
	RM	passing (0.005 mm)	----	E183	25.91 %	96.8	82.0	118	----
	RM	passing (0.020 mm)	----	E183	37.12 %	102	87.0	113	----
	RM	passing (0.0312 mm)	----	E183	42.58 %	102	88.0	112	----
Metals (QCLot: 727657)									
	RM	boron, hot water soluble	7440-42-8	E487	1.4938 mg/kg	109	60.0	140	----
Metals (QCLot: 727658)									

Sub-Matrix:

Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Reference Material (RM) Report: RM Target Concentration	Recovery (%): RM	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Metals (QCLot: 727658) - continued									
	RM	mercury	7439-97-6	E510	0.0585 mg/kg	102	70.0	130	----
Metals (QCLot: 727659)									
	RM	antimony	7440-36-0	E440	3.99 mg/kg	97.5	70.0	130	----
	RM	arsenic	7440-38-2	E440	3.73 mg/kg	104	70.0	130	----
	RM	barium	7440-39-3	E440	105 mg/kg	106	70.0	130	----
	RM	beryllium	7440-41-7	E440	0.349 mg/kg	95.3	70.0	130	----
	RM	boron	7440-42-8	E440	8.5 mg/kg	96.1	40.0	160	----
	RM	cadmium	7440-43-9	E440	0.91 mg/kg	94.4	70.0	130	----
	RM	chromium	7440-47-3	E440	101 mg/kg	98.0	70.0	130	----
	RM	cobalt	7440-48-4	E440	6.9 mg/kg	98.2	70.0	130	----
	RM	copper	7440-50-8	E440	123 mg/kg	99.4	70.0	130	----
	RM	lead	7439-92-1	E440	267 mg/kg	97.7	70.0	130	----
	RM	molybdenum	7439-98-7	E440	1.03 mg/kg	105	70.0	130	----
	RM	nickel	7440-02-0	E440	26.7 mg/kg	99.4	70.0	130	----
	RM	silver	7440-22-4	E440	4.06 mg/kg	109	70.0	130	----
	RM	thallium	7440-28-0	E440	0.0786 mg/kg	95.8	40.0	160	----
	RM	uranium	7440-61-1	E440	0.52 mg/kg	98.4	70.0	130	----
	RM	vanadium	7440-62-2	E440	32.7 mg/kg	99.3	70.0	130	----
	RM	zinc	7440-66-6	E440	297 mg/kg	97.8	70.0	130	----
Speciated Metals (QCLot: 727655)									
	RM	chromium, hexavalent [Cr VI]	18540-29-9	E532	172 mg/kg	89.3	70.0	130	----

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009754

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Environmental Division
Waterloo
Work Order Reference
WT2219916

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Omni-McCamman	Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Daniel Elliot	Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge m
Phone:	613-857-4936	☐ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge r
	Company address below will appear on the final report	Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge r
Street:	1755 Woodward Drive, unit 200	Email 1 or Fax dan@omnimccamm.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge n
City/Province:	Ottawa, ON	Email 2 antonia@omnimccamm.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharg may apply to rush requests on weekends, statutory holidays and
Postal Code:	K2C0P9	Email 3 Kristina@omnimccamm.com	Date and Time Required for all E&P TATs:
Invoice To	Same as Report To ☒ YES ☐ NO	Invoice Recipients	For all tests with rush TATs requested,
	Copy of Invoice with Report ☐ YES ☐ NO	Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	Analys
Company:		Email 1 or Fax invoicing@omnimccamm.com	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	90026	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:	JG	Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact: Eric	Sampler: Antonia Cass

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC	BTEX	PAH	Metals	Cr 6	Hg	VOC	RSC Grain size	pH	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRE	SUSPECTED HAZARD (see notes)
					Indicate Filtered (F), Preserved (P) or Filte												
	22-28 0.25-1.5	21-Oct-22			4	X	X	X	X	X	X						
	22-29 0.25-1.5	21-Oct-22			4	X	X	X	X	X	X						
	22-29 2.5-3.75	21-Oct-22			4	X	X	X	X	X	X		X	X			
	22-30 0-1.75	21-Oct-22			4	X	X	X	X	X	X						
	Dup 1	21-Oct-22			4	X	X	X	X	X	X						
	22-31 0-1	21-Oct-22			4	X	X	X	X	X	X						
	22-31 2.5-3.5	24-Oct-22			3							X					
	22-19B 0-2	24-Oct-22			4	X	X	X	X	X	X						
	22-19B 2.5-4	24-Oct-22			4	X	X	X	X	X	X						
	Dup 2	24-Oct-22			4	X	X	X	X	X	X						
	22-15B 0-1	25-Oct-22			4	X	X	X	X	X	X						
	22-15B 4-4.25	25-Oct-22			3							X					

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	O.Reg 153/19 Table 7 FOR RSC
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☒ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
2.7				3.5			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Antonia Cass	Date: 26-OCT-22	Time: 15:15	Received by:	Date: 10/27/22	Time: 7:40	Received by:	Date: 10/28/22	Time: 10:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

MA US-024 Sol-056/059

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009749

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	1755 Woodward Drive, Unit 200
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: dan@omnimccann.com

Email 2: antonia@omnimccann.com

Email 3: cristina@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: invoicing@omnimccann.com

Email 2:

Turnaround Time (TAT) Requested

☒ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests.

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For all tests with rush TATs requested, please contact your AM to confirm availability.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Account # / Quote #	90026
Job #:	0006-0103
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only):

ALS Contact: Eric

Sampler: Antonia Cass

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC	BTEX	PAH	Metals	Cr6	Hg	VOC	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	22-16B 0-1	25-Oct-22			4	X	X	X	X	X	X				
	22-16B 2.5-3	25-Oct-22			3							X			
	22-17B 0-0.75	26-Oct-22			4	X	X	X	X	X	X				
	22-17B 2.5-3.5	26-Oct-22			3							X			
	DUP3	26-Oct-22			3							X			
	22-03C 0-1	26-Oct-22			4	X	X	X	X	X	X				
	22-03C 2.5-2.75	26-Oct-22			3							X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

O. Reg 153/04 Table 7
FOR RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☒ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
2.7				3.2			

SHIPMENT RELEASE (client use)

Released by: Antonia Cass Date: 26-OCT-22 Time: 15:15

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 10/27/22 Time: 7:40

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 10/28/22 Time: 10:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2220569**	Page	: 1 of 4
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 01-Nov-2022 16:40
PO	: ----	Date Analysis Commenced	: 03-Nov-2022
C-O-C number	: 20-1009750	Issue Date	: 08-Nov-2022 15:39
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Organics, Waterloo, Ontario
Niral Patel		Centralized Prep, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-04C 2.5-4.25 Sampling date/time: 28-Oct-2022 00:00 WT2220569-001	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	7.75	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2220569-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	115	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2220569**	Page	: 1 of 6
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 01-Nov-2022 16:40
PO	: ----	Issue Date	: 08-Nov-2022 15:39
C-O-C number	: 20-1009750		
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	Acetone	67-64-1	E611D	163 % RRQC	50.0-140%	Recovery greater than upper data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	155 % RRQC	50.0-140%	Recovery greater than upper data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	methyl isobutyl ketone [MIBK]	108-10-1	E611D	144 % MES	50.0-140%	Recovery greater than upper data quality objective

Result Qualifiers

Qualifier	*Description*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-04C 2.5-4.25	E144	28-Oct-2022	----	----	----		03-Nov-2022	----	----	
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-04C 2.5-4.25	E611D	28-Oct-2022	07-Nov-2022	14 days	10 days	✓	07-Nov-2022	40 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Moisture Content by Gravimetry	E144	729697	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	732987	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Moisture Content by Gravimetry	E144	729697	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	732987	1	20	5.0	5.0	✓
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	729697	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	732987	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	732987	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2220569**	Page	: 1 of 10
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 01-Nov-2022 16:40
PO	: ----	Date Analysis Commenced	: 03-Nov-2022
C-O-C number	: 20-1009750	Issue Date	: 08-Nov-2022 15:39
Sampler	: ---- 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Waterloo Organics, Waterloo, Ontario
Niral Patel		Waterloo Centralized Prep, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 729697)											
WT2220203-001	Anonymous	moisture	----	E144	0.25	%	10.2	10.0	2.04%	20%	----
Volatile Organic Compounds (QC Lot: 732987)											
WT2220257-009	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 732987) - continued											
WT2220257-009	Anonymous	styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 729697)						
moisture	----	E144	0.25	%	<0.25	----
Volatile Organic Compounds (QCLot: 732987)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 732987) - continued						
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 729697)									
moisture	----	E144	0.25	%	50 %	101	90.0	110	----
Volatile Organic Compounds (QCLot: 732987)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	112	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	91.9	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	96.6	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	86.0	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	86.9	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	86.6	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	95.2	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	90.6	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	92.5	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	92.0	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	95.6	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	93.2	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	95.0	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	59.4	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	92.8	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	93.7	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	89.9	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	90.1	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	89.1	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	95.5	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	91.7	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	93.1	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	89.6	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	90.6	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	82.8	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	104	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	97.8	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	92.4	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	89.6	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	94.0	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 732987) - continued									
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	79.2	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	90.5	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	87.3	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	85.4	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	92.7	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	88.6	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	86.5	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	71.9	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	85.8	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	85.6	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 732987)										
WT2220257-009	Anonymous	Acetone	67-64-1	E611D	3.30 mg/kg	3.125 mg/kg	163	50.0	140	RRQC
		benzene	71-43-2	E611D	2.31 mg/kg	3.125 mg/kg	114	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.50 mg/kg	3.125 mg/kg	124	50.0	140	----
		bromoform	75-25-2	E611D	2.36 mg/kg	3.125 mg/kg	117	50.0	140	----
		bromomethane	74-83-9	E611D	2.21 mg/kg	3.125 mg/kg	109	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.11 mg/kg	3.125 mg/kg	104	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.36 mg/kg	3.125 mg/kg	117	50.0	140	----
		chloroform	67-66-3	E611D	2.29 mg/kg	3.125 mg/kg	113	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.43 mg/kg	3.125 mg/kg	120	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.47 mg/kg	3.125 mg/kg	122	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.37 mg/kg	3.125 mg/kg	117	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.20 mg/kg	3.125 mg/kg	109	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.27 mg/kg	3.125 mg/kg	112	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.89 mg/kg	3.125 mg/kg	93.6	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.31 mg/kg	3.125 mg/kg	114	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.50 mg/kg	3.125 mg/kg	123	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.23 mg/kg	3.125 mg/kg	110	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.28 mg/kg	3.125 mg/kg	113	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.19 mg/kg	3.125 mg/kg	108	50.0	140	----
		dichloromethane	75-09-2	E611D	2.45 mg/kg	3.125 mg/kg	121	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.36 mg/kg	3.125 mg/kg	117	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.32 mg/kg	3.125 mg/kg	115	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.22 mg/kg	3.125 mg/kg	110	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.19 mg/kg	3.125 mg/kg	108	50.0	140	----
		hexane, n-	110-54-3	E611D	2.05 mg/kg	3.125 mg/kg	102	50.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	3.13 mg/kg	3.125 mg/kg	155	50.0	140	RRQC
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.90 mg/kg	3.125 mg/kg	144	50.0	140	MES
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.25 mg/kg	3.125 mg/kg	111	50.0	140	----
		styrene	100-42-5	E611D	2.26 mg/kg	3.125 mg/kg	112	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.37 mg/kg	3.125 mg/kg	117	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.25 mg/kg	3.125 mg/kg	111	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 732987) - continued										
WT2220257-009	Anonymous	tetrachloroethylene	127-18-4	E611D	2.14 mg/kg	3.125 mg/kg	106	50.0	140	----
		toluene	108-88-3	E611D	2.13 mg/kg	3.125 mg/kg	105	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.10 mg/kg	3.125 mg/kg	104	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.46 mg/kg	3.125 mg/kg	121	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.18 mg/kg	3.125 mg/kg	108	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.17 mg/kg	3.125 mg/kg	107	50.0	140	----
		vinyl chloride	75-01-4	E611D	1.88 mg/kg	3.125 mg/kg	92.7	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.15 mg/kg	6.25 mg/kg	103	50.0	140	----
		xylene, o-	95-47-6	E611D	2.10 mg/kg	3.125 mg/kg	104	50.0	140	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009750

Canada Toll Free: 1 800 668 9878

Page 1 of 1

www.alsglobal.com

Environmental Division Waterloo

Work Order Reference WT2220569

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Omni-McConn Inc.	Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Daniel Elliot	Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge ml
Phone:	613-857-4936	☒ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge m
	Company address below will appear on the final report	Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge n
Street:	1755 Woodward Drive, Unit 200	Email 1 or Fax dan@omnimccann.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge n
City/Province:	Ottawa, ON	Email 2 antonia@omnimccann.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharg may apply to rush requests on weekends, statutory holidays an
Postal Code:	K2C 0P9	Email 3 kristina@omnimccann.com	Date and Time Required for all E&P TATs:
Invoice To	Same as Report To ☒ YES ☐ NO	Invoice Recipients	For all tests with rush TATs requested
	Copy of Invoice with Report ☐ YES ☐ NO	Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	Analy
Company:		Email 1 or Fax invoicing@omnimccann.com	Indicate Filtered (F), Preserved (P) or F.
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q90026	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):	WT2220569	ALS Contact: Eric	Sampler: Antonia Cuss

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOC	SAMPLES ON HOLD	EXTENDED STORAGE REQ	SUSPECTED HAZARD (see notes)
	22-04C 2.5-4.25	28-Oct-22		Soil	3	X			

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	O. Reg. 153/04 Table 7 FOR RSC
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
19.7				9.1			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Antonia Cuss	Date: 01-NOV-22	Time: 16:30	Received by: Eric Debbis	Date: 1/11/22	Time: 9:40	Received by:	Date: 3-NOV-22	Time: 9:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

SOL-456, VS-052

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2220705**	Page	: 1 of 3
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 03-Nov-2022 12:15
PO	: ----	Date Analysis Commenced	: 07-Nov-2022
C-O-C number	: 20-1009753	Issue Date	: 14-Nov-2022 16:47
Sampler	: AC		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Centralized Prep, Waterloo, Ontario
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Organics, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Metals, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2220705**	Page	: 1 of 9
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 03-Nov-2022 12:15
PO	: ----	Issue Date	: 14-Nov-2022 16:46
C-O-C number	: 20-1009753		
Sampler	: AC		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Duplicate outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Duplicate (DUP) RPDs								
Speciated Metals	Anonymous	Anonymous	chromium, hexavalent [Cr VI]	18540-29-9	E532	83.5 % DUP-H	35%	Duplicate RPD does not meet the DQO for this test.
Hydrocarbons	Anonymous	Anonymous	F3 (C16-C34)	----	E601.SG-L	61.0 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.

Result Qualifiers

Qualifier	Description
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-35 0-1	E581.F1	02-Nov-2022	08-Nov-2022	14 days	7 days	✓	09-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-35 0-1	E601.F4G-L	02-Nov-2022	09-Nov-2022	14 days	8 days	✓	14-Nov-2022	40 days	5 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-35 0-1	E601.SG-L	02-Nov-2022	08-Nov-2022	14 days	7 days	✓	14-Nov-2022	40 days	6 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-35 0-1	E487	02-Nov-2022	10-Nov-2022	180 days	8 days	✓	10-Nov-2022	180 days	0 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-35 0-1	E510	02-Nov-2022	10-Nov-2022	----	----		10-Nov-2022	28 days	8 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-35 0-1	E440	02-Nov-2022	10-Nov-2022	----	----		10-Nov-2022	180 days	8 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-35 0-1	E144	02-Nov-2022	----	----	----		07-Nov-2022	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-35 0-1	E641A	02-Nov-2022	08-Nov-2022	14 days	7 days	✓	09-Nov-2022	40 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-35 0-1	E532	02-Nov-2022	08-Nov-2022	30 days	6 days	✓	10-Nov-2022	7 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-35 0-1	E611D	02-Nov-2022	08-Nov-2022	14 days	7 days	✓	09-Nov-2022	40 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Boron-Hot Water Extractable by ICPOES	E487	735583	1	12	8.3	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	736127	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	741883	1	7	14.2	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	735214	1	16	6.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	734373	1	19	5.2	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	735579	1	12	8.3	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	735580	1	12	8.3	5.0	✓
Moisture Content by Gravimetry	E144	734356	1	19	5.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	735215	1	6	16.6	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	736128	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Boron-Hot Water Extractable by ICPOES	E487	735583	2	12	16.6	10.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	736127	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	741883	1	7	14.2	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	735214	1	16	6.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	734373	2	19	10.5	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	735579	2	12	16.6	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	735580	2	12	16.6	10.0	✓
Moisture Content by Gravimetry	E144	734356	1	19	5.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	735215	1	6	16.6	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	736128	1	20	5.0	5.0	✓
Method Blanks (MB)							
Boron-Hot Water Extractable by ICPOES	E487	735583	1	12	8.3	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	736127	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	741883	1	7	14.2	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	735214	1	16	6.2	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	734373	1	19	5.2	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	735579	1	12	8.3	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	735580	1	12	8.3	5.0	✓
Moisture Content by Gravimetry	E144	734356	1	19	5.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	735215	1	6	16.6	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	736128	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID	E581.F1	736127	1	20	5.0	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	741883	1	7	14.2	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS) - Continued							
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	735214	1	16	6.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	735215	1	6	16.6	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	736128	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Metals in Soil/Solid by CRC ICPMS	E440 Waterloo - Environmental	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Boron-Hot Water Extractable by ICPOES	E487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS	E510 Waterloo - Environmental	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 Waterloo - Environmental	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	A portion of the silica gel treated sample extract is filtered and dried at 105°C and the mass of the residual gravimetric heavy hydrocarbons (F4G) is determined gravimetrically.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hex:Ace GC-MS	E641A Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with hexane/acetone and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
F1-BTEX	EC580 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.
F2 to F3 minus PAH	EC600 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F2-PAH = CCME Fraction 2 (C10-C16) minus Naphthalene F3-PAH = CCME Fraction 3 (C16-C34) minus select Polycyclic Aromatic Hydrocarbons (PAH) as per CCME Soil Tier 1

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Metals and Mercury	EP440 Waterloo - Environmental	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 Waterloo - Environmental	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2220705**	Page	: 1 of 16
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 03-Nov-2022 12:15
PO	: ----	Date Analysis Commenced	: 07-Nov-2022
C-O-C number	: 20-1009753	Issue Date	: 14-Nov-2022 16:46
Sampler	: AC 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Waterloo Centralized Prep, Waterloo, Ontario
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Waterloo Organics, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Waterloo Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Metals, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 734356)											
CG2215342-001	Anonymous	moisture	----	E144	0.25	%	48.0	49.8	3.67%	20%	----
Metals (QC Lot: 735579)											
WT2219037-002	Anonymous	mercury	7439-97-6	E510	0.0050	mg/kg	0.0132	0.0141	0.0009	Diff <2x LOR	----
Metals (QC Lot: 735580)											
WT2219037-002	Anonymous	antimony	7440-36-0	E440	0.10	mg/kg	0.17	0.16	0.008	Diff <2x LOR	----
		arsenic	7440-38-2	E440	0.10	mg/kg	3.94	4.14	4.94%	30%	----
		barium	7440-39-3	E440	0.50	mg/kg	116	110	4.88%	40%	----
		beryllium	7440-41-7	E440	0.10	mg/kg	0.73	0.74	1.62%	30%	----
		boron	7440-42-8	E440	5.0	mg/kg	12.1	12.3	0.2	Diff <2x LOR	----
		cadmium	7440-43-9	E440	0.020	mg/kg	0.086	0.086	0.0007	Diff <2x LOR	----
		chromium	7440-47-3	E440	0.50	mg/kg	25.4	25.6	1.01%	30%	----
		cobalt	7440-48-4	E440	0.10	mg/kg	10.9	11.3	3.66%	30%	----
		copper	7440-50-8	E440	0.50	mg/kg	22.7	22.2	2.26%	30%	----
		lead	7439-92-1	E440	0.50	mg/kg	9.29	10.0	7.96%	40%	----
		molybdenum	7439-98-7	E440	0.10	mg/kg	0.38	0.36	0.02	Diff <2x LOR	----
		nickel	7440-02-0	E440	0.50	mg/kg	24.6	25.2	2.40%	30%	----
		selenium	7782-49-2	E440	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	----
		silver	7440-22-4	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		thallium	7440-28-0	E440	0.050	mg/kg	0.147	0.162	0.014	Diff <2x LOR	----
		uranium	7440-61-1	E440	0.050	mg/kg	0.480	0.543	12.5%	30%	----
		vanadium	7440-62-2	E440	0.20	mg/kg	36.8	37.2	0.838%	30%	----
		zinc	7440-66-6	E440	2.0	mg/kg	54.3	55.3	1.88%	30%	----
Metals (QC Lot: 735583)											
WT2219037-002	Anonymous	boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	0.10	<0.10	0.002	Diff <2x LOR	----
Speciated Metals (QC Lot: 734373)											
WT2220613-013	Anonymous	chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	0.52	1.26	83.5%	35%	DUP-H
Volatile Organic Compounds (QC Lot: 736128)											
WT2220613-018	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 736128) - continued											
WT2220613-018	Anonymous	bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 736128) - continued											
WT2220613-018	Anonymous	vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 735214)											
WT2219037-004	Anonymous	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	<10	0	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	523	278	61.0%	40%	DUP-H
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	154	92	62	Diff <2x LOR	----
Hydrocarbons (QC Lot: 736127)											
WT2220613-018	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 741883)											
WT2219037-004	Anonymous	F4G-sg	----	E601.F4G-L	250	mg/kg	620	410	210	Diff <2x LOR	----
Polycyclic Aromatic Hydrocarbons (QC Lot: 735215)											
WT2219037-004	Anonymous	acenaphthene	83-32-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		acenaphthylene	208-96-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		anthracene	120-12-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benz(a)anthracene	56-55-3	E641A	0.050	mg/kg	<0.050	0.059	0.009	Diff <2x LOR	J
		benzo(a)pyrene	50-32-8	E641A	0.050	mg/kg	<0.050	0.069	0.019	Diff <2x LOR	J
		benzo(b+j)fluoranthene	n/a	E641A	0.050	mg/kg	0.056	0.094	0.039	Diff <2x LOR	J
		benzo(g,h,i)perylene	191-24-2	E641A	0.050	mg/kg	<0.050	0.056	0.006	Diff <2x LOR	J
		benzo(k)fluoranthene	207-08-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chrysene	218-01-9	E641A	0.050	mg/kg	<0.050	0.070	0.020	Diff <2x LOR	J
		dibenz(a,h)anthracene	53-70-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluoranthene	206-44-0	E641A	0.050	mg/kg	0.079	0.148	0.069	Diff <2x LOR	J
		fluorene	86-73-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.050	mg/kg	<0.050	0.060	0.010	Diff <2x LOR	J
		methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		naphthalene	91-20-3	E641A	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		phenanthrene	85-01-8	E641A	0.050	mg/kg	<0.050	0.067	0.017	Diff <2x LOR	J
		pyrene	129-00-0	E641A	0.050	mg/kg	0.066	0.125	0.059	Diff <2x LOR	J

Qualifiers

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
J	Duplicate results and limits are expressed in terms of absolute difference.

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 734356)						
moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 735579)						
mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 735580)						
antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
boron	7440-42-8	E440	5	mg/kg	<5.0	----
cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Metals (QCLot: 735583)						
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Speciated Metals (QCLot: 734373)						
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 736128)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 736128) - continued						
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Hydrocarbons (QCLot: 735214)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Hydrocarbons (QCLot: 736127)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 741883)						
F4G-sg	----	E601.F4G-L	250	mg/kg	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 735215)						
acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----
chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 734356)									
moisture	----	E144	0.25	%	50 %	99.9	90.0	110	----
Metals (QCLot: 735579)									
mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	97.0	80.0	120	----
Metals (QCLot: 735580)									
antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	106	80.0	120	----
arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	101	80.0	120	----
barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	96.2	80.0	120	----
beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	92.5	80.0	120	----
boron	7440-42-8	E440	5	mg/kg	100 mg/kg	91.2	80.0	120	----
cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	98.6	80.0	120	----
chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	96.1	80.0	120	----
cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	95.5	80.0	120	----
copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	91.8	80.0	120	----
lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	98.7	80.0	120	----
molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	101	80.0	120	----
nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	94.6	80.0	120	----
selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	97.0	80.0	120	----
silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	93.7	80.0	120	----
thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	99.3	80.0	120	----
uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	91.4	80.0	120	----
vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	99.3	80.0	120	----
zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	93.0	80.0	120	----
Metals (QCLot: 735583)									
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	1.33333 mg/kg	103	70.0	130	----
Speciated Metals (QCLot: 734373)									
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	91.3	80.0	120	----
Volatile Organic Compounds (QCLot: 736128)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	109	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	110	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	115	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 736128) - continued									
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	96.2	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	99.9	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	106	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	107	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	111	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	107	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	111	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	113	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	114	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	73.4	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	114	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	106	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	107	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	108	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	113	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	109	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	110	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	105	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	105	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	107	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	105	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	104	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	104	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	107	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	106	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	108	60.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	108	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	106	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	111	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	110	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	106	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	107	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	102	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	87.9	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	107	70.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 736128) - continued									
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	109	70.0	130	----
Hydrocarbons (QCLot: 735214)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	916.995 mg/kg	88.6	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1190.25 mg/kg	92.7	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	879.735 mg/kg	91.4	70.0	130	----
Hydrocarbons (QCLot: 736127)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	116	80.0	120	----
Hydrocarbons (QCLot: 741883)									
F4G-sg	----	E601.F4G-L	250	mg/kg	1298.6 mg/kg	89.8	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 735215)									
acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	88.9	60.0	130	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	93.6	60.0	130	----
anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	89.0	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	87.5	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	93.5	60.0	130	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	93.7	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	83.9	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	90.1	60.0	130	----
chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	87.9	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	88.6	60.0	130	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	89.1	60.0	130	----
fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	90.3	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	82.4	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	84.4	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	80.4	60.0	130	----
naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	80.6	60.0	130	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	84.6	60.0	130	----
pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	88.8	60.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 736128)										
WT2220613-018	Anonymous	Acetone	67-64-1	E611D	2.32 mg/kg	3.125 mg/kg	112	50.0	140	----
		benzene	71-43-2	E611D	2.25 mg/kg	3.125 mg/kg	109	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.40 mg/kg	3.125 mg/kg	116	50.0	140	----
		bromoform	75-25-2	E611D	2.10 mg/kg	3.125 mg/kg	102	50.0	140	----
		bromomethane	74-83-9	E611D	2.00 mg/kg	3.125 mg/kg	97.2	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.10 mg/kg	3.125 mg/kg	102	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.17 mg/kg	3.125 mg/kg	105	50.0	140	----
		chloroform	67-66-3	E611D	2.28 mg/kg	3.125 mg/kg	111	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.27 mg/kg	3.125 mg/kg	110	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.18 mg/kg	3.125 mg/kg	106	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.22 mg/kg	3.125 mg/kg	108	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.19 mg/kg	3.125 mg/kg	106	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.22 mg/kg	3.125 mg/kg	108	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.56 mg/kg	3.125 mg/kg	75.7	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.29 mg/kg	3.125 mg/kg	111	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.26 mg/kg	3.125 mg/kg	110	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.11 mg/kg	3.125 mg/kg	102	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.19 mg/kg	3.125 mg/kg	106	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.23 mg/kg	3.125 mg/kg	108	50.0	140	----
		dichloromethane	75-09-2	E611D	2.22 mg/kg	3.125 mg/kg	108	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.30 mg/kg	3.125 mg/kg	111	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.19 mg/kg	3.125 mg/kg	106	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.22 mg/kg	3.125 mg/kg	108	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.13 mg/kg	3.125 mg/kg	103	50.0	140	----
		hexane, n-	110-54-3	E611D	2.10 mg/kg	3.125 mg/kg	102	50.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	2.32 mg/kg	3.125 mg/kg	113	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.43 mg/kg	3.125 mg/kg	118	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.16 mg/kg	3.125 mg/kg	105	50.0	140	----
		styrene	100-42-5	E611D	2.18 mg/kg	3.125 mg/kg	106	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.23 mg/kg	3.125 mg/kg	108	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.43 mg/kg	3.125 mg/kg	118	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 736128) - continued										
WT2220613-018	Anonymous	tetrachloroethylene	127-18-4	E611D	2.05 mg/kg	3.125 mg/kg	99.6	50.0	140	----
		toluene	108-88-3	E611D	2.22 mg/kg	3.125 mg/kg	108	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.20 mg/kg	3.125 mg/kg	107	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.28 mg/kg	3.125 mg/kg	110	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.13 mg/kg	3.125 mg/kg	103	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.03 mg/kg	3.125 mg/kg	98.4	50.0	140	----
		vinyl chloride	75-01-4	E611D	1.74 mg/kg	3.125 mg/kg	84.2	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.26 mg/kg	6.25 mg/kg	103	50.0	140	----
		xylene, o-	95-47-6	E611D	2.18 mg/kg	3.125 mg/kg	106	50.0	140	----
Hydrocarbons (QCLot: 735214)										
WT2219037-004	Anonymous	F2 (C10-C16)	----	E601.SG-L	592 mg/kg	916.995 mg/kg	82.7	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	650 mg/kg	1190.25 mg/kg	70.0	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	564 mg/kg	879.735 mg/kg	82.1	60.0	140	----
Hydrocarbons (QCLot: 736127)										
WT2220613-018	Anonymous	F1 (C6-C10)	----	E581.F1	43.4 mg/kg	62.5 mg/kg	105	60.0	140	----
Hydrocarbons (QCLot: 741883)										
WT2219037-004	Anonymous	F4G-sg	----	E601.F4G-L	640 mg/kg	1298.6 mg/kg	63.1	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 735215)										
WT2219037-004	Anonymous	acenaphthene	83-32-9	E641A	0.344 mg/kg	0.5 mg/kg	89.8	50.0	140	----
		acenaphthylene	208-96-8	E641A	0.360 mg/kg	0.5 mg/kg	94.2	50.0	140	----
		anthracene	120-12-7	E641A	0.369 mg/kg	0.5 mg/kg	96.4	50.0	140	----
		benz(a)anthracene	56-55-3	E641A	0.304 mg/kg	0.5 mg/kg	79.6	50.0	140	----
		benzo(a)pyrene	50-32-8	E641A	0.364 mg/kg	0.5 mg/kg	95.1	50.0	140	----
		benzo(b+j)fluoranthene	n/a	E641A	0.311 mg/kg	0.5 mg/kg	81.4	50.0	140	----
		benzo(g,h,i)perylene	191-24-2	E641A	0.314 mg/kg	0.5 mg/kg	82.0	50.0	140	----
		benzo(k)fluoranthene	207-08-9	E641A	0.326 mg/kg	0.5 mg/kg	85.3	50.0	140	----
		chrysene	218-01-9	E641A	0.295 mg/kg	0.5 mg/kg	77.3	50.0	140	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.338 mg/kg	0.5 mg/kg	88.4	50.0	140	----
		fluoranthene	206-44-0	E641A	0.322 mg/kg	0.5 mg/kg	84.2	50.0	140	----
		fluorene	86-73-7	E641A	0.345 mg/kg	0.5 mg/kg	90.3	50.0	140	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.308 mg/kg	0.5 mg/kg	80.5	50.0	140	----
		methylnaphthalene, 1-	90-12-0	E641A	0.347 mg/kg	0.5 mg/kg	90.8	50.0	140	----
		methylnaphthalene, 2-	91-57-6	E641A	0.344 mg/kg	0.5 mg/kg	89.9	50.0	140	----
		naphthalene	91-20-3	E641A	0.347 mg/kg	0.5 mg/kg	90.6	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 735215) - continued										
WT2219037-004	Anonymous	phenanthrene	85-01-8	E641A	0.323 mg/kg	0.5 mg/kg	84.5	50.0	140	----
		pyrene	129-00-0	E641A	0.327 mg/kg	0.5 mg/kg	85.5	50.0	140	----

Reference Material (RM) Report

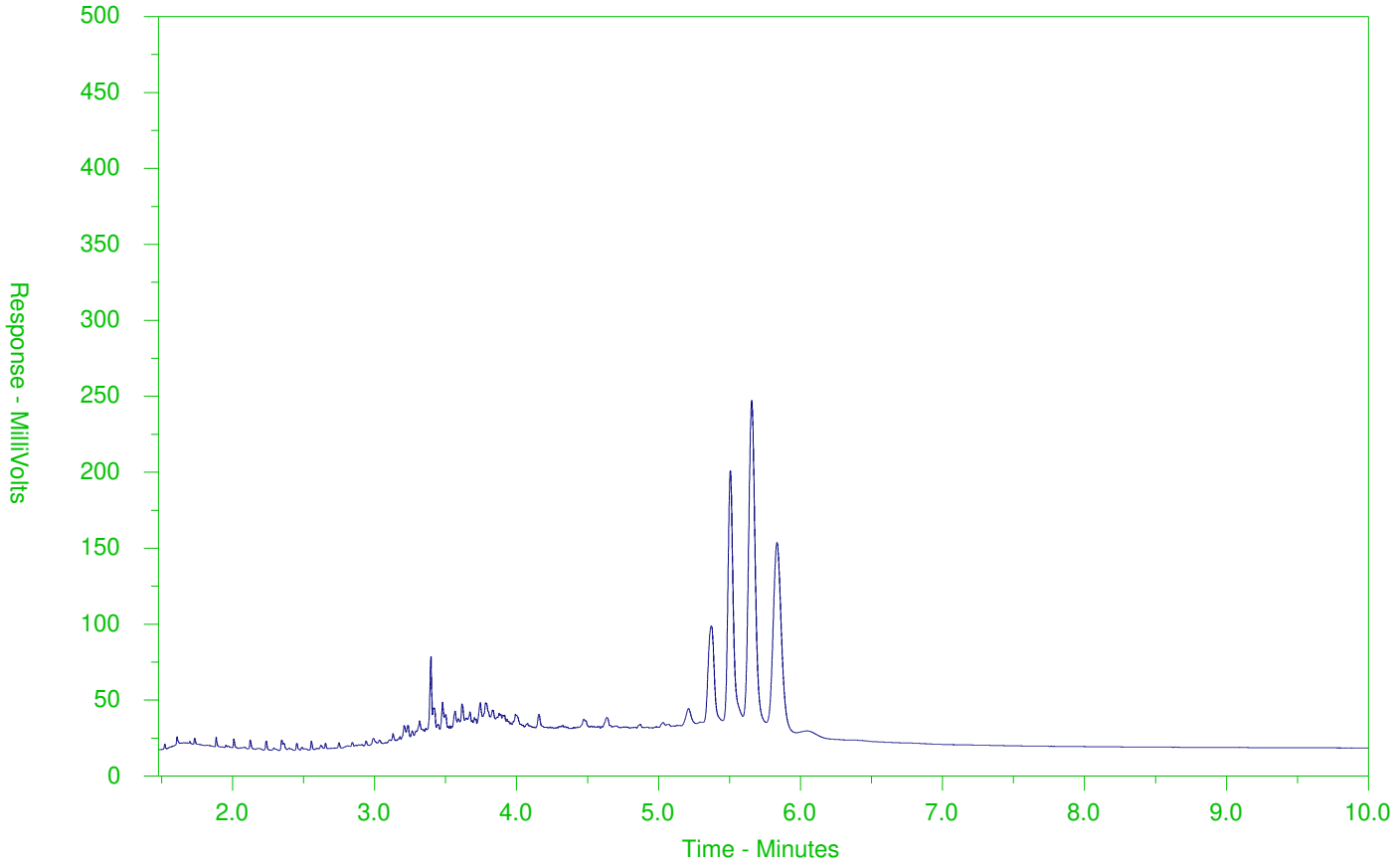
A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 735579)									
	RM	mercury	7439-97-6	E510	0.0585 mg/kg	109	70.0	130	----
Metals (QCLot: 735580)									
	RM	antimony	7440-36-0	E440	3.99 mg/kg	92.6	70.0	130	----
	RM	arsenic	7440-38-2	E440	3.73 mg/kg	101	70.0	130	----
	RM	barium	7440-39-3	E440	105 mg/kg	102	70.0	130	----
	RM	beryllium	7440-41-7	E440	0.349 mg/kg	95.2	70.0	130	----
	RM	boron	7440-42-8	E440	8.5 mg/kg	97.8	40.0	160	----
	RM	cadmium	7440-43-9	E440	0.91 mg/kg	101	70.0	130	----
	RM	chromium	7440-47-3	E440	101 mg/kg	92.3	70.0	130	----
	RM	cobalt	7440-48-4	E440	6.9 mg/kg	96.6	70.0	130	----
	RM	copper	7440-50-8	E440	123 mg/kg	96.5	70.0	130	----
	RM	lead	7439-92-1	E440	267 mg/kg	98.5	70.0	130	----
	RM	molybdenum	7439-98-7	E440	1.03 mg/kg	106	70.0	130	----
	RM	nickel	7440-02-0	E440	26.7 mg/kg	98.4	70.0	130	----
	RM	thallium	7440-28-0	E440	0.0786 mg/kg	94.1	40.0	160	----
	RM	uranium	7440-61-1	E440	0.52 mg/kg	92.1	70.0	130	----
	RM	vanadium	7440-62-2	E440	32.7 mg/kg	96.6	70.0	130	----
	RM	zinc	7440-66-6	E440	297 mg/kg	95.4	70.0	130	----
Metals (QCLot: 735583)									
	RM	boron, hot water soluble	7440-42-8	E487	1.4938 mg/kg	95.1	60.0	140	----
Speciated Metals (QCLot: 734373)									
	RM	chromium, hexavalent [Cr VI]	18540-29-9	E532	172 mg/kg	93.1	70.0	130	----

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2220705-001-E601.SG-L
Client Sample ID: 22-35 0-1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Environmental Division Waterloo

Work Order Reference WT2220705

Telephone : +1 519 886 6910

Canada Toll Free: 1 800 668 9878

Page

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-957-4936
	Company address below will appear on the final report
Street:	1755 Woodward Drive, unit 200
City/Province:	Ottawa, ON
Postal Code:	K2C0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Project Information

ALS Account # / Quote #: Q90026

Job #: 0006-0163

PO / AFE:

LSD:

ALS Lab Work Order # (ALS use only): 10 J6

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax dan@omnimccann.com

Email 2 antonia@omnimccann.com

Email 3 kristina@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax invoicing@omnimccann.com

Email 2

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#

Major/Minor Code: Routing Code:

Requisitioner:

Location:

ALS Contact: Eric Sampler: Antonia (Cass)

Turnaround Time (TAT) Requested

☒ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional charges may apply to rush requests on weekends, statutory holidays and non-routine tests.

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contact your AM to confirm availability.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	DHC	BTEX VOC	PAH	Metals	Cr 6	Hg	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	22-35 0-1	02-Nov-22			4	X	X	X	X	X	X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

O. Reg. 153/04 Table 7 FOR RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☒ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
10.0				8.2			

SHIPMENT RELEASE (client use)

Released by: Antonia Cass Date: 3-NOV-22 Time: 12:15

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: Eric Dobbins Date: 03/11/22 Time: 12:15

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 11/04/22 Time: 9:00

VS-066
SOL-492

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

AUG 2020 FRONT

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2221344**	Page	: 1 of 21
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 10-Nov-2022 09:10
PO	: ----	Date Analysis Commenced	: 11-Nov-2022
C-O-C number	: ----	Issue Date	: 24-Nov-2022 18:29
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Centralized Prep, Waterloo, Ontario
Andrea Armstrong	Department Manager - Air Quality and Volatiles	Organics, Waterloo, Ontario
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Metals, Waterloo, Ontario
Hedy Lai	Team Leader - Inorganics	Sask Soils, Saskatoon, Saskatchewan
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Qualifiers

Qualifier	*Description*
DLQ	*Detection Limit raised due to co-eluting interference. GCMS qualifier ion ratio did not meet acceptance criteria.*
RRR	*Refer to report comments for issues regarding this analysis.*

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-36 0-0.75 Sampling date/time: 07-Nov-2022 00:00 WT2221344-001	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	22.2	--	--	--	--	--	--
Particle Size										
passing (9.5 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (4.75 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (19 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (25.4 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (38.1 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (50.8 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (76.2 mm)	E181	1.0	%	100	--	--	--	--	--	--
passing (1.0 mm)	E182	1.0	%	95.3	--	--	--	--	--	--
passing (0.841 mm)	E182	1.0	%	94.5	--	--	--	--	--	--
passing (0.50 mm)	E182	1.0	%	87.0	--	--	--	--	--	--
passing (0.420 mm)	E182	1.0	%	85.1	--	--	--	--	--	--
passing (0.250 mm)	E182	1.0	%	73.6	--	--	--	--	--	--
passing (0.149 mm)	E182	1.0	%	54.9	--	--	--	--	--	--
passing (0.125 mm)	E182	1.0	%	50.8	--	--	--	--	--	--
passing (0.075 mm)	E182	1.0	%	42.2	--	--	--	--	--	--
passing (0.063 mm)	E182	1.0	%	38.0	--	--	--	--	--	--
passing (0.05 mm)	E182	1.0	%	33.3	--	--	--	--	--	--
passing (0.0312 mm)	E183	1.0	%	26.0	--	--	--	--	--	--
passing (0.020 mm)	E183	1.0	%	20.8	--	--	--	--	--	--
passing (0.005 mm)	E183	1.0	%	12.2	--	--	--	--	--	--
passing (0.004 mm)	E183	1.0	%	11.0	--	--	--	--	--	--
passing (0.002 mm)	E183	1.0	%	9.1	--	--	--	--	--	--
grain size curve	E185		-	See Attached	--	--	--	--	--	--
passing (2.0 mm)	E181	1.0	%	99.5	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.71	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	118	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.54	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Metals - Continued										
boron, hot water soluble	E487	0.10	mg/kg	0.22	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	<5.0	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.186	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	33.0	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	8.38	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	9.63	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	7.69	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0385	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.39	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	15.7	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	0.26	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.115	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.816	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	46.6	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	54.6	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.10	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2221344-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Hydrocarbons Surrogates - Continued										
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	83.4	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	87.7	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	0.10	%	81.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	90.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-20 2-4 Sampling date/time: 07-Nov-2022 00:00 WT2221344-002	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	19.4	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	84.2	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	92.5	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-22 2.5-3 Sampling date/time: 07-Nov-2022 00:00 WT2221344-003	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	12.0	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-003 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	87.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	97.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-23 1-2 Sampling date/time: 07-Nov-2022 00:00 WT2221344-004	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	23.1	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	0.046 RRR	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-004 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	85.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	96.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: DUP4 Sampling date/time: 07-Nov-2022 00:00 WT2221344-005	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	6.22	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-005 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	89.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	99.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-37 0-0.5 Sampling date/time: 08-Nov-2022 00:00 WT2221344-006	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	15.5	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.71	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	100	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.33	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.38	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	5.9	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.093	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	19.8	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	5.81	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	14.1	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	6.08	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0193	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.43	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	11.1	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.114	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.645	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	31.1	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	32.0	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.10	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-006 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	<50	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	91.9	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	120	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	109	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	125	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221344-006 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	72.5	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	73.2	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	66.8	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	74.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-38 0-0.75 Sampling date/time: 08-Nov-2022 00:00 WT2221344-007	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	9.63	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.141 DLQ	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.144	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.15	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	84.2	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	127	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	116	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	134	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2221344-007 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	139	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	87.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-38 0.75-2 Sampling date/time: 08-Nov-2022 00:00 WT2221344-008	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	4.57	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.063 DLQ	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.070	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	89.3	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	96.8	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	95.1	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	108	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2221344-008 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	138	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	91.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2221344**	Page	: 1 of 13
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 10-Nov-2022 09:10
PO	: ----	Issue Date	: 24-Nov-2022 18:29
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Hydrocarbons	QC-742975-002	----	F1 (C6-C10)	----	E581.F1	122 % LCS-H	80.0-120%	Recovery greater than upper control limit
Polycyclic Aromatic Hydrocarbons	QC-744686-002	----	benzo(k)fluoranthene	207-08-9	E641A	59.2 % LCS-ND	60.0-130%	Recovery less than lower control limit

Result Qualifiers

Qualifier	Description
LCS-H	*Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-37 0-0.5	E581.F1	08-Nov-2022	14-Nov-2022	14 days	7 days	✓	15-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-38 0.75-2	E581.F1	08-Nov-2022	14-Nov-2022	14 days	7 days	✓	15-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-38 0-0.75	E581.F1	08-Nov-2022	14-Nov-2022	14 days	7 days	✓	15-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP]										
22-36 0-0.75	E581.F1	07-Nov-2022	15-Nov-2022	14 days	8 days	✓	15-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E601.SG-L	08-Nov-2022	16-Nov-2022	14 days	8 days	✓	17-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-38 0.75-2	E601.SG-L	08-Nov-2022	16-Nov-2022	14 days	8 days	✓	17-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-38 0-0.75	E601.SG-L	08-Nov-2022	16-Nov-2022	14 days	8 days	✓	17-Nov-2022	40 days	1 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E601.SG-L	07-Nov-2022	16-Nov-2022	14 days	9 days	✓	17-Nov-2022	40 days	1 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E487	08-Nov-2022	23-Nov-2022	180 days	16 days	✓	23-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E487	07-Nov-2022	23-Nov-2022	180 days	17 days	✓	23-Nov-2022	180 days	0 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E510	08-Nov-2022	23-Nov-2022	----	----		23-Nov-2022	28 days	16 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E510	07-Nov-2022	23-Nov-2022	----	----		23-Nov-2022	28 days	17 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E440	08-Nov-2022	23-Nov-2022	----	----		23-Nov-2022	180 days	16 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E440	07-Nov-2022	23-Nov-2022	----	----		23-Nov-2022	180 days	17 days	✓
Particle Size : Grain Size Report (Attachment) Hydrometer/Sieve Method										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E185	07-Nov-2022	----	----	----		18-Nov-2022	----	----	
Particle Size : Particle Size Analysis - Hydrometer										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E183	07-Nov-2022	16-Nov-2022	----	----		16-Nov-2022	365 days	9 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particle Size : Particle Size Analysis - Sieve <2mm										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E182	07-Nov-2022	16-Nov-2022	----	----		16-Nov-2022	365 days	9 days	✓
Particle Size : Particle Size Analysis - Sieve >2mm										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E181	07-Nov-2022	16-Nov-2022	----	----		16-Nov-2022	365 days	9 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-20 2-4	E144	07-Nov-2022	----	----	----		14-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-22 2.5-3	E144	07-Nov-2022	----	----	----		14-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-23 1-2	E144	07-Nov-2022	----	----	----		14-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E144	07-Nov-2022	----	----	----		14-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E144	08-Nov-2022	----	----	----		14-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-38 0.75-2	E144	08-Nov-2022	----	----	----		14-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-38 0-0.75	E144	08-Nov-2022	----	----	----		14-Nov-2022	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP4	E144	07-Nov-2022	----	----	----		14-Nov-2022	----	----	
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-38 0.75-2	E687	08-Nov-2022	15-Nov-2022	----	----		16-Nov-2022	40 days	1 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-38 0-0.75	E687	08-Nov-2022	15-Nov-2022	----	----		16-Nov-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E641A	08-Nov-2022	16-Nov-2022	14 days	8 days	✓	16-Nov-2022	40 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-37 0-0.5	E532	08-Nov-2022	15-Nov-2022	30 days	8 days	✓	16-Nov-2022	7 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-36 0-0.75	E532	07-Nov-2022	15-Nov-2022	30 days	9 days	✓	16-Nov-2022	7 days	1 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-37 0-0.5	E611A	08-Nov-2022	14-Nov-2022	14 days	7 days	✓	15-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-38 0.75-2	E611A	08-Nov-2022	14-Nov-2022	14 days	7 days	✓	15-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-38 0-0.75	E611A	08-Nov-2022	14-Nov-2022	14 days	7 days	✓	15-Nov-2022	40 days	1 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-20 2-4	E611D	07-Nov-2022	15-Nov-2022	14 days	8 days	✓	15-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-22 2.5-3	E611D	07-Nov-2022	15-Nov-2022	14 days	8 days	✓	15-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-23 1-2	E611D	07-Nov-2022	15-Nov-2022	14 days	8 days	✓	15-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-36 0-0.75	E611D	07-Nov-2022	15-Nov-2022	14 days	8 days	✓	15-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] DUP4	E611D	07-Nov-2022	15-Nov-2022	14 days	8 days	✓	15-Nov-2022	40 days	1 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Boron-Hot Water Extractable by ICPOES	E487	741334	1	2	50.0	5.0	✓
BTEX by Headspace GC-MS	E611A	742038	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	742039	2	27	7.4	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744687	1	15	6.6	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	744082	1	20	5.0	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	741331	1	2	50.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	741332	1	20	5.0	5.0	✓
Moisture Content by Gravimetry	E144	742876	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744686	1	8	12.5	5.0	✓
Particle Size Analysis - Hydrometer	E183	745294	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve <2mm	E182	745293	1	1	100.0	5.0	✓
PCB Aroclors by GC-MS	E687	742887	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	742974	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Boron-Hot Water Extractable by ICPOES	E487	741334	2	2	100.0	10.0	✓
BTEX by Headspace GC-MS	E611A	742038	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	742039	2	27	7.4	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744687	1	15	6.6	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	744082	2	20	10.0	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	741331	2	2	100.0	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	741332	2	20	10.0	10.0	✓
Moisture Content by Gravimetry	E144	742876	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744686	1	8	12.5	5.0	✓
Particle Size Analysis - Hydrometer	E183	745294	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve <2mm	E182	745293	1	1	100.0	5.0	✓
Particle Size Analysis - Sieve >2mm	E181	745292	1	1	100.0	5.0	✓
PCB Aroclors by GC-MS	E687	742887	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	742974	1	20	5.0	5.0	✓
Method Blanks (MB)							
Boron-Hot Water Extractable by ICPOES	E487	741334	1	2	50.0	5.0	✓
BTEX by Headspace GC-MS	E611A	742038	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	742039	2	27	7.4	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744687	1	15	6.6	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	744082	1	20	5.0	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	741331	1	2	50.0	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Method Blanks (MB) - Continued							
Metals in Soil/Solid by CRC ICPMS	E440	741332	1	20	5.0	5.0	✓
Moisture Content by Gravimetry	E144	742876	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744686	1	8	12.5	5.0	✓
PCB Aroclors by GC-MS	E687	742887	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	742974	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	742038	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	742039	2	27	7.4	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744687	1	15	6.6	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744686	1	8	12.5	5.0	✓
PCB Aroclors by GC-MS	E687	742887	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	742974	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Particle Size Analysis - Sieve >2mm	E181 Saskatoon - Environmental	Soil/Solid	ASTM D6913-17 (mod)	Soil samples are disaggregated and sieved through a 2mm sieve. Material retained on the sieve is then further sieved through a series of sieves. The amount passing through the sieves is measured gravimetrically.
Particle Size Analysis - Sieve <2mm	E182 Saskatoon - Environmental	Soil/Solid	ASTM D6913-17 (mod)	Soil samples are disaggregated and sieved through a 2mm sieve. Material passed through the sieve is then further disaggregated using calgon solution and passed through a series of sieves. The amount passing through the sieves is measured gravimetrically.
Particle Size Analysis - Hydrometer	E183 Saskatoon - Environmental	Soil/Solid	ASTM D7928-21 (mod)	Soil material is separated from coarse material (>2mm). A specimen is then disaggregated through mixing with Calgon solution. The material is then suspended in solution wherein regular hydrometer readings are taken at specific time intervals. The principles of Stokes' Law are applied to determine the amount of material remaining in solution as well as the maximum particle size remaining in solution at the specified time.
Grain Size Report (Attachment) Hydrometer/Sieve Method	E185 Saskatoon - Environmental	Soil/Solid	ASTM D6913/D7928	A grain size curve is a graphical representation of the particle sizing of a sample representing the percent passing against the effective particle size.
Metals in Soil/Solid by CRC ICPMS	E440 Waterloo - Environmental	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Boron-Hot Water Extractable by ICPOES	E487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Mercury in Soil/Solid by CVAAS	E510 Waterloo - Environmental	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 Waterloo - Environmental	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
BTEX by Headspace GC-MS	E611A Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hex:Ace GC-MS	E641A Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with hexane/acetone and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
PCB Aroclors by GC-MS	E687 Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	PCB Aroclors are analyzed by GC-MS
F1-BTEX	EC580 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.
F2 to F3 minus PAH	EC600 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F2-PAH = CCME Fraction 2 (C10-C16) minus Naphthalene F3-PAH = CCME Fraction 3 (C16-C34) minus select Polycyclic Aromatic Hydrocarbons (PAH) as per CCME Soil Tier 1

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Metals and Mercury	EP440 Waterloo - Environmental	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 Waterloo - Environmental	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.
Pesticides, PCB, PAH, and Neutral Extractable Chlorinated Hydrocarbons Extraction	EP660 Waterloo - Environmental	Soil/Solid	EPA 3570 (mod)	A homogenized subsample is extracted with organic solvents using a mechanical shaker.
Dry and Grind in Soil/Solid <60°C	EPP442 Waterloo - Environmental	Soil/Solid	Soil Sampling and Methods of Analysis, Carter 2008	After removal of any coarse fragments and reservation of wet subsamples a portion of homogenized sample is set in a tray and dried at less than 60°C until dry. The sample is then particle size reduced with an automated crusher or mortar and pestle, typically to <2 mm. Further size reduction may be needed for particular tests.

QUALITY CONTROL REPORT

Work Order	: **WT2221344**	Page	: 1 of 19
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 10-Nov-2022 09:10
PO	: ----	Date Analysis Commenced	: 11-Nov-2022
C-O-C number	: ----	Issue Date	: 24-Nov-2022 18:29
Sampler	: ---- 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Waterloo Centralized Prep, Waterloo, Ontario
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General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 742876)											
WT2221344-001	22-36 0-0.75	moisture	----	E144	0.25	%	22.2	22.5	1.20%	20%	----
Particle Size (QC Lot: 745293)											
WT2221344-001	22-36 0-0.75	passing (0.05 mm)	----	E182	1.0	%	33.3	33.3	0.0374%	15%	----
		passing (0.063 mm)	----	E182	1.0	%	38.0	38.2	0.755%	15%	----
		passing (0.075 mm)	----	E182	1.0	%	42.2	42.8	1.27%	15%	----
		passing (0.125 mm)	----	E182	1.0	%	50.8	50.8	0.0127%	15%	----
		passing (0.149 mm)	----	E182	1.0	%	54.9	54.6	0.492%	15%	----
		passing (0.250 mm)	----	E182	1.0	%	73.6	74.0	0.517%	15%	----
		passing (0.420 mm)	----	E182	1.0	%	85.1	85.4	0.404%	15%	----
		passing (0.50 mm)	----	E182	1.0	%	87.0	87.3	0.262%	15%	----
		passing (0.841 mm)	----	E182	1.0	%	94.5	94.2	0.311%	15%	----
		passing (1.0 mm)	----	E182	1.0	%	95.3	95.0	0.280%	15%	----
Particle Size (QC Lot: 745294)											
WT2221344-001	22-36 0-0.75	passing (0.002 mm)	----	E183	1.0	%	9.1	9.2	0.09	Diff <2x LOR	----
		passing (0.004 mm)	----	E183	1.0	%	11.0	10.9	1.08%	20%	----
		passing (0.005 mm)	----	E183	1.0	%	12.2	12.2	0.0176%	20%	----
		passing (0.020 mm)	----	E183	1.0	%	20.8	21.9	4.84%	20%	----
		passing (0.0312 mm)	----	E183	1.0	%	26.0	26.4	1.77%	20%	----
Metals (QC Lot: 741331)											
WT2221344-001	22-36 0-0.75	mercury	7439-97-6	E510	0.0050	mg/kg	0.0385	0.0369	4.14%	40%	----
Metals (QC Lot: 741332)											
WT2221344-001	22-36 0-0.75	antimony	7440-36-0	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		arsenic	7440-38-2	E440	0.10	mg/kg	1.71	1.66	2.82%	30%	----
		barium	7440-39-3	E440	0.50	mg/kg	118	110	6.31%	40%	----
		beryllium	7440-41-7	E440	0.10	mg/kg	0.54	0.51	0.04	Diff <2x LOR	----
		boron	7440-42-8	E440	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
		cadmium	7440-43-9	E440	0.020	mg/kg	0.186	0.173	7.63%	30%	----
		chromium	7440-47-3	E440	0.50	mg/kg	33.0	32.4	1.64%	30%	----
		cobalt	7440-48-4	E440	0.10	mg/kg	8.38	8.23	1.84%	30%	----
		copper	7440-50-8	E440	0.50	mg/kg	9.63	9.62	0.104%	30%	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 741332) - continued											
WT2221344-001	22-36 0-0.75	lead	7439-92-1	E440	0.50	mg/kg	7.69	7.28	5.48%	40%	----
		molybdenum	7439-98-7	E440	0.10	mg/kg	0.39	0.38	0.02	Diff <2x LOR	----
		nickel	7440-02-0	E440	0.50	mg/kg	15.7	15.5	1.03%	30%	----
		selenium	7782-49-2	E440	0.20	mg/kg	0.26	0.27	0.008	Diff <2x LOR	----
		silver	7440-22-4	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		thallium	7440-28-0	E440	0.050	mg/kg	0.115	0.114	0.002	Diff <2x LOR	----
		uranium	7440-61-1	E440	0.050	mg/kg	0.816	0.790	3.26%	30%	----
		vanadium	7440-62-2	E440	0.20	mg/kg	46.6	45.9	1.59%	30%	----
		zinc	7440-66-6	E440	2.0	mg/kg	54.6	53.2	2.51%	30%	----
Metals (QC Lot: 741334)											
WT2221344-001	22-36 0-0.75	boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	0.22	0.22	0.006	Diff <2x LOR	----
Speciated Metals (QC Lot: 744082)											
WT2219142-002	Anonymous	chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 742038)											
WT2221224-001	Anonymous	benzene	71-43-2	E611A	0.0071	mg/kg	<0.0071	<0.0071	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.018	mg/kg	<0.018	<0.018	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.058	mg/kg	<0.058	<0.058	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 742974)											
WT2221344-001	22-36 0-0.75	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 742974) - continued											
WT2221344-001	22-36 0-0.75	dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 742039)											
WT2221224-001	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 742975)											
WT2221344-001	22-36 0-0.75	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 744687)											
WT2221252-005	Anonymous	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	78	110	33.3%	40%	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	318	382	18.2%	40%	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	386	402	4.10%	40%	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Polycyclic Aromatic Hydrocarbons (QC Lot: 744686)											
WT2221252-005	Anonymous	acenaphthene	83-32-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		acenaphthylene	208-96-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		anthracene	120-12-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benz(a)anthracene	56-55-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(a)pyrene	50-32-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(b+j)fluoranthene	n/a	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(g,h,i)perylene	191-24-2	E641A	0.050	mg/kg	0.051	<0.050	0.001	Diff <2x LOR	J
		benzo(k)fluoranthene	207-08-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chrysene	218-01-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluoranthene	206-44-0	E641A	0.050	mg/kg	0.078	0.060	0.017	Diff <2x LOR	J
		fluorene	86-73-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		naphthalene	91-20-3	E641A	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		phenanthrene	85-01-8	E641A	0.050	mg/kg	0.055	<0.050	0.005	Diff <2x LOR	J
		pyrene	129-00-0	E641A	0.050	mg/kg	0.074	0.062	0.011	Diff <2x LOR	J
Polychlorinated Biphenyls (QC Lot: 742887)											
WT2221353-025	Anonymous	Aroclor 1016	12674-11-2	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1221	11104-28-2	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1232	11141-16-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1242	53469-21-9	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1248	12672-29-6	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1254	11097-69-1	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1260	11096-82-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1262	37324-23-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1268	11100-14-4	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----

Qualifiers

Qualifier	*Description*
J	*Duplicate results and limits are expressed in terms of absolute difference.*

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 742876)						
moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 741331)						
mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 741332)						
antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
boron	7440-42-8	E440	5	mg/kg	<5.0	----
cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Metals (QCLot: 741334)						
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Speciated Metals (QCLot: 744082)						
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 742038)						
benzene	71-43-2	E611A	0.005	mg/kg	<0.0050	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015	----
toluene	108-88-3	E611A	0.05	mg/kg	<0.050	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	<0.030	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 742974)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 742974) - continued						
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----
Hydrocarbons (QCLot: 742039)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 742975)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 744687)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744686)						
acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----
chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----
Polychlorinated Biphenyls (QCLot: 742887)						
Aroclor 1016	12674-11-2	E687	0.01	mg/kg	<0.010	----
Aroclor 1221	11104-28-2	E687	0.01	mg/kg	<0.010	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polychlorinated Biphenyls (QCLot: 742887) - continued						
Aroclor 1232	11141-16-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1242	53469-21-9	E687	0.01	mg/kg	<0.010	----
Aroclor 1248	12672-29-6	E687	0.01	mg/kg	<0.010	----
Aroclor 1254	11097-69-1	E687	0.01	mg/kg	<0.010	----
Aroclor 1260	11096-82-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1262	37324-23-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1268	11100-14-4	E687	0.01	mg/kg	<0.010	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 742876)									
moisture	----	E144	0.25	%	50 %	100	90.0	110	----
Metals (QCLot: 741331)									
mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	99.5	80.0	120	----
Metals (QCLot: 741332)									
antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	102	80.0	120	----
arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	110	80.0	120	----
barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	106	80.0	120	----
beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	104	80.0	120	----
boron	7440-42-8	E440	5	mg/kg	100 mg/kg	102	80.0	120	----
cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	102	80.0	120	----
chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	103	80.0	120	----
cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	103	80.0	120	----
copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	101	80.0	120	----
lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	104	80.0	120	----
molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	102	80.0	120	----
nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	102	80.0	120	----
selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	102	80.0	120	----
silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	96.0	80.0	120	----
thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	102	80.0	120	----
uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	110	80.0	120	----
vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	106	80.0	120	----
zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	100	80.0	120	----
Metals (QCLot: 741334)									
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	1.33333 mg/kg	105	70.0	130	----
Speciated Metals (QCLot: 744082)									
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	85.4	80.0	120	----
Volatile Organic Compounds (QCLot: 742038)									
benzene	71-43-2	E611A	0.005	mg/kg	3.475 mg/kg	111	70.0	130	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg	3.475 mg/kg	101	70.0	130	----
toluene	108-88-3	E611A	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 742038) - continued									
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	6.95 mg/kg	96.8	70.0	130	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	3.475 mg/kg	102	70.0	130	----
Volatile Organic Compounds (QCLot: 742974)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	79.3	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	91.6	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	92.0	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	84.4	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	83.8	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	90.8	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	98.2	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	87.4	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	92.3	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	86.2	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	98.4	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	56.2	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	80.5	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	79.8	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	84.4	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	87.2	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	90.5	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	84.5	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	91.4	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	87.5	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	88.7	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	102	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	88.5	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	80.0	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	74.9	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	93.7	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	95.7	60.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	85.5	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	101	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	99.0	70.0	130	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Volatile Organic Compounds (QCLot: 742974) - continued									
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	89.0	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	90.7	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	95.8	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	86.1	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	77.1	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	102	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	99.8	70.0	130	----
Hydrocarbons (QCLot: 742039)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	116	80.0	120	----
Hydrocarbons (QCLot: 742975)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	# 122	80.0	120	LCS-H
Hydrocarbons (QCLot: 744687)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	916.995 mg/kg	91.8	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1190.25 mg/kg	96.8	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	879.735 mg/kg	82.8	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744686)									
acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	91.2	60.0	130	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	95.9	60.0	130	----
anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	89.3	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	61.7	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	63.3	60.0	130	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	61.4	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	90.7	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	# 59.2	60.0	130	LCS-ND
chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	64.1	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	82.6	60.0	130	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	91.7	60.0	130	----
fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	92.0	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	83.2	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	88.4	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	86.8	60.0	130	----
naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	87.8	60.0	130	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	85.3	60.0	130	----
pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	90.7	60.0	130	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Polychlorinated Biphenyls (QCLot: 742887)									
Aroclor 1016	12674-11-2	E687	0.01	mg/kg	0.01 mg/kg	99.6	60.0	140	----
Aroclor 1221	11104-28-2	E687	0.01	mg/kg	0.01 mg/kg	99.6	60.0	140	----
Aroclor 1232	11141-16-5	E687	0.01	mg/kg	0.01 mg/kg	99.6	60.0	140	----
Aroclor 1242	53469-21-9	E687	0.01	mg/kg	0.01 mg/kg	99.6	60.0	140	----
Aroclor 1248	12672-29-6	E687	0.01	mg/kg	0.01 mg/kg	84.1	60.0	140	----
Aroclor 1254	11097-69-1	E687	0.01	mg/kg	0.01 mg/kg	91.4	60.0	140	----
Aroclor 1260	11096-82-5	E687	0.01	mg/kg	0.01 mg/kg	111	60.0	140	----
Aroclor 1262	37324-23-5	E687	0.01	mg/kg	0.01 mg/kg	111	60.0	140	----
Aroclor 1268	11100-14-4	E687	0.01	mg/kg	0.01 mg/kg	111	60.0	140	----

Qualifiers

Qualifier	Description
LCS-H	Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.
LCS-ND	Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 742038)										
WT2221224-001	Anonymous	benzene	71-43-2	E611A	3.88 mg/kg	3.125 mg/kg	107	60.0	140	----
		ethylbenzene	100-41-4	E611A	3.64 mg/kg	3.125 mg/kg	100	60.0	140	----
		toluene	108-88-3	E611A	3.69 mg/kg	3.125 mg/kg	102	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	6.91 mg/kg	6.25 mg/kg	95.3	60.0	140	----
		xylene, o-	95-47-6	E611A	3.67 mg/kg	3.125 mg/kg	101	60.0	140	----
Volatile Organic Compounds (QCLot: 742974)										
WT2221344-001	22-36 0-0.75	Acetone	67-64-1	E611D	1.96 mg/kg	3.125 mg/kg	79.6	50.0	140	----
		benzene	71-43-2	E611D	2.29 mg/kg	3.125 mg/kg	92.7	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.25 mg/kg	3.125 mg/kg	91.1	50.0	140	----
		bromoform	75-25-2	E611D	2.01 mg/kg	3.125 mg/kg	81.6	50.0	140	----
		bromomethane	74-83-9	E611D	2.30 mg/kg	3.125 mg/kg	93.1	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.29 mg/kg	3.125 mg/kg	92.9	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.41 mg/kg	3.125 mg/kg	97.8	50.0	140	----
		chloroform	67-66-3	E611D	2.17 mg/kg	3.125 mg/kg	87.8	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.25 mg/kg	3.125 mg/kg	91.2	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.11 mg/kg	3.125 mg/kg	85.5	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.40 mg/kg	3.125 mg/kg	97.3	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.53 mg/kg	3.125 mg/kg	102	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.52 mg/kg	3.125 mg/kg	102	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.98 mg/kg	3.125 mg/kg	80.4	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.03 mg/kg	3.125 mg/kg	82.2	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	1.96 mg/kg	3.125 mg/kg	79.5	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.22 mg/kg	3.125 mg/kg	90.1	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.16 mg/kg	3.125 mg/kg	87.7	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.27 mg/kg	3.125 mg/kg	92.2	50.0	140	----
		dichloromethane	75-09-2	E611D	2.11 mg/kg	3.125 mg/kg	85.7	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.24 mg/kg	3.125 mg/kg	90.8	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.14 mg/kg	3.125 mg/kg	86.7	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.19 mg/kg	3.125 mg/kg	88.9	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.53 mg/kg	3.125 mg/kg	103	50.0	140	----
		hexane, n-	110-54-3	E611D	2.41 mg/kg	3.125 mg/kg	97.8	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 742974) - continued										
WT2221344-001	22-36 0-0.75	methyl ethyl ketone [MEK]	78-93-3	E611D	1.94 mg/kg	3.125 mg/kg	78.7	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	1.75 mg/kg	3.125 mg/kg	71.1	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.35 mg/kg	3.125 mg/kg	95.2	50.0	140	----
		styrene	100-42-5	E611D	2.46 mg/kg	3.125 mg/kg	99.9	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.35 mg/kg	3.125 mg/kg	95.3	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.00 mg/kg	3.125 mg/kg	80.9	50.0	140	----
		tetrachloroethylene	127-18-4	E611D	2.51 mg/kg	3.125 mg/kg	102	50.0	140	----
		toluene	108-88-3	E611D	2.47 mg/kg	3.125 mg/kg	100	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.24 mg/kg	3.125 mg/kg	90.8	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.21 mg/kg	3.125 mg/kg	89.7	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.37 mg/kg	3.125 mg/kg	95.9	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.36 mg/kg	3.125 mg/kg	95.7	50.0	140	----
		vinyl chloride	75-01-4	E611D	2.20 mg/kg	3.125 mg/kg	89.1	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	5.06 mg/kg	6.25 mg/kg	102	50.0	140	----
		xylene, o-	95-47-6	E611D	2.46 mg/kg	3.125 mg/kg	99.7	50.0	140	----
Hydrocarbons (QCLot: 742039)										
WT2221224-001	Anonymous	F1 (C6-C10)	----	E581.F1	63.6 mg/kg	62.5 mg/kg	87.8	60.0	140	----
Hydrocarbons (QCLot: 742975)										
WT2221344-001	22-36 0-0.75	F1 (C6-C10)	----	E581.F1	53.8 mg/kg	62.5 mg/kg	109	60.0	140	----
Hydrocarbons (QCLot: 744687)										
WT2221252-005	Anonymous	F2 (C10-C16)	----	E601.SG-L	704 mg/kg	916.995 mg/kg	88.9	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	1040 mg/kg	1190.25 mg/kg	101	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	687 mg/kg	879.735 mg/kg	90.6	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744686)										
WT2221252-005	Anonymous	acenaphthene	83-32-9	E641A	0.340 mg/kg	0.5 mg/kg	91.0	50.0	140	----
		acenaphthylene	208-96-8	E641A	0.362 mg/kg	0.5 mg/kg	97.0	50.0	140	----
		anthracene	120-12-7	E641A	0.374 mg/kg	0.5 mg/kg	100	50.0	140	----
		benz(a)anthracene	56-55-3	E641A	0.250 mg/kg	0.5 mg/kg	66.9	50.0	140	----
		benzo(a)pyrene	50-32-8	E641A	0.327 mg/kg	0.5 mg/kg	87.5	50.0	140	----
		benzo(b+j)fluoranthene	n/a	E641A	0.337 mg/kg	0.5 mg/kg	90.0	50.0	140	----
		benzo(g,h,i)perylene	191-24-2	E641A	0.355 mg/kg	0.5 mg/kg	94.9	50.0	140	----
		benzo(k)fluoranthene	207-08-9	E641A	0.266 mg/kg	0.5 mg/kg	71.1	50.0	140	----
		chrysene	218-01-9	E641A	0.272 mg/kg	0.5 mg/kg	72.8	50.0	140	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.339 mg/kg	0.5 mg/kg	90.8	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 744686) - continued										
WT2221252-005	Anonymous	fluoranthene	206-44-0	E641A	0.352 mg/kg	0.5 mg/kg	94.1	50.0	140	----
		fluorene	86-73-7	E641A	0.347 mg/kg	0.5 mg/kg	92.7	50.0	140	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.376 mg/kg	0.5 mg/kg	100	50.0	140	----
		methylnaphthalene, 1-	90-12-0	E641A	0.327 mg/kg	0.5 mg/kg	87.5	50.0	140	----
		methylnaphthalene, 2-	91-57-6	E641A	0.323 mg/kg	0.5 mg/kg	86.4	50.0	140	----
		naphthalene	91-20-3	E641A	0.324 mg/kg	0.5 mg/kg	86.6	50.0	140	----
		phenanthrene	85-01-8	E641A	0.328 mg/kg	0.5 mg/kg	87.8	50.0	140	----
		pyrene	129-00-0	E641A	0.388 mg/kg	0.5 mg/kg	104	50.0	140	----
Polychlorinated Biphenyls (QCLot: 742887)										
WT2221353-025	Anonymous	Aroclor 1016	12674-11-2	E687	0.010 mg/kg	0.01 mg/kg	107	50.0	150	----
		Aroclor 1221	11104-28-2	E687	0.010 mg/kg	0.01 mg/kg	107	50.0	150	----
		Aroclor 1232	11141-16-5	E687	0.010 mg/kg	0.01 mg/kg	107	50.0	150	----
		Aroclor 1242	53469-21-9	E687	0.009 mg/kg	0.01 mg/kg	95.9	50.0	150	----
		Aroclor 1248	12672-29-6	E687	0.010 mg/kg	0.01 mg/kg	107	50.0	150	----
		Aroclor 1254	11097-69-1	E687	0.009 mg/kg	0.01 mg/kg	95.9	50.0	150	----
		Aroclor 1260	11096-82-5	E687	0.013 mg/kg	0.01 mg/kg	136	50.0	150	----
		Aroclor 1262	37324-23-5	E687	0.015 mg/kg	0.01 mg/kg	148	50.0	150	----
		Aroclor 1268	11100-14-4	E687	0.015 mg/kg	0.01 mg/kg	148	50.0	150	----

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

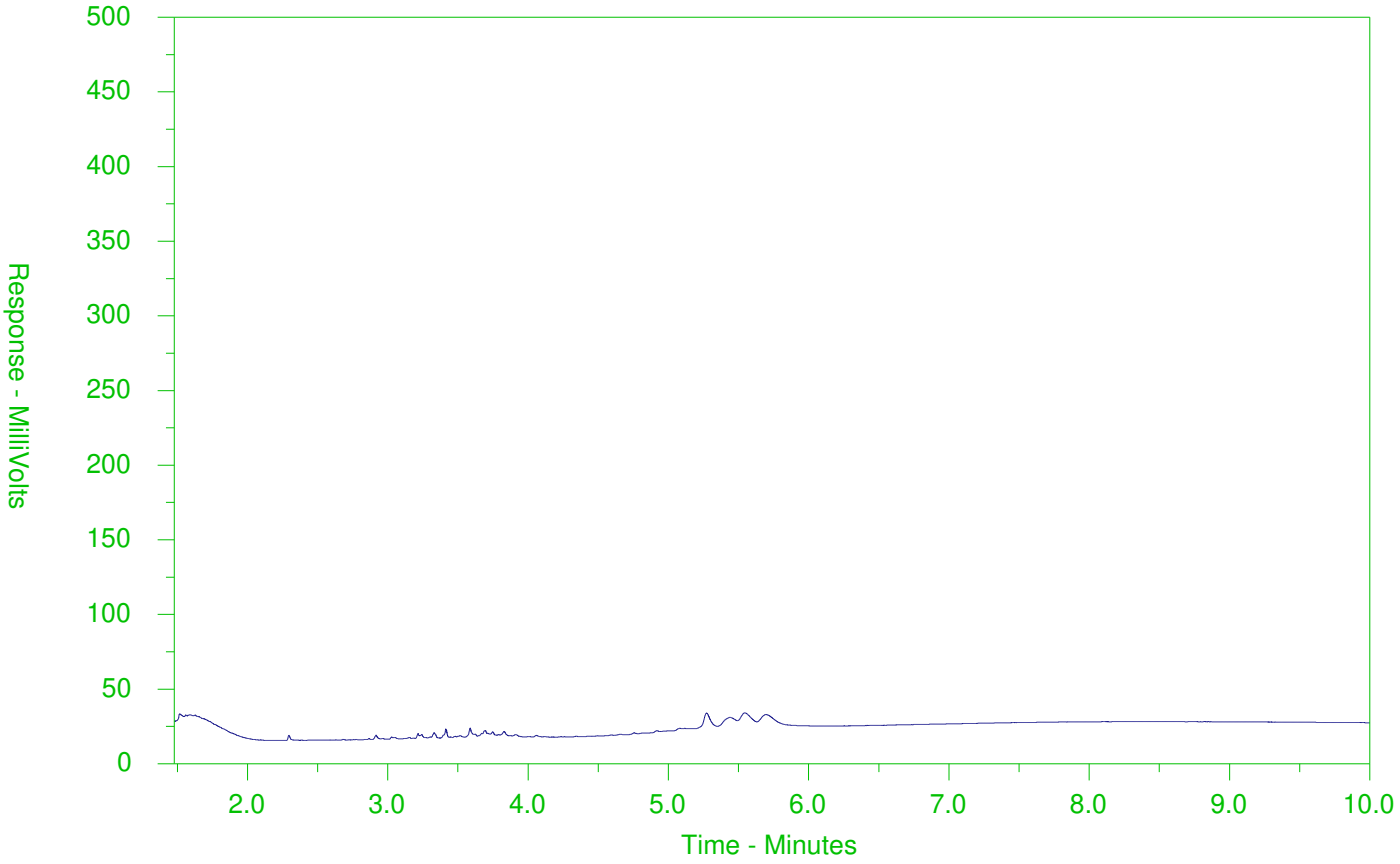
					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Particle Size (QCLot: 745292)									
	RM	passing (19 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (2.0 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (25.4 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (38.1 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (4.75 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (50.8 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (76.2 mm)	----	E181	100 %	100	90.0	110	----
	RM	passing (9.5 mm)	----	E181	100 %	100	90.0	110	----
Particle Size (QCLot: 745293)									
	RM	passing (0.05 mm)	----	E182	49.81 %	101	90.0	110	----
	RM	passing (0.063 mm)	----	E182	54.27 %	100	90.8	109	----
	RM	passing (0.075 mm)	----	E182	58.38 %	100	91.4	109	----
	RM	passing (0.125 mm)	----	E182	68.06 %	99.0	92.7	107	----
	RM	passing (0.149 mm)	----	E182	72.71 %	98.6	93.1	107	----
	RM	passing (0.250 mm)	----	E182	85.38 %	98.6	94.1	106	----
	RM	passing (0.420 mm)	----	E182	92.78 %	99.6	94.6	105	----
	RM	passing (0.50 mm)	----	E182	93.78 %	99.7	94.7	105	----
	RM	passing (0.841 mm)	----	E182	97.34 %	99.9	94.9	105	----
	RM	passing (1.0 mm)	----	E182	97.77 %	99.9	94.9	105	----
Particle Size (QCLot: 745294)									
	RM	passing (0.002 mm)	----	E183	21.14 %	94.3	76.0	124	----
	RM	passing (0.004 mm)	----	E183	24.64 %	95.3	80.0	120	----
	RM	passing (0.005 mm)	----	E183	25.91 %	97.6	82.0	118	----
	RM	passing (0.020 mm)	----	E183	37.12 %	98.9	87.0	113	----
	RM	passing (0.0312 mm)	----	E183	42.58 %	101	88.0	112	----
Metals (QCLot: 741331)									
	RM	mercury	7439-97-6	E510	0.0585 mg/kg	102	70.0	130	----
Metals (QCLot: 741332)									

Sub-Matrix:

Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Reference Material (RM) Report: RM Target Concentration	Recovery (%): RM	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Metals (QCLot: 741332) - continued									
	RM	antimony	7440-36-0	E440	3.99 mg/kg	98.2	70.0	130	----
	RM	arsenic	7440-38-2	E440	3.73 mg/kg	110	70.0	130	----
	RM	barium	7440-39-3	E440	105 mg/kg	112	70.0	130	----
	RM	beryllium	7440-41-7	E440	0.349 mg/kg	108	70.0	130	----
	RM	boron	7440-42-8	E440	8.5 mg/kg	124	40.0	160	----
	RM	cadmium	7440-43-9	E440	0.91 mg/kg	104	70.0	130	----
	RM	chromium	7440-47-3	E440	101 mg/kg	113	70.0	130	----
	RM	cobalt	7440-48-4	E440	6.9 mg/kg	108	70.0	130	----
	RM	copper	7440-50-8	E440	123 mg/kg	106	70.0	130	----
	RM	lead	7439-92-1	E440	267 mg/kg	102	70.0	130	----
	RM	molybdenum	7439-98-7	E440	1.03 mg/kg	102	70.0	130	----
	RM	nickel	7440-02-0	E440	26.7 mg/kg	107	70.0	130	----
	RM	silver	7440-22-4	E440	4.06 mg/kg	91.6	70.0	130	----
	RM	thallium	7440-28-0	E440	0.0786 mg/kg	109	40.0	160	----
	RM	uranium	7440-61-1	E440	0.52 mg/kg	106	70.0	130	----
	RM	vanadium	7440-62-2	E440	32.7 mg/kg	111	70.0	130	----
	RM	zinc	7440-66-6	E440	297 mg/kg	104	70.0	130	----
Metals (QCLot: 741334)									
	RM	boron, hot water soluble	7440-42-8	E487	1.4938 mg/kg	120	60.0	140	----
Speciated Metals (QCLot: 744082)									
	RM	chromium, hexavalent [Cr VI]	18540-29-9	E532	172 mg/kg	106	70.0	130	----

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221344-001-E601.SG-L
Client Sample ID: 22-36 0-0.75



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

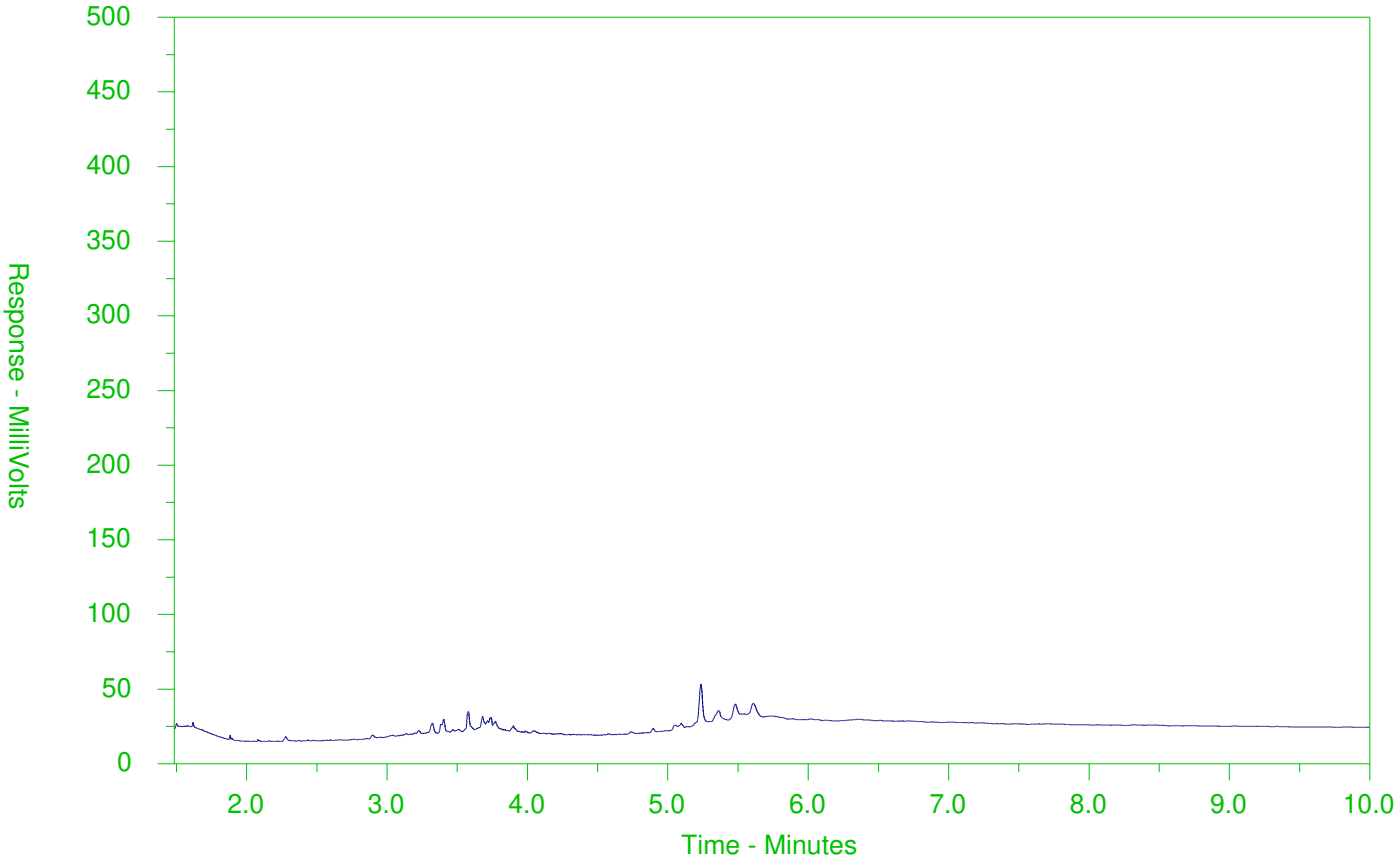
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221344-006-E601.SG-L
Client Sample ID: 22-37 0-0.5



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

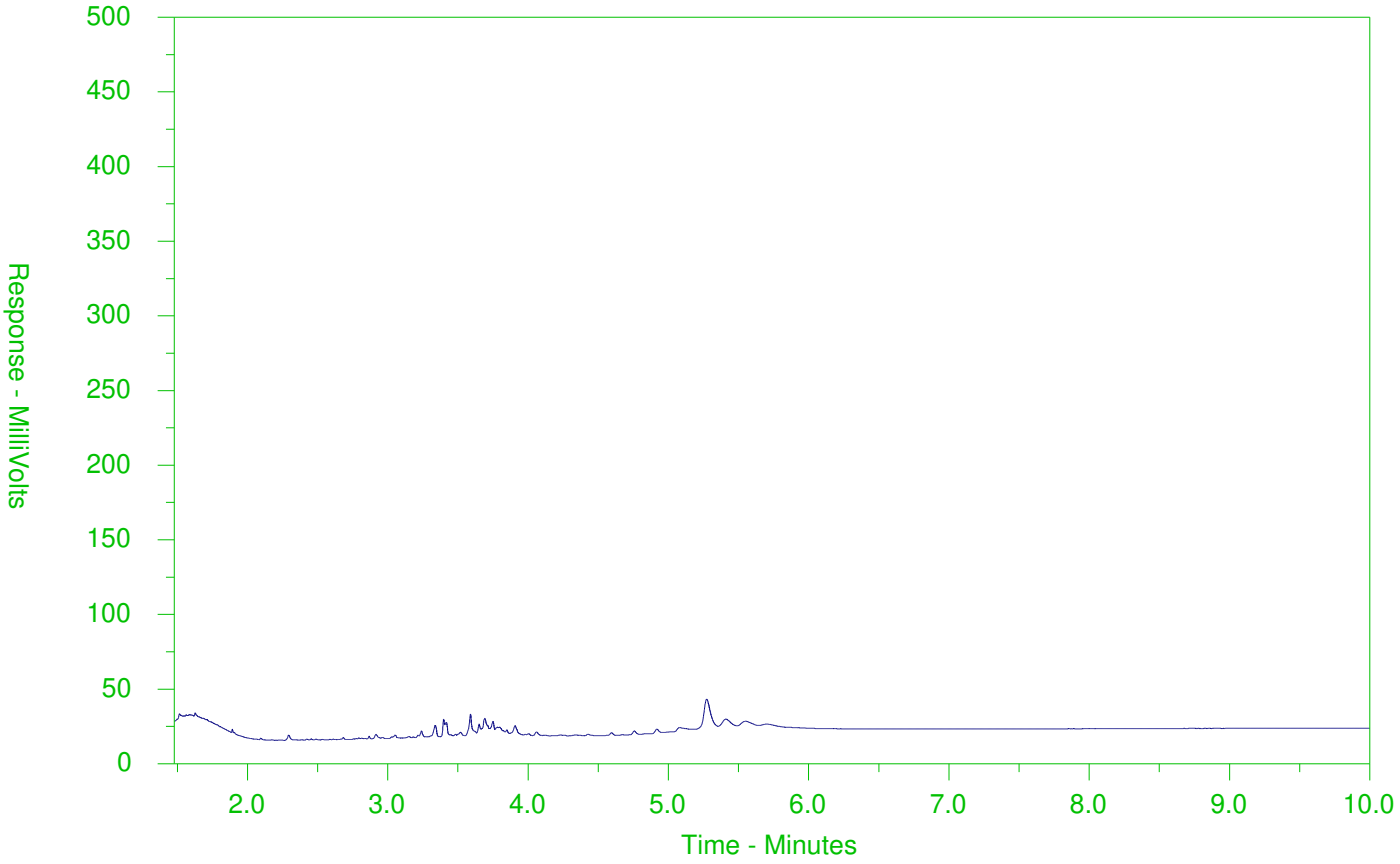
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221344-007-E601.SG-L
Client Sample ID: 22-38 0-0.75



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

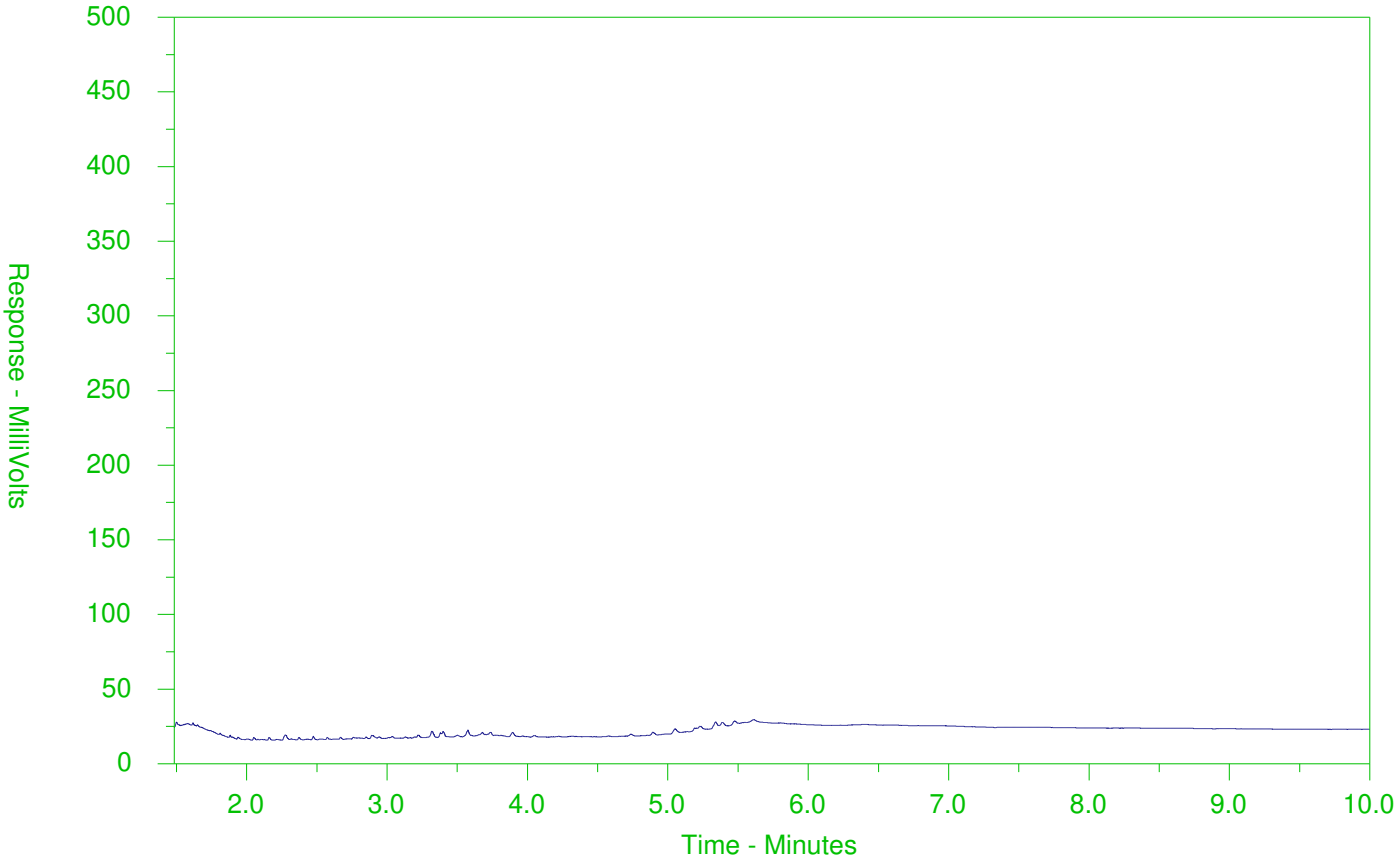
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221344-008-E601.SG-L
Client Sample ID: 22-38 0.75-2



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009752

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Page 1 of

Environmental Division Waterloo
Work Order Reference
WT2221344

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	1755 Woodward Drive, Unit 200
City/Province:	Ottawa, ON
Postal Code:	K2C0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A
☒ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax: dan@omnimccann.com
Email 2: antonia@omnimccann.com
Email 3: kristina@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax: invoicing@omnimccann.com
Email 2:

Turnaround Time (TAT) Requested

☒ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimu
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimu
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimu
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimu
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Add may apply to rush requests on weekends, statutory holidays and non-
Date and Time Required for all E&P TATs:
For all tests with rush TATs requested, please

Project Information

ALS Account # / Quote #: Q90026
Job #: 0006-0103
PO / AFE:
LSD: A.M.
ALS Lab Work Order # (ALS use only): WT2221344

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#
Major/Minor Code: Routing Code:
Requisitioner:
Location:
ALS Contact: Sampler:

Analysis Re

Indicate Filtered (F), Preserved (P) or Filtered a

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC	VOC	Metals	Cr 6	Hg	RSC Grain Size	PAH	BTEX	PCB	SAMPLES ON HOLD	EXTENDED STORAGE REQU	SUSPECTED HAZARD (see n
	22-36 0-0.75	07-Nov-22			4	X	X	X	X	X	X						
	22-20 2-4	07-Nov-22			3		X										
	22-22 2.5-3	07-Nov-22			3		X										
	22-23 1-2	07-Nov-22			3		X										
	DUP4	07-Nov-22			3		X										
	22-37 0-0.5	08-Nov-22			4	X		X	X	X		X	X				
	22-38 0-0.75	08-Nov-22			4	X							X	X			
	22-38 0.75-2	08-Nov-22			4	X							X	X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO
Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

O. Reg. 153/04 Table 7 For RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☒ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED
Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO
Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C	
5.9		2.2	

SHIPMENT RELEASE (client use)

Released by: Antonia Cass Date: 8-Nov-22 Time: 17:30

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 11/09/22 Time: 7:40

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 11/10/22 Time: 9:10

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

VS-082/083, SOL-564

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2221612**	Page	: 1 of 24
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 11-Nov-2022 07:55
PO	: ----	Date Analysis Commenced	: 15-Nov-2022
C-O-C number	: 17-802170	Issue Date	: 24-Nov-2022 18:42
Sampler	: Antonia Cass		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Inorganics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Metals, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Joseph Scharbach		Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
pH units	pH units

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Qualifiers

Qualifier	*Description*
DLM	*Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).*
RRV	*Reported result verified by repeat analysis.*

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

	Client sample ID	22-06B 0.75-1.75								
	Sampling date/time	09-Nov-2022 00:00								
Analyte	*Method*	*LOR*	*Unit*	WT2221612-001	**ON153/04 T7-ICC-C**	**ON153/04 T7-ICC-F**	**ON153/04 T7-RPI-C**	**ON153/04 T7-RPI-F**		
Physical Tests										
moisture	E144	0.25	%	18.2	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	73.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	105	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	110	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2221612-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	94.0	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	77.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-06B 2.5-3.25 Sampling date/time: 09-Nov-2022 00:00 WT2221612-002	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	17.3	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	62.1	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	109	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	0.10	%	104	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	115	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2221612-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	95.3	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	79.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: DUP5 Sampling date/time: 09-Nov-2022 00:00 WT2221612-003	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	18.0	--	--	--	--	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	75.6	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	106	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	98.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	106	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1221	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1232	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1242	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1248	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1254	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1260	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
Aroclor 1262	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2221612-003 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polychlorinated Biphenyls - Continued										
Aroclor 1268	E687	0.010	mg/kg	<0.010	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.030	mg/kg	<0.030	**1.1 mg/kg**	**1.1 mg/kg**	**0.35 mg/kg**	**0.35 mg/kg**	--	--
decachlorobiphenyl	E687	0.1	%	92.5	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	77.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-01C 0.25-2 Sampling date/time: 09-Nov-2022 00:00 WT2221612-004	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	5.11	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	0.20	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.60	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	200	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.27	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.15	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	8.6	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.151	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
chromium	E440	0.50	mg/kg	14.6	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	4.55	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	11.5	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	11.6	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
mercury	E510	0.0050	mg/kg	0.0119	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	1.06	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	10.1	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
thallium	E440	0.050	mg/kg	0.176	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.440	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	19.5	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	21.7	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.10	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
benzene	E611A	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
ethylbenzene	E611A	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
toluene	E611A	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
xylene, m+p-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611A	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611A	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-004 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
BTEX, total	E611A	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	317	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	714	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F4G-sg	E601.F4G-L	250	mg/kg	2420	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3-PAH	EC600	50	mg/kg	317	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	1030	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	NO	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	73.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	96.8	--	--	--	--	--	--
bromofluorobenzene, 4-	E611A	0.10	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611A	0.10	%	110	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-004 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	91.4	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	69.8	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	88.0	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	91.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
22-01C 0.25-2	Soil/Solid	F3 (C16-C34)		ON153/04	T7-RPI-C	317 mg/kg	300 mg/kg

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-01C 2.5-3 Sampling date/time: 09-Nov-2022 00:00 WT2221612-005	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	5.28	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	0.079	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-005 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	0.011	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	114	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-13B 0-2 Sampling date/time: 10-Nov-2022 00:00 WT2221612-006	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	3.91	--	--	--	--	--	--
pH (1:2 soil:CaCl2-aq)	E108A	0.10	pH units	8.14	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.16	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	66.5	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.18	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.23	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	8.7	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.030	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
calcium, soluble ion content	E484	0.50	mg/L	12.2	--	--	--	--	--	--
chromium	E440	0.50	mg/kg	9.91	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	2.77	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	9.25	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	7.69	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
magnesium, soluble ion content	E484	0.50	mg/L	1.13	--	--	--	--	--	--
mercury	E510	0.0050	mg/kg	0.0073	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.63	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	7.69	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
sodium, soluble ion content	E484	0.50	mg/L	111	--	--	--	--	--	--
thallium	E440	0.050	mg/kg	0.099	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.293	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	16.4	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	19.6	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
sodium adsorption ratio [SAR]	E484	0.10	-	8.15	**12 -**	**12 -**	**5 -**	**5 -**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.10	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-006 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-006 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	15	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	1230	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F3-PAH	EC600	50	mg/kg	1230	--	--	--	--	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	2450	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F4G-sg	E601.F4G-L	250	mg/kg	7130	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	3700	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	NO	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	77.3	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	89.0	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	0.10	%	103	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	116	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	0.056	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	0.080	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.103 DLM	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-006 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	103	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	92.2	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	86.6	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	97.3	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
22-13B 0-2	Soil/Solid	F4G-sg		ON153/04	T7-ICC-C	7130 mg/kg	3,300 mg/kg
	Soil/Solid	F4G-sg		ON153/04	T7-ICC-F	7130 mg/kg	6,600 mg/kg
	Soil/Solid	sodium adsorption ratio [SAR]		ON153/04	T7-RPI-C	8.15 -	5 -
	Soil/Solid	F3 (C16-C34)		ON153/04	T7-RPI-C	1230 mg/kg	300 mg/kg
	Soil/Solid	F4G-sg		ON153/04	T7-RPI-C	7130 mg/kg	2,800 mg/kg
	Soil/Solid	sodium adsorption ratio [SAR]		ON153/04	T7-RPI-F	8.15 -	5 -
	Soil/Solid	F4G-sg		ON153/04	T7-RPI-F	7130 mg/kg	5,600 mg/kg

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: DUP6 Sampling date/time: 10-Nov-2022 00:00 WT2221612-007	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	4.45	--	--	--	--	--	--
pH (1:2 soil:CaCl2-aq)	E108A	0.10	pH units	8.13	--	--	--	--	--	--
Metals										
antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
arsenic	E440	0.10	mg/kg	1.10	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
barium	E440	0.50	mg/kg	67.7	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
beryllium	E440	0.10	mg/kg	0.16	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
boron, hot water soluble	E487	0.10	mg/kg	0.27	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
boron	E440	5.0	mg/kg	6.6	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
cadmium	E440	0.020	mg/kg	0.030	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
calcium, soluble ion content	E484	0.50	mg/L	8.14	--	--	--	--	--	--
chromium	E440	0.50	mg/kg	7.30	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
cobalt	E440	0.10	mg/kg	2.52	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
copper	E440	0.50	mg/kg	6.13	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
lead	E440	0.50	mg/kg	7.60	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
magnesium, soluble ion content	E484	0.50	mg/L	0.77	--	--	--	--	--	--
mercury	E510	0.0050	mg/kg	0.0074	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
molybdenum	E440	0.10	mg/kg	0.56	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
nickel	E440	0.50	mg/kg	6.88	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
sodium, soluble ion content	E484	0.50	mg/L	105	--	--	--	--	--	--
thallium	E440	0.050	mg/kg	0.096	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
uranium	E440	0.050	mg/kg	0.250	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
vanadium	E440	0.20	mg/kg	14.7	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
zinc	E440	2.0	mg/kg	16.7	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
sodium adsorption ratio [SAR]	E484	0.10	-	9.43	**12 -**	**12 -**	**5 -**	**5 -**	--	--
Speciated Metals										
chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	<0.10	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-007 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	0.350	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-007 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	0.062	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	0.062	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	19.5 RRV	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<12 DLM	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F2-naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	1090	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F3-PAH	EC600	50	mg/kg	1090	--	--	--	--	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	2360	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F4G-sg	E601.F4G-L	250	mg/kg	7740	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	19.5	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	3470	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	NO	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	88.1	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	99.8	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	0.10	%	104	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	117	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
benzo(b+j)fluoranthene	E641A	0.050	mg/kg	0.053	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
benzo(g,h,i)perylene	E641A	0.050	mg/kg	0.057	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-007 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--
phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
acridine-d9	E641A	0.1	%	99.0	--	--	--	--	--	--
chrysene-d12	E641A	0.1	%	97.4	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	76.3	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	91.5	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
DUP6	Soil/Solid	F4G-sg		ON153/04	T7-ICC-C	7740 mg/kg	3,300 mg/kg
	Soil/Solid	F4G-sg		ON153/04	T7-ICC-F	7740 mg/kg	6,600 mg/kg
	Soil/Solid	sodium adsorption ratio [SAR]		ON153/04	T7-RPI-C	9.43 -	5 -
	Soil/Solid	F3 (C16-C34)		ON153/04	T7-RPI-C	1090 mg/kg	300 mg/kg
	Soil/Solid	F4G-sg		ON153/04	T7-RPI-C	7740 mg/kg	2,800 mg/kg
	Soil/Solid	sodium adsorption ratio [SAR]		ON153/04	T7-RPI-F	9.43 -	5 -
	Soil/Solid	F4G-sg		ON153/04	T7-RPI-F	7740 mg/kg	5,600 mg/kg

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

	Client sample ID	22-05C 0-1								
	Sampling date/time	10-Nov-2022 00:00								
Analyte	*Method*	*LOR*	*Unit*	WT2221612-008	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	19.2	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2221612-008 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	98.1	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	110	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2221612**	Page	: 1 of 16
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 11-Nov-2022 07:55
PO	: ----	Issue Date	: 24-Nov-2022 18:41
C-O-C number	: 17-802170		
Sampler	: Antonia Cass		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Matrix Spike outliers occur.
- Method Blank value outliers occur - please see following pages for full details.
- Duplicate outliers occur - please see following pages for full details.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Method Blank (MB) Values								
Hydrocarbons	QC-MRG2-744749001	----	F2 (C10-C16)	----	E601.SG-L	23 mg/kg MB-LOR	10 mg/kg	Blank result exceeds permitted value

Result Qualifiers

Qualifier	Description
MB-LOR	*Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.*

Duplicate (DUP) RPDs								
Metals	Anonymous	Anonymous	cadmium	7440-43-9	E440	40.6 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	Anonymous	Anonymous	calcium, soluble ion content	7440-70-2	E484	38.0 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	Anonymous	Anonymous	magnesium, soluble ion content	7439-95-4	E484	2.54 % DUP-H	Diff <2x LOR	Low Level DUP DQO exceeded (difference > 2 LOR).
Polycyclic Aromatic Hydrocarbons	Anonymous	Anonymous	anthracene	120-12-7	E641A	57.9 % DUP-H	50%	Duplicate RPD does not meet the DQO for this test.
Polycyclic Aromatic Hydrocarbons	Anonymous	Anonymous	benz(a)anthracene	56-55-3	E641A	57.4 % DUP-H	50%	Duplicate RPD does not meet the DQO for this test.
Polycyclic Aromatic Hydrocarbons	Anonymous	Anonymous	chrysene	218-01-9	E641A	51.7 % DUP-H	50%	Duplicate RPD does not meet the DQO for this test.
Polycyclic Aromatic Hydrocarbons	Anonymous	Anonymous	naphthalene	91-20-3	E641A	75.4 % DUP-H	50%	Duplicate RPD does not meet the DQO for this test.
Polycyclic Aromatic Hydrocarbons	Anonymous	Anonymous	phenanthrene	85-01-8	E641A	64.9 % DUP-H	50%	Duplicate RPD does not meet the DQO for this test.

Result Qualifiers

Qualifier	Description
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*

Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-745670-002	----	dichlorodifluoromethane	75-71-8	E611D	48.9 % MES	50.0-140%	Recovery less than lower control limit
Hydrocarbons	QC-745669-002	----	F1 (C6-C10)	----	E581.F1	122 % LCS-H	80.0-120%	Recovery greater than upper control limit

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment

Result Qualifiers

Qualifier	Description
LCS-H	Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-01C 0.25-2	E581.F1	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	16-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-06B 0.75-1.75	E581.F1	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	16-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] DUP5	E581.F1	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	16-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-13B 0-2	E581.F1	10-Nov-2022	16-Nov-2022	14 days	7 days	✓	18-Nov-2022	40 days	2 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] DUP6	E581.F1	10-Nov-2022	16-Nov-2022	14 days	7 days	✓	18-Nov-2022	40 days	2 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-06B 2.5-3.25	E581.F1	09-Nov-2022	16-Nov-2022	14 days	8 days	✓	18-Nov-2022	40 days	2 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap 22-13B 0-2	E601.F4G-L	10-Nov-2022	16-Nov-2022	14 days	7 days	✓	24-Nov-2022	40 days	8 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
DUP6	E601.F4G-L	10-Nov-2022	17-Nov-2022	14 days	8 days	✓	17-Nov-2022	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E601.F4G-L	09-Nov-2022	16-Nov-2022	14 days	8 days	✓	24-Nov-2022	40 days	8 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
DUP6	E601.SG-L	10-Nov-2022	16-Nov-2022	14 days	6 days	✓	17-Nov-2022	40 days	1 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E601.SG-L	10-Nov-2022	16-Nov-2022	14 days	6 days	✓	23-Nov-2022	40 days	8 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E601.SG-L	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	23-Nov-2022	40 days	8 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-06B 0.75-1.75	E601.SG-L	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	23-Nov-2022	40 days	8 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
22-06B 2.5-3.25	E601.SG-L	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	23-Nov-2022	40 days	8 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap										
DUP5	E601.SG-L	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	23-Nov-2022	40 days	8 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E487	10-Nov-2022	24-Nov-2022	180 days	14 days	✓	24-Nov-2022	180 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
DUP6	E487	10-Nov-2022	24-Nov-2022	180 days	14 days	✓	24-Nov-2022	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E487	09-Nov-2022	24-Nov-2022	180 days	15 days	✓	24-Nov-2022	180 days	0 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E510	10-Nov-2022	23-Nov-2022	----	----		24-Nov-2022	28 days	14 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
DUP6	E510	10-Nov-2022	23-Nov-2022	----	----		24-Nov-2022	28 days	14 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E510	09-Nov-2022	23-Nov-2022	----	----		24-Nov-2022	28 days	15 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E440	10-Nov-2022	23-Nov-2022	----	----		24-Nov-2022	180 days	14 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
DUP6	E440	10-Nov-2022	23-Nov-2022	----	----		24-Nov-2022	180 days	14 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E440	09-Nov-2022	23-Nov-2022	----	----		24-Nov-2022	180 days	15 days	✓
Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E484	10-Nov-2022	24-Nov-2022	180 days	14 days	✓	24-Nov-2022	180 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)										
Glass soil jar/Teflon lined cap										
DUP6	E484	10-Nov-2022	24-Nov-2022	180 days	14 days	✓	24-Nov-2022	180 days	0 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E144	09-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-01C 2.5-3	E144	09-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-05C 0-1	E144	10-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-06B 0.75-1.75	E144	09-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-06B 2.5-3.25	E144	09-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E144	10-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP5	E144	09-Nov-2022	----	----	----		15-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP6	E144	10-Nov-2022	----	----	----		15-Nov-2022	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E108A	10-Nov-2022	15-Nov-2022	----	----		17-Nov-2022	30 days	8 days	✓
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap										
DUP6	E108A	10-Nov-2022	15-Nov-2022	----	----		17-Nov-2022	30 days	8 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-06B 0.75-1.75	E687	09-Nov-2022	16-Nov-2022	----	----		17-Nov-2022	40 days	1 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
22-06B 2.5-3.25	E687	09-Nov-2022	16-Nov-2022	----	----		17-Nov-2022	40 days	1 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Glass soil jar/Teflon lined cap										
DUP5	E687	09-Nov-2022	16-Nov-2022	----	----		17-Nov-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E641A	10-Nov-2022	16-Nov-2022	14 days	6 days	✓	18-Nov-2022	40 days	3 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
DUP6	E641A	10-Nov-2022	16-Nov-2022	14 days	6 days	✓	18-Nov-2022	40 days	3 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E641A	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	18-Nov-2022	40 days	3 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-13B 0-2	E532	10-Nov-2022	15-Nov-2022	30 days	6 days	✓	21-Nov-2022	7 days	6 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
DUP6	E532	10-Nov-2022	15-Nov-2022	30 days	6 days	✓	21-Nov-2022	7 days	6 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-01C 0.25-2	E532	09-Nov-2022	15-Nov-2022	30 days	7 days	✓	21-Nov-2022	7 days	6 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-01C 0.25-2	E611A	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	16-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-06B 0.75-1.75	E611A	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	16-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : BTEX by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
DUP5	E611A	09-Nov-2022	16-Nov-2022	14 days	7 days	✓	16-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-05C 0-1	E611D	10-Nov-2022	16-Nov-2022	14 days	7 days	✓	18-Nov-2022	40 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-13B 0-2	E611D	10-Nov-2022	16-Nov-2022	14 days	7 days	✓	18-Nov-2022	40 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
DUP6	E611D	10-Nov-2022	16-Nov-2022	14 days	7 days	✓	18-Nov-2022	40 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-01C 2.5-3	E611D	09-Nov-2022	16-Nov-2022	14 days	8 days	✓	18-Nov-2022	40 days	2 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-06B 2.5-3.25	E611D	09-Nov-2022	16-Nov-2022	14 days	8 days	✓	18-Nov-2022	40 days	2 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Boron-Hot Water Extractable by ICPOES	E487	743815	1	6	16.6	5.0	✓
BTEX by Headspace GC-MS	E611A	744774	1	16	6.2	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	744775	2	38	5.2	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	747466	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744709	2	35	5.7	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	744126	1	15	6.6	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	743810	1	10	10.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	743809	1	16	6.2	5.0	✓
Moisture Content by Gravimetry	E144	744093	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744710	2	11	18.1	5.0	✓
PCB Aroclors by GC-MS	E687	744727	1	19	5.2	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	743868	1	19	5.2	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	743812	1	5	20.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	745670	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Boron-Hot Water Extractable by ICPOES	E487	743815	2	6	33.3	10.0	✓
BTEX by Headspace GC-MS	E611A	744774	1	16	6.2	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	744775	2	38	5.2	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	747466	2	6	33.3	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744709	2	35	5.7	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	744126	2	15	13.3	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	743810	2	10	20.0	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	743809	2	16	12.5	10.0	✓
Moisture Content by Gravimetry	E144	744093	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744710	2	11	18.1	5.0	✓
PCB Aroclors by GC-MS	E687	744727	1	19	5.2	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	743868	1	19	5.2	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	743812	2	5	40.0	10.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	745670	1	20	5.0	5.0	✓
Method Blanks (MB)							
Boron-Hot Water Extractable by ICPOES	E487	743815	1	6	16.6	5.0	✓
BTEX by Headspace GC-MS	E611A	744774	1	16	6.2	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	744775	2	38	5.2	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	747466	2	6	33.3	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744709	2	35	5.7	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Method Blanks (MB) - Continued							
Hexavalent Chromium (Cr VI) by IC	E532	744126	1	15	6.6	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	743810	1	10	10.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	743809	1	16	6.2	5.0	✓
Moisture Content by Gravimetry	E144	744093	1	20	5.0	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744710	2	11	18.1	5.0	✓
PCB Aroclors by GC-MS	E687	744727	1	19	5.2	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	743812	1	5	20.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	745670	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
BTEX by Headspace GC-MS	E611A	744774	1	16	6.2	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	744775	2	38	5.2	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	747466	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	744709	2	35	5.7	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	744710	2	11	18.1	5.0	✓
PCB Aroclors by GC-MS	E687	744727	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	745670	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A Waterloo - Environmental	Soil/Solid	MOEE E3137A	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C) and is carried out in accordance with procedures described in the Analytical Protocol (prescriptive method). A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling, or decanting and then analyzed using a pH meter and electrode.
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Metals in Soil/Solid by CRC ICPMS	E440 Waterloo - Environmental	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484 Waterloo - Environmental	Soil/Solid	SW846 6010C	A dried, disaggregated solid sample is extracted with deionized water, the aqueous extract is separated from the solid, acidified and then analyzed using a ICP/OES. The concentrations of Na, Ca and Mg are reported as per CALA requirements for calculated parameters. These individual parameters are not for comparison to any guideline.
Boron-Hot Water Extractable by ICPOES	E487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS	E510 Waterloo - Environmental	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 Waterloo - Environmental	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	A portion of the silica gel treated sample extract is filtered and dried at 105°C and the mass of the residual gravimetric heavy hydrocarbons (F4G) is determined gravimetrically.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
BTEX by Headspace GC-MS	E611A Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hex:Ace GC-MS	E641A Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with hexane/acetone and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
PCB Aroclors by GC-MS	E687 Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	PCB Aroclors are analyzed by GC-MS
F1-BTEX	EC580 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.
F2 to F3 minus PAH	EC600 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F2-PAH = CCME Fraction 2 (C10-C16) minus Naphthalene F3-PAH = CCME Fraction 3 (C16-C34) minus select Polycyclic Aromatic Hydrocarbons (PAH) as per CCME Soil Tier 1

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 Waterloo - Environmental	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Leach 1:2 Soil : 0.01CaCl2 - As Received for pH	EP108A Waterloo - Environmental	Soil/Solid	MOEE E3137A	A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling or decanting and then analyzed using a pH meter and electrode.
Digestion for Metals and Mercury	EP440 Waterloo - Environmental	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 Waterloo - Environmental	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.
Pesticides, PCB, PAH, and Neutral Extractable Chlorinated Hydrocarbons Extraction	EP660 Waterloo - Environmental	Soil/Solid	EPA 3570 (mod)	A homogenized subsample is extracted with organic solvents using a mechanical shaker.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2221612**	Page	: 1 of 23
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 11-Nov-2022 07:55
PO	: ----	Date Analysis Commenced	: 15-Nov-2022
C-O-C number	: 17-802170	Issue Date	: 24-Nov-2022 18:42
Sampler	: Antonia Cass 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Waterloo Inorganics, Waterloo, Ontario
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Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Waterloo Organics, Waterloo, Ontario
Joseph Scharbach		Waterloo Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 743868)											
WT2221489-019	Anonymous	pH (1:2 soil:CaCl2-aq)	----	E108A	0.10	pH units	7.79	7.74	0.644%	5%	----
Physical Tests (QC Lot: 744093)											
KS2204290-001	Anonymous	moisture	----	E144	0.25	%	6.09	5.92	2.88%	20%	----
Metals (QC Lot: 743809)											
WT2221522-001	Anonymous	antimony	7440-36-0	E440	2.00	mg/kg	51.2	42.2	19.1%	30%	----
		arsenic	7440-38-2	E440	2.00	mg/kg	11.5	10.1	1.43	Diff <2x LOR	----
		barium	7440-39-3	E440	10.0	mg/kg	437	368	17.1%	40%	----
		beryllium	7440-41-7	E440	2.00	mg/kg	<2.00	<2.00	0	Diff <2x LOR	----
		boron	7440-42-8	E440	100	mg/kg	108	104	4.3	Diff <2x LOR	----
		cadmium	7440-43-9	E440	0.400	mg/kg	9.32	6.17	40.6%	30%	DUP-H
		chromium	7440-47-3	E440	10.0	mg/kg	69.4	63.1	6.27	Diff <2x LOR	----
		cobalt	7440-48-4	E440	2.00	mg/kg	121	91.8	27.7%	30%	----
		copper	7440-50-8	E440	10.0	mg/kg	1980	1600	20.7%	30%	----
		lead	7439-92-1	E440	10.0	mg/kg	471	427	9.90%	40%	----
		molybdenum	7439-98-7	E440	2.00	mg/kg	6.73	5.91	0.82	Diff <2x LOR	----
		nickel	7440-02-0	E440	10.0	mg/kg	76.5	73.1	4.44%	30%	----
		selenium	7782-49-2	E440	4.00	mg/kg	<4.00	<4.00	0	Diff <2x LOR	----
		silver	7440-22-4	E440	2.00	mg/kg	2.73	3.44	0.71	Diff <2x LOR	----
		thallium	7440-28-0	E440	1.00	mg/kg	<1.00	<1.00	0	Diff <2x LOR	----
		uranium	7440-61-1	E440	1.00	mg/kg	1.44	1.22	0.212	Diff <2x LOR	----
		vanadium	7440-62-2	E440	4.00	mg/kg	17.2	15.1	2.12	Diff <2x LOR	----
		zinc	7440-66-6	E440	40.0	mg/kg	2920	2400	19.5%	30%	----
Metals (QC Lot: 743810)											
WT2221522-001	Anonymous	mercury	7439-97-6	E510	0.0050	mg/kg	0.0054	<0.0050	0.0004	Diff <2x LOR	----
Metals (QC Lot: 743812)											
WT2221731-001	Anonymous	calcium, soluble ion content	7440-70-2	E484	0.50	mg/L	9.33	6.35	38.0%	30%	DUP-H
		magnesium, soluble ion content	7439-95-4	E484	0.50	mg/L	4.38	# 1.84	2.54	Diff <2x LOR	DUP-H
		sodium, soluble ion content	17341-25-2	E484	0.50	mg/L	726	724	0.276%	30%	----
Metals (QC Lot: 743815)											
WT2221731-003	Anonymous	boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Speciated Metals (QC Lot: 744126)											
WT2221489-002	Anonymous	chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 744774)											
WT2221849-002	Anonymous	benzene	71-43-2	E611A	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		toluene	108-88-3	E611A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 745670)											
WT2221591-001	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 745670) - continued											
WT2221591-001	Anonymous	methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 744709)											
WT2221489-024	Anonymous	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	17	30	12	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	55	113	58	Diff <2x LOR	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 744749)											
WT2221612-007	DUP6	F2 (C10-C16)	----	E601.SG-L	12	mg/kg	<12	<12	0.03	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1090	1280	15.6%	40%	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	2360	2760	15.4%	40%	----
Hydrocarbons (QC Lot: 744775)											
WT2221849-002	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 745669)											
WT2221591-001	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 747466)											
WT2221612-007	DUP6	F4G-sg	----	E601.F4G-L	250	mg/kg	7740	9450	19.9%	40%	----
Polycyclic Aromatic Hydrocarbons (QC Lot: 744710)											
WT2221489-024	Anonymous	acenaphthene	83-32-9	E641A	0.050	mg/kg	4.06	4.08	0.565%	50%	J
		acenaphthylene	208-96-8	E641A	0.050	mg/kg	0.066	0.090	0.024	Diff <2x LOR	J
		anthracene	120-12-7	E641A	0.050	mg/kg	0.170	0.308	57.9%	50%	DUP-H
		benz(a)anthracene	56-55-3	E641A	0.050	mg/kg	0.187	0.337	57.4%	50%	DUP-H
		benzo(a)pyrene	50-32-8	E641A	0.050	mg/kg	0.174	0.282	47.6%	50%	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Polycyclic Aromatic Hydrocarbons (QC Lot: 744710) - continued											
WT2221489-024	Anonymous	benzo(b+j)fluoranthene	n/a	E641A	0.050	mg/kg	0.146	0.245	0.099	Diff <2x LOR	J
		benzo(g,h,i)perylene	191-24-2	E641A	0.050	mg/kg	0.118	0.172	0.054	Diff <2x LOR	J
		benzo(k)fluoranthene	207-08-9	E641A	0.050	mg/kg	0.056	0.103	0.048	Diff <2x LOR	J
		chrysene	218-01-9	E641A	0.050	mg/kg	0.211	0.358	51.7%	50%	DUP-H
		dibenz(a,h)anthracene	53-70-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluoranthene	206-44-0	E641A	0.050	mg/kg	1.06	1.66	43.8%	50%	----
		fluorene	86-73-7	E641A	0.050	mg/kg	1.41	1.76	22.5%	50%	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.050	mg/kg	0.108	0.158	0.050	Diff <2x LOR	J
		methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	0.491	0.455	7.52%	50%	----
		methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	0.039	0.090	0.051	Diff <2x LOR	J
		naphthalene	91-20-3	E641A	0.010	mg/kg	0.103	0.229	75.4%	50%	DUP-H
		phenanthrene	85-01-8	E641A	0.050	mg/kg	0.206	0.404	64.9%	50%	DUP-H
		pyrene	129-00-0	E641A	0.050	mg/kg	1.39	2.17	43.4%	50%	----
Polycyclic Aromatic Hydrocarbons (QC Lot: 744750)											
WT2221612-007	DUP6	acenaphthene	83-32-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		acenaphthylene	208-96-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		anthracene	120-12-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benz(a)anthracene	56-55-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(a)pyrene	50-32-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		benzo(b+j)fluoranthene	n/a	E641A	0.050	mg/kg	0.053	0.061	0.007	Diff <2x LOR	J
		benzo(g,h,i)perylene	191-24-2	E641A	0.050	mg/kg	0.057	0.065	0.008	Diff <2x LOR	J
		benzo(k)fluoranthene	207-08-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chrysene	218-01-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluoranthene	206-44-0	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		fluorene	86-73-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		naphthalene	91-20-3	E641A	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		phenanthrene	85-01-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		pyrene	129-00-0	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
Polychlorinated Biphenyls (QC Lot: 744727)											
WT2221612-001	22-06B 0.75-1.75	Aroclor 1016	12674-11-2	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Polychlorinated Biphenyls (QC Lot: 744727) - continued											
WT2221612-001	22-06B 0.75-1.75	Aroclor 1221	11104-28-2	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1232	11141-16-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1242	53469-21-9	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1248	12672-29-6	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1254	11097-69-1	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1260	11096-82-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1262	37324-23-5	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Aroclor 1268	11100-14-4	E687	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----

Qualifiers

Qualifier	*Description*
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*
J	*Duplicate results and limits are expressed in terms of absolute difference.*

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 744093)						
moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 743809)						
antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
boron	7440-42-8	E440	5	mg/kg	<5.0	----
cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Metals (QCLot: 743810)						
mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 743812)						
calcium, soluble ion content	7440-70-2	E484	0.5	mg/L	<0.50	----
magnesium, soluble ion content	7439-95-4	E484	0.5	mg/L	<0.50	----
sodium, soluble ion content	17341-25-2	E484	0.5	mg/L	<0.50	----
Metals (QCLot: 743815)						
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Speciated Metals (QCLot: 744126)						
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 744774)						
benzene	71-43-2	E611A	0.005	mg/kg	<0.0050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 744774) - continued						
ethylbenzene	100-41-4	E611A	0.015	mg/kg	<0.015	----
toluene	108-88-3	E611A	0.05	mg/kg	<0.050	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	<0.030	----
Volatile Organic Compounds (QCLot: 745670)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 745670) - continued						
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----
Hydrocarbons (QCLot: 744709)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Hydrocarbons (QCLot: 744749)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	# 23	MB-LOR
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Hydrocarbons (QCLot: 744775)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 745669)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 747466)						
F4G-sg	----	E601.F4G-L	250	mg/kg	<250	----
Hydrocarbons (QCLot: 755171)						
F4G-sg	----	E601.F4G-L	250	mg/kg	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744710)						
acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 744710) - continued						
chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744750)						
acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----
chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----
Polychlorinated Biphenyls (QCLot: 744727)						
Aroclor 1016	12674-11-2	E687	0.01	mg/kg	<0.010	----
Aroclor 1221	11104-28-2	E687	0.01	mg/kg	<0.010	----
Aroclor 1232	11141-16-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1242	53469-21-9	E687	0.01	mg/kg	<0.010	----
Aroclor 1248	12672-29-6	E687	0.01	mg/kg	<0.010	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polychlorinated Biphenyls (QCLot: 744727) - continued						
Aroclor 1254	11097-69-1	E687	0.01	mg/kg	<0.010	----
Aroclor 1260	11096-82-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1262	37324-23-5	E687	0.01	mg/kg	<0.010	----
Aroclor 1268	11100-14-4	E687	0.01	mg/kg	<0.010	----

Qualifiers

Qualifier	Description
MB-LOR	*Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.*

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 743868)									
pH (1:2 soil:CaCl2-aq)	----	E108A	----	pH units	7 pH units	101	98.0	102	----
Physical Tests (QCLot: 744093)									
moisture	----	E144	0.25	%	50 %	101	90.0	110	----
Metals (QCLot: 743809)									
antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	102	80.0	120	----
arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	105	80.0	120	----
barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	101	80.0	120	----
beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	95.8	80.0	120	----
boron	7440-42-8	E440	5	mg/kg	100 mg/kg	93.6	80.0	120	----
cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	97.7	80.0	120	----
chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	98.6	80.0	120	----
cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	98.1	80.0	120	----
copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	96.2	80.0	120	----
lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	99.9	80.0	120	----
molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	100	80.0	120	----
nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	97.8	80.0	120	----
selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	102	80.0	120	----
silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	92.7	80.0	120	----
thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	96.7	80.0	120	----
uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	95.2	80.0	120	----
vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	102	80.0	120	----
zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	95.6	80.0	120	----
Metals (QCLot: 743810)									
mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	99.5	80.0	120	----
Metals (QCLot: 743812)									
calcium, soluble ion content	7440-70-2	E484	0.5	mg/L	300 mg/L	106	80.0	120	----
magnesium, soluble ion content	7439-95-4	E484	0.5	mg/L	50 mg/L	101	80.0	120	----
sodium, soluble ion content	17341-25-2	E484	0.5	mg/L	50 mg/L	99.6	80.0	120	----
Metals (QCLot: 743815)									
boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	1.33333 mg/kg	103	70.0	130	----
Speciated Metals (QCLot: 744126)									

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Speciated Metals (QCLot: 744126) - continued									
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	85.6	80.0	120	----
Volatile Organic Compounds (QCLot: 744774)									
benzene	71-43-2	E611A	0.005	mg/kg	3.475 mg/kg	98.1	70.0	130	----
ethylbenzene	100-41-4	E611A	0.015	mg/kg	3.475 mg/kg	96.3	70.0	130	----
toluene	108-88-3	E611A	0.05	mg/kg	3.475 mg/kg	95.4	70.0	130	----
xylene, m+p-	179601-23-1	E611A	0.03	mg/kg	6.95 mg/kg	93.8	70.0	130	----
xylene, o-	95-47-6	E611A	0.03	mg/kg	3.475 mg/kg	96.0	70.0	130	----
Volatile Organic Compounds (QCLot: 745670)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	101	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	95.4	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	102	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	103	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	90.8	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	87.1	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	91.6	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	105	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	105	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	100	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	# 48.9	50.0	140	MES
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	80.3	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	92.8	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	80.3	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	93.8	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	90.9	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	93.4	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	100	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	107	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	110	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	98.3	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	82.0	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	116	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	103	60.0	140	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 745670) - continued									
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	97.4	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	105	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	99.8	60.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	97.8	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	96.8	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	96.5	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	86.7	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	105	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	97.5	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	80.4	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	74.8	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	99.2	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	98.5	70.0	130	----
Hydrocarbons (QCLot: 744709)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	916.995 mg/kg	83.3	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1190.25 mg/kg	94.7	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	879.735 mg/kg	93.5	70.0	130	----
Hydrocarbons (QCLot: 744749)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	916.995 mg/kg	86.4	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1190.25 mg/kg	93.0	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	879.735 mg/kg	81.1	70.0	130	----
Hydrocarbons (QCLot: 744775)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	106	80.0	120	----
Hydrocarbons (QCLot: 745669)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	# 122	80.0	120	LCS-H
Hydrocarbons (QCLot: 747466)									
F4G-sg	----	E601.F4G-L	250	mg/kg	1298.6 mg/kg	96.2	70.0	130	----
Hydrocarbons (QCLot: 755171)									
F4G-sg	----	E601.F4G-L	250	mg/kg	1298.6 mg/kg	80.2	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744710)									
acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	89.6	60.0	130	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	94.7	60.0	130	----
anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	98.7	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	60.2	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 744710) - continued									
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	66.9	60.0	130	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	63.8	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	68.1	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	63.3	60.0	130	----
chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	61.2	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	83.4	60.0	130	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	92.8	60.0	130	----
fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	91.6	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	69.0	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	86.1	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	84.0	60.0	130	----
naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	78.5	60.0	130	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	91.4	60.0	130	----
pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	92.8	60.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744750)									
acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	87.8	60.0	130	----
acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	93.2	60.0	130	----
anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	100	60.0	130	----
benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	101	60.0	130	----
benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	93.9	60.0	130	----
benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	105	60.0	130	----
benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	72.1	60.0	130	----
benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	92.8	60.0	130	----
chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	91.1	60.0	130	----
dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	86.2	60.0	130	----
fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	88.3	60.0	130	----
fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	90.7	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	79.2	60.0	130	----
methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	86.4	60.0	130	----
methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	84.2	60.0	130	----
naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	72.7	60.0	130	----
phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	91.0	60.0	130	----
pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	89.0	60.0	130	----
Polychlorinated Biphenyls (QCLot: 744727)									
Aroclor 1016	12674-11-2	E687	0.01	mg/kg	0.01 mg/kg	94.0	60.0	140	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Polychlorinated Biphenyls (QCLot: 744727) - continued									
Aroclor 1221	11104-28-2	E687	0.01	mg/kg	0.01 mg/kg	94.0	60.0	140	----
Aroclor 1232	11141-16-5	E687	0.01	mg/kg	0.01 mg/kg	94.0	60.0	140	----
Aroclor 1242	53469-21-9	E687	0.01	mg/kg	0.01 mg/kg	94.0	60.0	140	----
Aroclor 1248	12672-29-6	E687	0.01	mg/kg	0.01 mg/kg	75.0	60.0	140	----
Aroclor 1254	11097-69-1	E687	0.01	mg/kg	0.01 mg/kg	89.8	60.0	140	----
Aroclor 1260	11096-82-5	E687	0.01	mg/kg	0.01 mg/kg	90.7	60.0	140	----
Aroclor 1262	37324-23-5	E687	0.01	mg/kg	0.01 mg/kg	90.7	60.0	140	----
Aroclor 1268	11100-14-4	E687	0.01	mg/kg	0.01 mg/kg	90.7	60.0	140	----

Qualifiers

Qualifier	Description
LCS-H	Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 744774)										
WT2221849-002	Anonymous	benzene	71-43-2	E611A	2.08 mg/kg	3.125 mg/kg	93.0	60.0	140	----
		ethylbenzene	100-41-4	E611A	2.03 mg/kg	3.125 mg/kg	90.8	60.0	140	----
		toluene	108-88-3	E611A	2.02 mg/kg	3.125 mg/kg	90.4	60.0	140	----
		xylene, m+p-	179601-23-1	E611A	3.96 mg/kg	6.25 mg/kg	88.5	60.0	140	----
		xylene, o-	95-47-6	E611A	2.06 mg/kg	3.125 mg/kg	92.0	60.0	140	----
Volatile Organic Compounds (QCLot: 745670)										
WT2221591-001	Anonymous	Acetone	67-64-1	E611D	2.31 mg/kg	3.125 mg/kg	100	50.0	140	----
		benzene	71-43-2	E611D	2.18 mg/kg	3.125 mg/kg	94.9	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.30 mg/kg	3.125 mg/kg	100	50.0	140	----
		bromoform	75-25-2	E611D	2.33 mg/kg	3.125 mg/kg	101	50.0	140	----
		bromomethane	74-83-9	E611D	2.11 mg/kg	3.125 mg/kg	92.0	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.00 mg/kg	3.125 mg/kg	87.3	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.28 mg/kg	3.125 mg/kg	99.5	50.0	140	----
		chloroform	67-66-3	E611D	2.08 mg/kg	3.125 mg/kg	90.8	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.37 mg/kg	3.125 mg/kg	103	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.37 mg/kg	3.125 mg/kg	103	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.25 mg/kg	3.125 mg/kg	98.0	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.24 mg/kg	3.125 mg/kg	97.4	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.27 mg/kg	3.125 mg/kg	99.1	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.42 mg/kg	3.125 mg/kg	62.0	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	1.85 mg/kg	3.125 mg/kg	80.6	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.11 mg/kg	3.125 mg/kg	92.0	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	1.89 mg/kg	3.125 mg/kg	82.4	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.14 mg/kg	3.125 mg/kg	93.2	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.09 mg/kg	3.125 mg/kg	91.0	50.0	140	----
		dichloromethane	75-09-2	E611D	2.16 mg/kg	3.125 mg/kg	94.3	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.27 mg/kg	3.125 mg/kg	99.0	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.37 mg/kg	3.125 mg/kg	103	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.41 mg/kg	3.125 mg/kg	105	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.23 mg/kg	3.125 mg/kg	97.0	50.0	140	----
		hexane, n-	110-54-3	E611D	1.98 mg/kg	3.125 mg/kg	86.5	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 745670) - continued										
WT2221591-001	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	2.62 mg/kg	3.125 mg/kg	114	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.30 mg/kg	3.125 mg/kg	100	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.24 mg/kg	3.125 mg/kg	97.4	50.0	140	----
		styrene	100-42-5	E611D	2.36 mg/kg	3.125 mg/kg	103	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.26 mg/kg	3.125 mg/kg	98.6	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.26 mg/kg	3.125 mg/kg	98.6	50.0	140	----
		tetrachloroethylene	127-18-4	E611D	2.19 mg/kg	3.125 mg/kg	95.5	50.0	140	----
		toluene	108-88-3	E611D	2.20 mg/kg	3.125 mg/kg	95.7	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	1.99 mg/kg	3.125 mg/kg	86.8	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.39 mg/kg	3.125 mg/kg	104	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.22 mg/kg	3.125 mg/kg	96.5	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	1.95 mg/kg	3.125 mg/kg	84.9	50.0	140	----
		vinyl chloride	75-01-4	E611D	1.77 mg/kg	3.125 mg/kg	77.3	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.48 mg/kg	6.25 mg/kg	97.7	50.0	140	----
		xylene, o-	95-47-6	E611D	2.23 mg/kg	3.125 mg/kg	97.0	50.0	140	----
Hydrocarbons (QCLot: 744709)										
WT2221489-024	Anonymous	F2 (C10-C16)	----	E601.SG-L	730 mg/kg	916.995 mg/kg	100	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	1120 mg/kg	1190.25 mg/kg	118	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	687 mg/kg	879.735 mg/kg	98.4	60.0	140	----
Hydrocarbons (QCLot: 744749)										
WT2221612-007	DUP6	F2 (C10-C16)	----	E601.SG-L	689 mg/kg	916.995 mg/kg	90.9	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	ND mg/kg	1190.25 mg/kg	ND	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	ND mg/kg	879.735 mg/kg	ND	60.0	140	----
Hydrocarbons (QCLot: 744775)										
WT2221849-002	Anonymous	F1 (C6-C10)	----	E581.F1	43.0 mg/kg	62.5 mg/kg	96.0	60.0	140	----
Hydrocarbons (QCLot: 745669)										
WT2221591-001	Anonymous	F1 (C6-C10)	----	E581.F1	47.7 mg/kg	62.5 mg/kg	104	60.0	140	----
Hydrocarbons (QCLot: 747466)										
WT2221612-007	DUP6	F4G-sg	----	E601.F4G-L	ND mg/kg	1298.6 mg/kg	ND	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 744710)										
WT2221489-024	Anonymous	acenaphthene	83-32-9	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		acenaphthylene	208-96-8	E641A	0.406 mg/kg	0.5 mg/kg	102	50.0	140	----
		anthracene	120-12-7	E641A	0.416 mg/kg	0.5 mg/kg	105	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 744710) - continued										
WT2221489-024	Anonymous	benz(a)anthracene	56-55-3	E641A	0.268 mg/kg	0.5 mg/kg	67.6	50.0	140	----
		benzo(a)pyrene	50-32-8	E641A	0.402 mg/kg	0.5 mg/kg	102	50.0	140	----
		benzo(b+j)fluoranthene	n/a	E641A	0.323 mg/kg	0.5 mg/kg	81.6	50.0	140	----
		benzo(g,h,i)perylene	191-24-2	E641A	0.380 mg/kg	0.5 mg/kg	95.7	50.0	140	----
		benzo(k)fluoranthene	207-08-9	E641A	0.309 mg/kg	0.5 mg/kg	77.9	50.0	140	----
		chrysene	218-01-9	E641A	0.263 mg/kg	0.5 mg/kg	66.3	50.0	140	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.416 mg/kg	0.5 mg/kg	105	50.0	140	----
		fluoranthene	206-44-0	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		fluorene	86-73-7	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.384 mg/kg	0.5 mg/kg	96.8	50.0	140	----
		methylnaphthalene, 1-	90-12-0	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
		methylnaphthalene, 2-	91-57-6	E641A	0.385 mg/kg	0.5 mg/kg	97.1	50.0	140	----
		naphthalene	91-20-3	E641A	0.388 mg/kg	0.5 mg/kg	98.0	50.0	140	----
		phenanthrene	85-01-8	E641A	0.415 mg/kg	0.5 mg/kg	105	50.0	140	----
		pyrene	129-00-0	E641A	ND mg/kg	0.5 mg/kg	ND	50.0	140	MS-B
Polycyclic Aromatic Hydrocarbons (QCLot: 744750)										
WT2221612-007	DUP6	acenaphthene	83-32-9	E641A	0.353 mg/kg	0.5 mg/kg	90.0	50.0	140	----
		acenaphthylene	208-96-8	E641A	0.371 mg/kg	0.5 mg/kg	94.7	50.0	140	----
		anthracene	120-12-7	E641A	0.422 mg/kg	0.5 mg/kg	108	50.0	140	----
		benz(a)anthracene	56-55-3	E641A	0.440 mg/kg	0.5 mg/kg	112	50.0	140	----
		benzo(a)pyrene	50-32-8	E641A	0.381 mg/kg	0.5 mg/kg	97.1	50.0	140	----
		benzo(b+j)fluoranthene	n/a	E641A	0.441 mg/kg	0.5 mg/kg	112	50.0	140	----
		benzo(g,h,i)perylene	191-24-2	E641A	0.265 mg/kg	0.5 mg/kg	67.6	50.0	140	----
		benzo(k)fluoranthene	207-08-9	E641A	0.401 mg/kg	0.5 mg/kg	102	50.0	140	----
		chrysene	218-01-9	E641A	0.451 mg/kg	0.5 mg/kg	115	50.0	140	----
		dibenz(a,h)anthracene	53-70-3	E641A	0.349 mg/kg	0.5 mg/kg	89.0	50.0	140	----
		fluoranthene	206-44-0	E641A	0.348 mg/kg	0.5 mg/kg	88.8	50.0	140	----
		fluorene	86-73-7	E641A	0.361 mg/kg	0.5 mg/kg	92.0	50.0	140	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.278 mg/kg	0.5 mg/kg	70.9	50.0	140	----
		methylnaphthalene, 1-	90-12-0	E641A	0.352 mg/kg	0.5 mg/kg	89.7	50.0	140	----
		methylnaphthalene, 2-	91-57-6	E641A	0.344 mg/kg	0.5 mg/kg	87.8	50.0	140	----
		naphthalene	91-20-3	E641A	0.319 mg/kg	0.5 mg/kg	81.4	50.0	140	----
		phenanthrene	85-01-8	E641A	0.372 mg/kg	0.5 mg/kg	94.8	50.0	140	----
		pyrene	129-00-0	E641A	0.358 mg/kg	0.5 mg/kg	91.3	50.0	140	----
Polychlorinated Biphenyls (QCLot: 744727)										

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Polychlorinated Biphenyls (QCLot: 744727) - continued										
WT2221612-001	22-06B 0.75-1.75	Aroclor 1016	12674-11-2	E687	0.009 mg/kg	0.01 mg/kg	93.1	50.0	150	----
		Aroclor 1221	11104-28-2	E687	0.009 mg/kg	0.01 mg/kg	93.1	50.0	150	----
		Aroclor 1232	11141-16-5	E687	0.009 mg/kg	0.01 mg/kg	93.1	50.0	150	----
		Aroclor 1242	53469-21-9	E687	0.009 mg/kg	0.01 mg/kg	91.5	50.0	150	----
		Aroclor 1248	12672-29-6	E687	0.009 mg/kg	0.01 mg/kg	93.1	50.0	150	----
		Aroclor 1254	11097-69-1	E687	0.009 mg/kg	0.01 mg/kg	90.7	50.0	150	----
		Aroclor 1260	11096-82-5	E687	0.009 mg/kg	0.01 mg/kg	90.6	50.0	150	----
		Aroclor 1262	37324-23-5	E687	0.009 mg/kg	0.01 mg/kg	93.5	50.0	150	----
		Aroclor 1268	11100-14-4	E687	0.009 mg/kg	0.01 mg/kg	93.5	50.0	150	----

Qualifiers

Qualifier	Description
MS-B	*Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.*

Reference Material (RM) Report

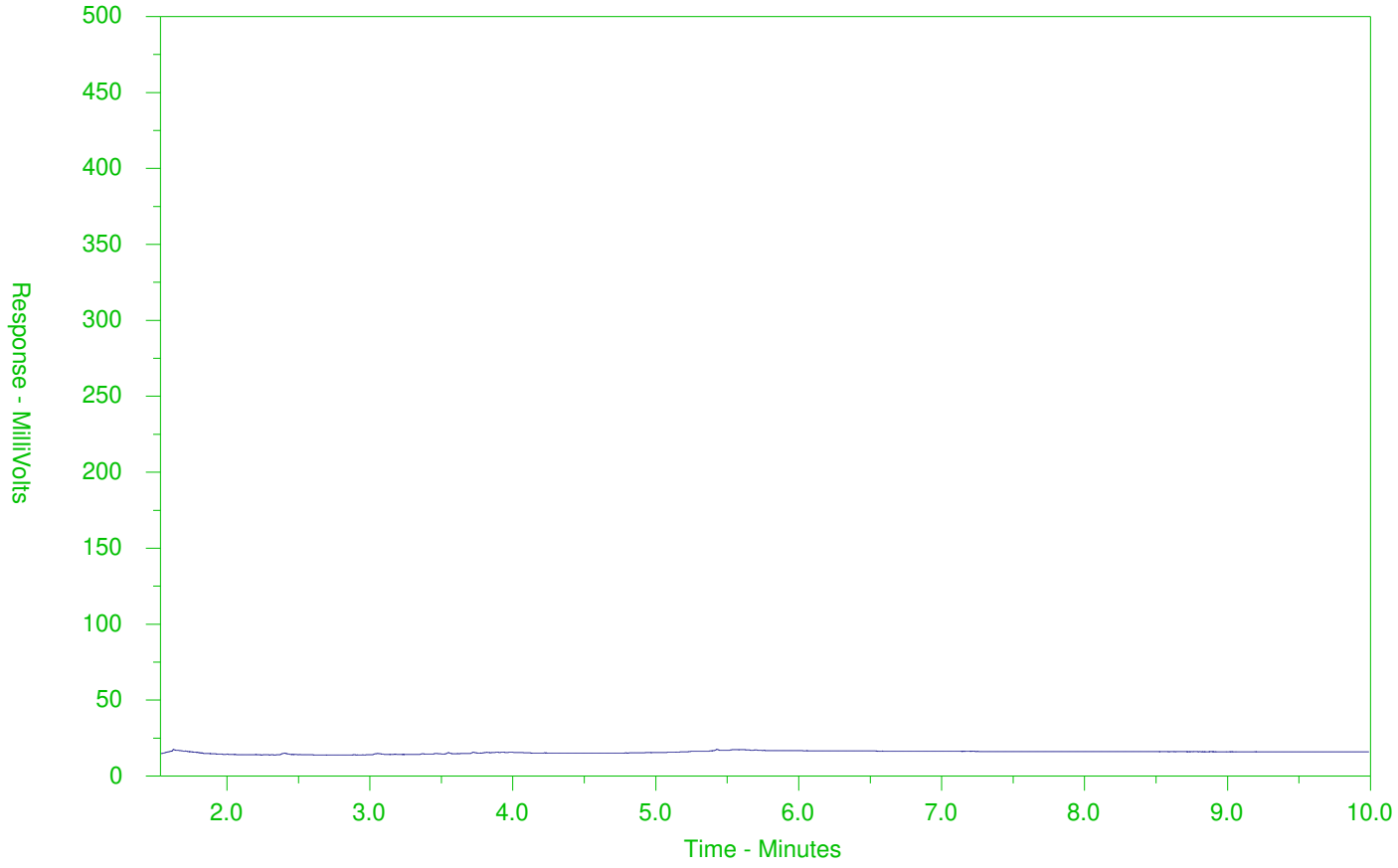
A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 743809)									
	RM	antimony	7440-36-0	E440	3.99 mg/kg	104	70.0	130	----
	RM	arsenic	7440-38-2	E440	3.73 mg/kg	106	70.0	130	----
	RM	barium	7440-39-3	E440	105 mg/kg	112	70.0	130	----
	RM	beryllium	7440-41-7	E440	0.349 mg/kg	107	70.0	130	----
	RM	boron	7440-42-8	E440	8.5 mg/kg	115	40.0	160	----
	RM	cadmium	7440-43-9	E440	0.91 mg/kg	112	70.0	130	----
	RM	chromium	7440-47-3	E440	101 mg/kg	106	70.0	130	----
	RM	cobalt	7440-48-4	E440	6.9 mg/kg	103	70.0	130	----
	RM	copper	7440-50-8	E440	123 mg/kg	105	70.0	130	----
	RM	lead	7439-92-1	E440	267 mg/kg	105	70.0	130	----
	RM	molybdenum	7439-98-7	E440	1.03 mg/kg	109	70.0	130	----
	RM	nickel	7440-02-0	E440	26.7 mg/kg	104	70.0	130	----
	RM	silver	7440-22-4	E440	4.06 mg/kg	99.2	70.0	130	----
	RM	thallium	7440-28-0	E440	0.0786 mg/kg	104	40.0	160	----
	RM	uranium	7440-61-1	E440	0.52 mg/kg	104	70.0	130	----
	RM	vanadium	7440-62-2	E440	32.7 mg/kg	106	70.0	130	----
	RM	zinc	7440-66-6	E440	297 mg/kg	102	70.0	130	----
Metals (QCLot: 743810)									
	RM	mercury	7439-97-6	E510	0.0585 mg/kg	107	70.0	130	----
Metals (QCLot: 743812)									
	RM	calcium, soluble ion content	7440-70-2	E484	86.59 mg/L	97.7	70.0	130	----
	RM	magnesium, soluble ion content	7439-95-4	E484	25.74 mg/L	99.4	70.0	130	----
	RM	sodium, soluble ion content	17341-25-2	E484	30.05 mg/L	100	70.0	130	----
Metals (QCLot: 743815)									
	RM	boron, hot water soluble	7440-42-8	E487	1.4938 mg/kg	100	60.0	140	----
Speciated Metals (QCLot: 744126)									
	RM	chromium, hexavalent [Cr VI]	18540-29-9	E532	172 mg/kg	95.1	70.0	130	----

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221612-001-E601.SG-L
Client Sample ID: 22-06B 0.75-1.75



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

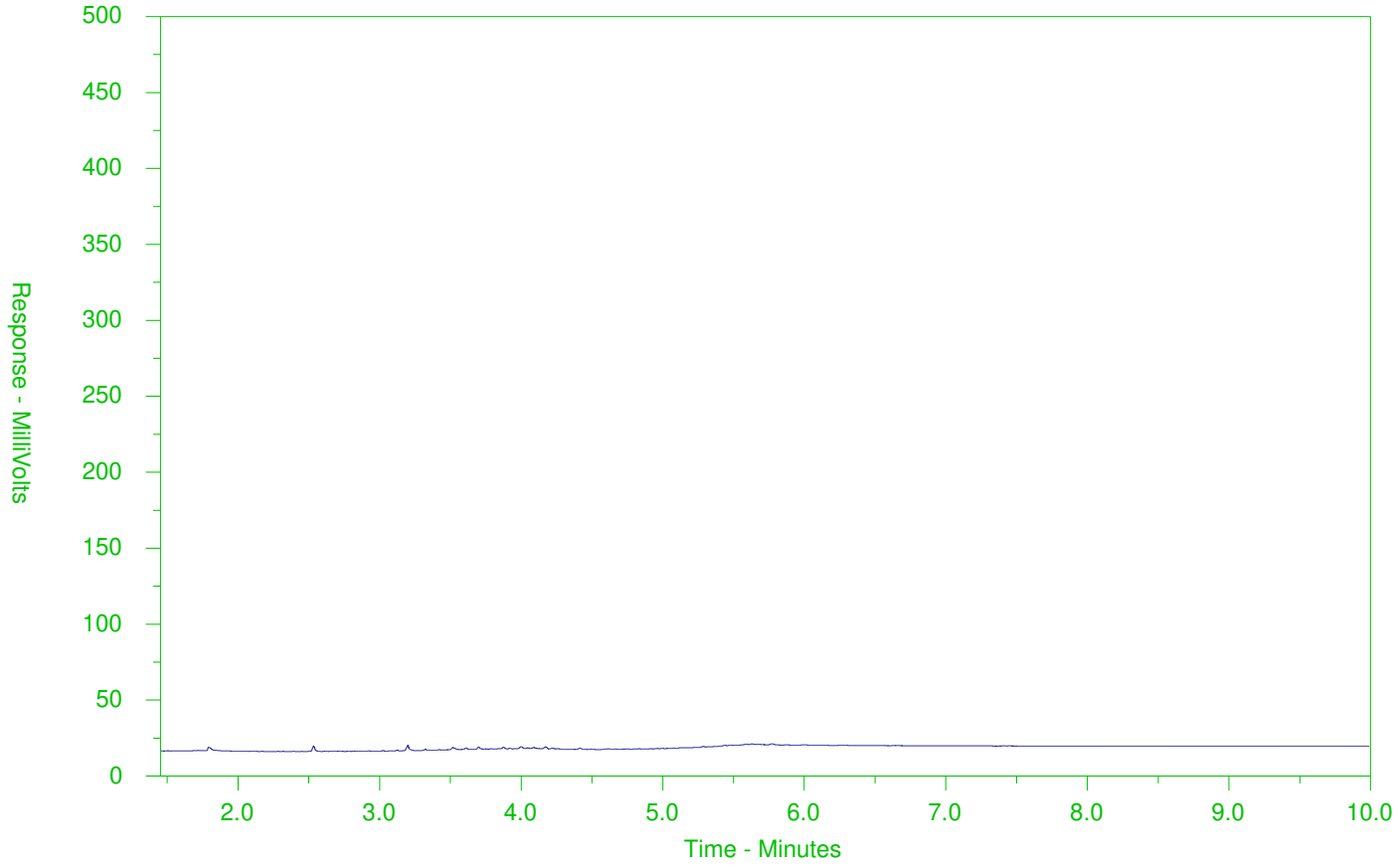
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221612-002-E601.SG-L
Client Sample ID: 22-06B 2.5-3.25



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

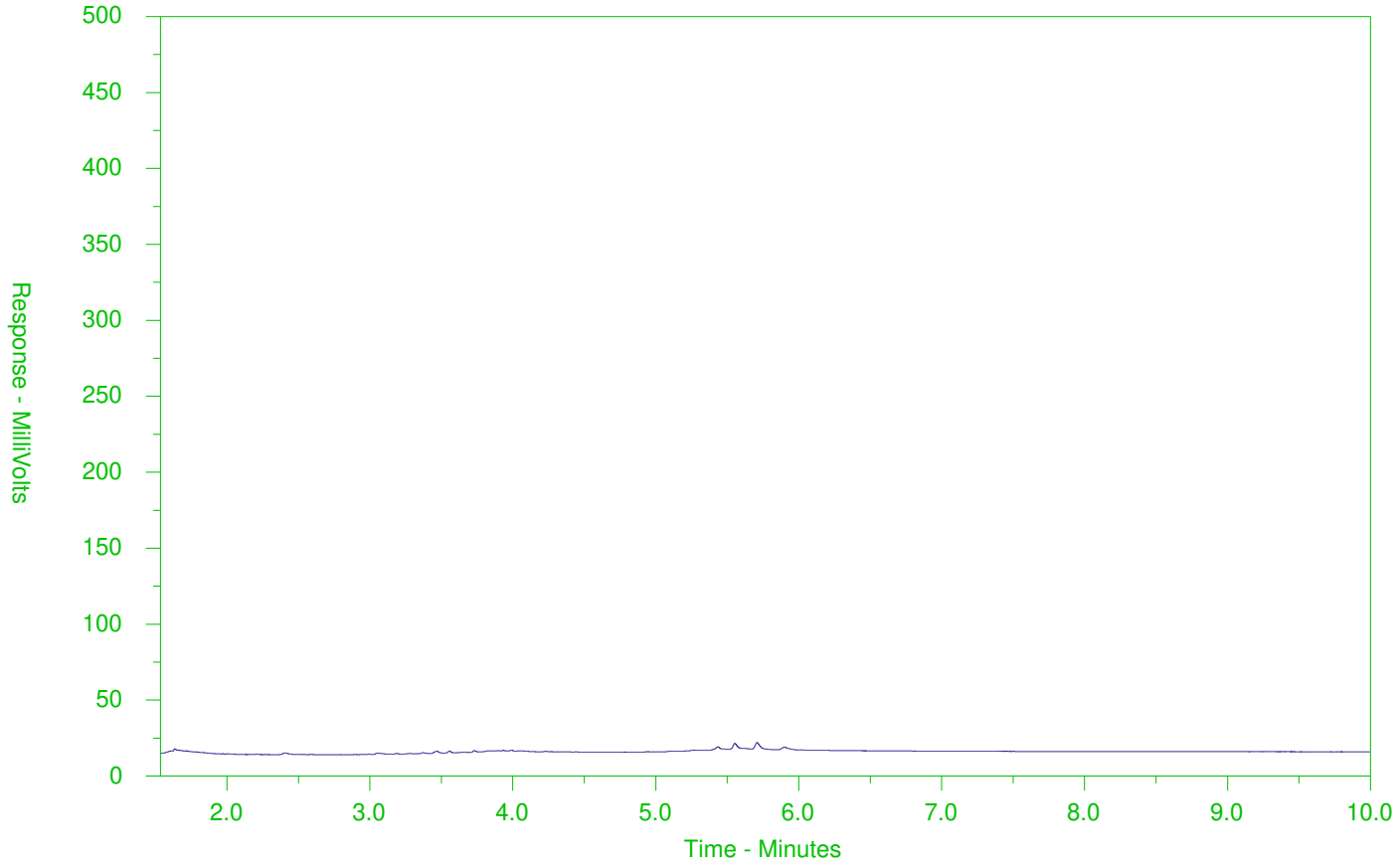
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221612-003-E601.SG-L
Client Sample ID: DUP5



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

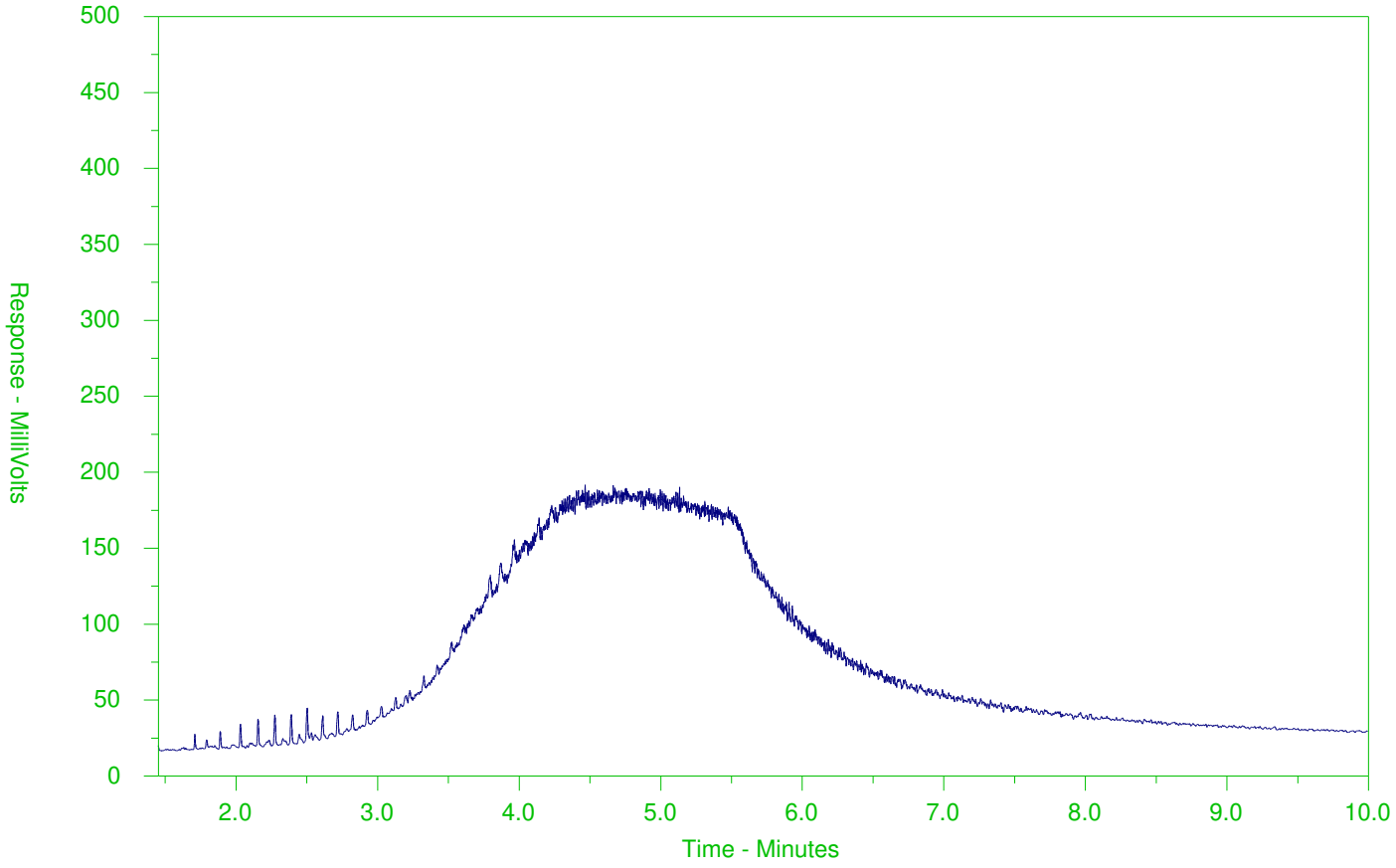
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221612-004-E601.SG-L
Client Sample ID: 22-01C 0.25-2



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

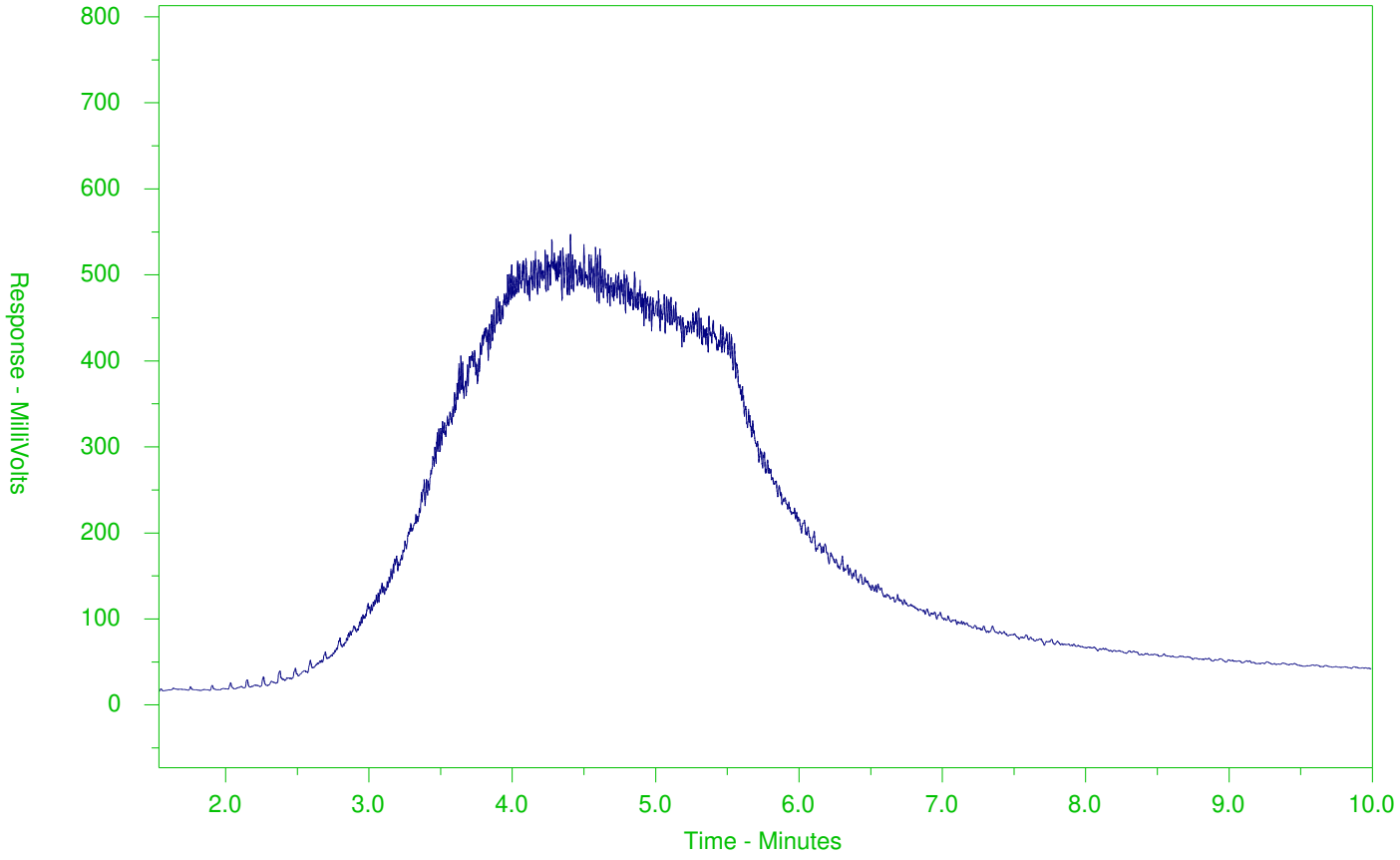
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221612-006-E601.SG-L
Client Sample ID: 22-13B 0-2



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

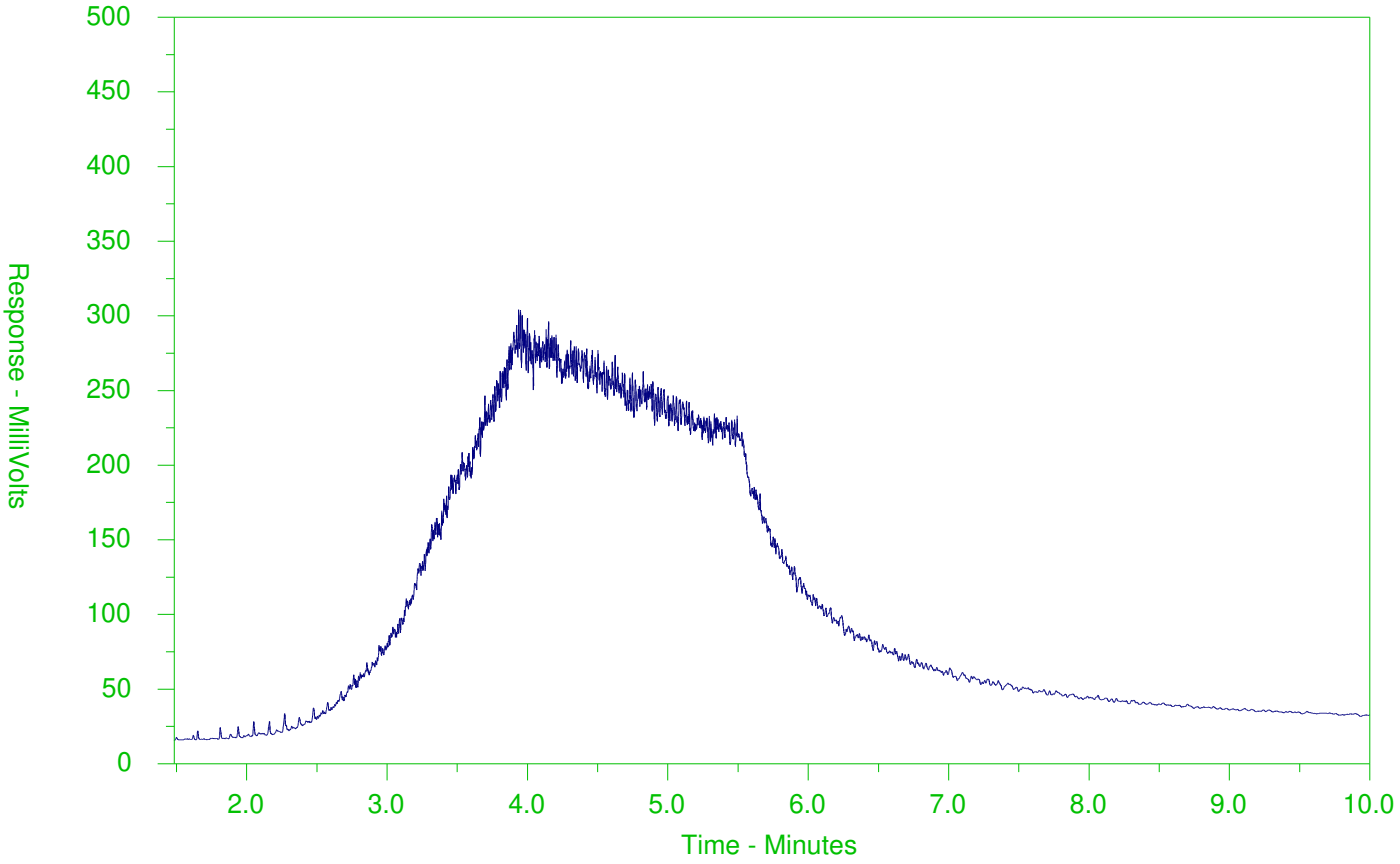
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2221612-007-E601.SG-L
Client Sample ID: DUP6



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number:

Page:

Environmental Division Waterloo
Work Order Reference
WT2221612

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Select Service Level Below - Contact your AM t
Company:	Omni-McCann Inc.	Select Report Format: [X] PDF [X] EXCEL [ ] EDD (DIGITAL)	Regular [R] [X] Standard TAT if received by 3 p
Contact:	Daniel Elliot	Quality Control (QC) Report with Report [X] YES [ ] NO	PRIORITY (Business Days): 4 day [P4-20%] [ ] 3 day [P3-25%] [ ] 2 day [P2-50%] [ ]
Phone:	613-857-4936	[X] Compare Results to Criteria on Report - provide details below if box checked	EMERGENCY: 1 Busines / Same Day, (Laborator
	Company address below will appear on the final report	Select Distribution: [X] EMAIL [ ] MAIL [ ] FAX	
Street:	1755 Woodward Drive, unit 200	Email 1 or Fax dan@omnimccann.com	Date and Time Required for all E&P TATs:
City/Province:	Ottawa, ON	Email 2 antonia@omnimccann.com	For tests that can not be performed according to the service level selected,
Postal Code:	K2C 0P9	Email 3 Kristina@omnimccann.com	
Invoice To	Same as Report To [X] YES [ ] NO	Invoice Distribution	
	Copy of Invoice with Report [ ] YES [X] NO	Select Invoice Distribution: [X] EMAIL [ ] MAIL [ ] FAX	
Company:		Email 1 or Fax invoicing@omnimccann.com	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	90029	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):		ALS Contact: Eric	Sampler: Antonia Cass

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC	BTEX	PCB	VOC	PAH	Metals	Cr6	Hg	pH	SAR	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	22-06B 0.75-1.75	09-NOV-22		Soil	4	X	X	X									
	22-06B 2.5-3.25	09-NOV-22			4	X		X	X								
	DUP5	09-NOV-22			4	X	X	X									
	22-01C 0.25-2	09-NOV-22			4	X	X			X	X	X	X				
	22-01C 2.5-3	09-NOV-22			3				X								
	22-13B 0-2	10-Nov-22			4	X			X	X	X	X	X	X	X		
	DUP6	10-Nov-22			4	X			X	X	X	X	X	X	X		
	22-05C 0-1	10-Nov-22			3				X								

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? [ ] YES [ ] NO	O. Reg. 153/04 Table 7 FOR RSC
Are samples for human consumption/ use? [ ] YES [ ] NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ] SIF Observations Yes [ ] No [ ]
Ice Packs [ ] Ice Cubes [ ] Custody seal intact Yes [ ] No [ ]
Cooling Initiated [ ]

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
6.7				6.0			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Antonia Cass	Date: 10-NOV-22	Time: 17:10	Received by:	Date: 11/11/22	Time: 7:55	Received by: FH	Date: NOV 12 2022	Time: 11AM

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

VS-098 SOL-618

ALS Canada Ltd.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2222268**	Page	: 1 of 8
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 17-Nov-2022 07:35
PO	: ----	Date Analysis Commenced	: 18-Nov-2022
C-O-C number	: ----	Issue Date	: 24-Nov-2022 18:18
Sampler	: Antonia Cass		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Niral Patel		Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-39 0.5-1 Sampling date/time: 14-Nov-2022 00:00 WT2222268-001	ON153/04 T7-RPI-C					
Physical Tests										
moisture	E144	0.25	%	17.0	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	16 mg/kg	--	--	--	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	0.21 mg/kg	--	--	--	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	13 mg/kg	--	--	--	--	--
bromoform	E611D	0.050	mg/kg	<0.050	0.27 mg/kg	--	--	--	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	2.4 mg/kg	--	--	--	--	--
chloroform	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	9.4 mg/kg	--	--	--	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	3.4 mg/kg	--	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	4.8 mg/kg	--	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	0.083 mg/kg	--	--	--	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	16 mg/kg	--	--	--	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	3.5 mg/kg	--	--	--	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	3.4 mg/kg	--	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	0.084 mg/kg	--	--	--	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	0.1 mg/kg	--	--	--	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	2 mg/kg	--	--	--	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	2.8 mg/kg	--	--	--	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	16 mg/kg	--	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	1.7 mg/kg	--	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	0.75 mg/kg	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2222268-001 (Continued)	ON153/04 T7-RPI-C					
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	0.7 mg/kg	--	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	0.058 mg/kg	--	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	0.28 mg/kg	--	--	--	--	--
toluene	E611D	0.050	mg/kg	<0.050	2.3 mg/kg	--	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	0.38 mg/kg	--	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	0.061 mg/kg	--	--	--	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	4 mg/kg	--	--	--	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	0.02 mg/kg	--	--	--	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	3.1 mg/kg	--	--	--	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	92.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-RPI-C 153 T7-Soil-Res/Park/Inst. Property Use (Coarse)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-39 2.5-3.5 Sampling date/time: 14-Nov-2022 00:00 WT2222268-002	ON153/04 T7-RPI-C					
Physical Tests										
moisture	E144	0.25	%	14.3	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	16 mg/kg	--	--	--	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	0.21 mg/kg	--	--	--	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	13 mg/kg	--	--	--	--	--
bromoform	E611D	0.050	mg/kg	<0.050	0.27 mg/kg	--	--	--	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	2.4 mg/kg	--	--	--	--	--
chloroform	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	9.4 mg/kg	--	--	--	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	3.4 mg/kg	--	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	4.8 mg/kg	--	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	0.083 mg/kg	--	--	--	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	16 mg/kg	--	--	--	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	3.5 mg/kg	--	--	--	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	3.4 mg/kg	--	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	0.084 mg/kg	--	--	--	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	0.1 mg/kg	--	--	--	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	2 mg/kg	--	--	--	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	2.8 mg/kg	--	--	--	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	16 mg/kg	--	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	1.7 mg/kg	--	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	0.75 mg/kg	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2222268-002 (Continued)	ON153/04 T7-RPI-C					
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	0.7 mg/kg	--	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	0.058 mg/kg	--	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	0.28 mg/kg	--	--	--	--	--
toluene	E611D	0.050	mg/kg	<0.050	2.3 mg/kg	--	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	0.38 mg/kg	--	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	0.061 mg/kg	--	--	--	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	4 mg/kg	--	--	--	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	0.02 mg/kg	--	--	--	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	3.1 mg/kg	--	--	--	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	86.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	95.2	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-RPI-C 153 T7-Soil-Res/Park/Inst. Property Use (Coarse)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: DUP7 Sampling date/time: 14-Nov-2022 00:00 WT2222268-003	ON153/04 T7-RPI-C					
Physical Tests										
moisture	E144	0.25	%	17.1	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	16 mg/kg	--	--	--	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	0.21 mg/kg	--	--	--	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	13 mg/kg	--	--	--	--	--
bromoform	E611D	0.050	mg/kg	<0.050	0.27 mg/kg	--	--	--	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	2.4 mg/kg	--	--	--	--	--
chloroform	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	9.4 mg/kg	--	--	--	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	3.4 mg/kg	--	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	4.8 mg/kg	--	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	0.083 mg/kg	--	--	--	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	16 mg/kg	--	--	--	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	3.5 mg/kg	--	--	--	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	3.4 mg/kg	--	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	0.084 mg/kg	--	--	--	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	0.1 mg/kg	--	--	--	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	2 mg/kg	--	--	--	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	2.8 mg/kg	--	--	--	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	16 mg/kg	--	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	1.7 mg/kg	--	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	0.75 mg/kg	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2222268-003 (Continued)	ON153/04 T7-RPI-C					
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	0.7 mg/kg	--	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	0.058 mg/kg	--	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	0.28 mg/kg	--	--	--	--	--
toluene	E611D	0.050	mg/kg	<0.050	2.3 mg/kg	--	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	0.38 mg/kg	--	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	0.05 mg/kg	--	--	--	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	0.061 mg/kg	--	--	--	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	4 mg/kg	--	--	--	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	0.02 mg/kg	--	--	--	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	3.1 mg/kg	--	--	--	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	105	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	111	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-RPI-C 153 T7-Soil-Res/Park/Inst. Property Use (Coarse)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2222268**	Page	: 1 of 6
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 17-Nov-2022 07:35
PO	: ----	Issue Date	: 24-Nov-2022 18:19
C-O-C number	: ----		
Sampler	: Antonia Cass		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	dichlorodifluoromethane	75-71-8	E611D	48.2 % MES	50.0-140%	Recovery less than lower data quality objective

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap 22-39 0.5-1	E144	14-Nov-2022	----	----	----		21-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap 22-39 2.5-3.5	E144	14-Nov-2022	----	----	----		21-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap DUP7	E144	14-Nov-2022	----	----	----		21-Nov-2022	----	----	
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-39 0.5-1	E611D	14-Nov-2022	18-Nov-2022	14 days	5 days	✓	20-Nov-2022	40 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-39 2.5-3.5	E611D	14-Nov-2022	18-Nov-2022	14 days	5 days	✓	20-Nov-2022	40 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] DUP7	E611D	14-Nov-2022	18-Nov-2022	14 days	5 days	✓	20-Nov-2022	40 days	2 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Moisture Content by Gravimetry	E144	751884	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	749374	1	17	5.8	5.0	✓
Laboratory Control Samples (LCS)							
Moisture Content by Gravimetry	E144	751884	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	749374	1	17	5.8	5.0	✓
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	751884	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	749374	1	17	5.8	5.0	✓
Matrix Spikes (MS)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	749374	1	17	5.8	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

QUALITY CONTROL REPORT

Work Order	: **WT2222268**	Page	: 1 of 10
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 17-Nov-2022 07:35
PO	: ----	Date Analysis Commenced	: 18-Nov-2022
C-O-C number	: ----	Issue Date	: 24-Nov-2022 18:18
Sampler	: Antonia Cass 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Niral Patel		Waterloo Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 751884)											
SK2206759-001	Anonymous	moisture	----	E144	0.25	%	14.8	14.2	4.28%	20%	----
Volatile Organic Compounds (QC Lot: 749374)											
WT2222297-001	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	0.411	0.415	0.930%	40%	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 749374) - continued											
WT2222297-001	Anonymous	styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	0.061	0.062	0.0006	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 751884)						
moisture	----	E144	0.25	%	<0.25	----
Volatile Organic Compounds (QCLot: 749374)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 749374) - continued						
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 751884)									
moisture	----	E144	0.25	%	50 %	99.0	90.0	110	----
Volatile Organic Compounds (QCLot: 749374)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	102	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	102	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	99.4	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	93.8	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	85.0	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	98.7	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	95.8	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	97.3	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	98.7	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	94.2	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	99.4	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	99.8	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	100.0	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	67.5	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	95.9	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	95.8	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	90.2	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	98.0	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	95.7	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	94.7	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	97.8	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	93.7	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	91.3	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	98.8	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	92.0	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	99.0	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	96.3	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	100	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	98.6	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	98.4	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 749374) - continued									
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	98.7	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	95.8	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	98.1	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	98.3	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	92.6	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	97.8	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	89.3	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	75.1	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	98.9	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	98.3	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 749374)										
WT2222297-001	Anonymous	Acetone	67-64-1	E611D	2.48 mg/kg	4.6875 mg/kg	107	50.0	140	----
		benzene	71-43-2	E611D	2.04 mg/kg	4.6875 mg/kg	88.5	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.13 mg/kg	4.6875 mg/kg	92.2	50.0	140	----
		bromoform	75-25-2	E611D	2.17 mg/kg	4.6875 mg/kg	94.0	50.0	140	----
		bromomethane	74-83-9	E611D	1.65 mg/kg	4.6875 mg/kg	71.5	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	1.92 mg/kg	4.6875 mg/kg	83.2	50.0	140	----
		chlorobenzene	108-90-7	E611D	1.98 mg/kg	4.6875 mg/kg	85.7	50.0	140	----
		chloroform	67-66-3	E611D	2.00 mg/kg	4.6875 mg/kg	86.7	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.20 mg/kg	4.6875 mg/kg	95.5	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.14 mg/kg	4.6875 mg/kg	92.8	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.13 mg/kg	4.6875 mg/kg	92.4	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.06 mg/kg	4.6875 mg/kg	89.2	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.09 mg/kg	4.6875 mg/kg	90.4	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	1.11 mg/kg	4.6875 mg/kg	48.2	50.0	140	MES
		dichloroethane, 1,1-	75-34-3	E611D	1.96 mg/kg	4.6875 mg/kg	84.7	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.18 mg/kg	4.6875 mg/kg	94.2	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	1.74 mg/kg	4.6875 mg/kg	75.5	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.00 mg/kg	4.6875 mg/kg	86.6	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	1.88 mg/kg	4.6875 mg/kg	81.2	50.0	140	----
		dichloromethane	75-09-2	E611D	2.00 mg/kg	4.6875 mg/kg	86.4	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.07 mg/kg	4.6875 mg/kg	89.8	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	1.99 mg/kg	4.6875 mg/kg	86.3	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.01 mg/kg	4.6875 mg/kg	87.0	50.0	140	----
		ethylbenzene	100-41-4	E611D	1.97 mg/kg	4.6875 mg/kg	85.2	50.0	140	----
		hexane, n-	110-54-3	E611D	1.75 mg/kg	4.6875 mg/kg	75.6	50.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	2.40 mg/kg	4.6875 mg/kg	104	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.30 mg/kg	4.6875 mg/kg	99.4	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.14 mg/kg	4.6875 mg/kg	92.8	50.0	140	----
		styrene	100-42-5	E611D	2.04 mg/kg	4.6875 mg/kg	88.4	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.07 mg/kg	4.6875 mg/kg	89.7	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.25 mg/kg	4.6875 mg/kg	97.4	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 749374) - continued										
WT2222297-001	Anonymous	tetrachloroethylene	127-18-4	E611D	1.84 mg/kg	4.6875 mg/kg	79.8	50.0	140	----
		toluene	108-88-3	E611D	1.97 mg/kg	4.6875 mg/kg	85.4	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	1.93 mg/kg	4.6875 mg/kg	83.5	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.07 mg/kg	4.6875 mg/kg	89.8	50.0	140	----
		trichloroethylene	79-01-6	E611D	1.92 mg/kg	4.6875 mg/kg	83.0	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	1.70 mg/kg	4.6875 mg/kg	73.6	50.0	140	----
		vinyl chloride	75-01-4	E611D	1.37 mg/kg	4.6875 mg/kg	59.2	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	3.94 mg/kg	9.375 mg/kg	85.4	50.0	140	----
		xylene, o-	95-47-6	E611D	2.00 mg/kg	4.6875 mg/kg	86.5	50.0	140	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Chain of Custody (COC) / Analytical Request Form

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Numb

Environmental Division Waterloo
Work Order Reference
WT2222268

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	1755 Woodward Drive, Unit 200
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To [X] YES [ ] NO
	Copy of Invoice with Report [ ] YES [X] NO
Company:	
Contact:	

Report Format / Distribution

Select Report Format: [X] PDF [X] EXCEL [ ] EDD (DIGITAL)
Quality Control (QC) Report with Report [X] YES [ ] NO
[X] Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: [X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax dan@omnimccann.com
Email 2 Kristina@omnimccann.com
Email 3 antonia@omnimccann.com

Invoice Distribution

Select Invoice Distribution: [X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax invoicing@omnimccann.com
Email 2

Select Service Level Below - Contact you

Regular [R] [X] Standard TAT if received

PRIORITY (Business Days): 4 day [P4-20%] [ ] | 3 day [P3-25%] [ ] | 2 day [P2-50%] [ ]
EMERGENCY: 1 Bu | Same (Labo

Date and Time Required for all E&P TATs:

For tests that can not be performed according to the service level s

Project Information

ALS Account # / Quote #: Q90626
Job #: COC-0103
PO / AFE:
LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: | PO#
Major/Minor Code: | Routing Code:
Requisitioner:
Location:

ALS Lab Work Order # (lab use only):

ALS Contact: Eric | Sampler: Antonia Cuss

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOC	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	22-39 0.5-1	14-Nov-22			3	X		
	22-39 2.5-3.5	14-Nov-22			3	X		
	Dup7	14-Nov-22			3	X		

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?
[ ] YES [ ] NO
Are samples for human consumption/ use?
[ ] YES [ ] NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

O. Reg. 153/04 Table 7
For RSC

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ] | SIF Observations Yes [ ] No [ ]
Ice Packs [ ] Ice Cubes [ ] | Custody seal intact Yes [ ] No [ ]
Cooling Initiated [ ]

INITIAL COOLER TEMPERATURES °C	FINAL COOLER TEMPERATURES °C
10.3	4.1

SHIPMENT RELEASE (client use)

Released by: Antonia Cuss | Date: 17-Nov-22 | Time: 7:14

INITIAL SHIPMENT RECEPTION (lab use only)

Received by: | Date: 11/17/22 | Time: 7:35

FINAL SHIPMENT RECEPTION (lab use only)

Received by: | Date: 18-NOV-22 | Time: 9:15

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

MA VS-124 Sol - 677 ~~674~~

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2222790**	Page	: 1 of 6
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 21-Nov-2022 16:25
PO	: ----	Date Analysis Commenced	: 23-Nov-2022
C-O-C number	: ----	Issue Date	: 28-Nov-2022 12:19
Sampler	: Daniel Elliot		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Workorder Comments

RRQC - Matrix spike recovery was above ALS DQO. Non-detect sample results are considered reliable. Other results, if reported, have been qualified.

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-40 0-1.5 Sampling date/time: 17-Nov-2022 00:00 WT2222790-001	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	17.6	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2222790-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	82.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	97.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-40 2-3 Sampling date/time: 17-Nov-2022 00:00 WT2222790-002	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	12.0	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2222790-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	90.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	103	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2222790**	Page	: 1 of 6
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 21-Nov-2022 16:25
PO	: ----	Issue Date	: 28-Nov-2022 12:19
C-O-C number	: ----		
Sampler	: Daniel Elliot		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	Acetone	67-64-1	E611D	152 % RRQC	50.0-140%	Recovery greater than upper data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	carbon tetrachloride	56-23-5	E611D	146 % MES	50.0-140%	Recovery greater than upper data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	dichloroethylene, trans-1,2-	156-60-5	E611D	141 % MES	50.0-140%	Recovery greater than upper data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	trichloroethane, 1,1,1-	71-55-6	E611D	144 % MES	50.0-140%	Recovery greater than upper data quality objective

Result Qualifiers

Qualifier	*Description*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	*Method*	*Sampling Date*	*Extraction / Preparation*				*Analysis*			
			Preparation Date	*Holding Times* Rec	*Holding Times* Actual	*Eval*	*Analysis Date*	*Holding Times* Rec	*Holding Times* Actual	*Eval*
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap 22-40 0-1.5	E144	17-Nov-2022	----	----	----		23-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap 22-40 2-3	E144	17-Nov-2022	----	----	----		23-Nov-2022	----	----	
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-40 0-1.5	E611D	17-Nov-2022	23-Nov-2022	14 days	7 days	✓	24-Nov-2022	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP] 22-40 2-3	E611D	17-Nov-2022	23-Nov-2022	14 days	7 days	✓	24-Nov-2022	40 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Moisture Content by Gravimetry	E144	755009	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	755433	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Moisture Content by Gravimetry	E144	755009	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	755433	1	20	5.0	5.0	✓
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	755009	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	755433	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	755433	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

QUALITY CONTROL REPORT

Work Order	: **WT2222790**	Page	: 1 of 10
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 21-Nov-2022 16:25
PO	: ----	Date Analysis Commenced	: 23-Nov-2022
C-O-C number	: ----	Issue Date	: 28-Nov-2022 12:19
Sampler	: Daniel Elliot 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
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General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 755009)											
WT2222774-001	Anonymous	moisture	----	E144	0.25	%	17.2	17.0	0.934%	20%	----
Volatile Organic Compounds (QC Lot: 755433)											
WT2222774-002	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 755433) - continued											
WT2222774-002	Anonymous	styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 755009)						
moisture	----	E144	0.25	%	<0.25	----
Volatile Organic Compounds (QCLot: 755433)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 755433) - continued						
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 755009)									
moisture	----	E144	0.25	%	50 %	100	90.0	110	----
Volatile Organic Compounds (QCLot: 755433)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	97.2	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	103	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	96.6	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	93.0	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	84.6	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	98.2	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	95.3	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	95.5	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	96.3	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	88.0	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	101	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	92.9	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	122	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	94.3	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	92.2	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	94.1	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	97.4	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	93.0	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	97.5	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	93.9	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	92.2	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	100	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	92.9	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	92.0	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	89.6	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	101	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	97.2	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	96.3	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 755433) - continued									
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	97.8	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	96.2	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	99.5	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	97.1	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	88.3	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	94.3	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	88.4	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	76.8	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	101	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	98.8	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 755433)										
WT2222774-002	Anonymous	Acetone	67-64-1	E611D	3.66 mg/kg	3.125 mg/kg	152	50.0	140	RRQC
		benzene	71-43-2	E611D	2.45 mg/kg	3.125 mg/kg	101	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.29 mg/kg	3.125 mg/kg	94.7	50.0	140	----
		bromoform	75-25-2	E611D	2.19 mg/kg	3.125 mg/kg	90.8	50.0	140	----
		bromomethane	74-83-9	E611D	2.91 mg/kg	3.125 mg/kg	120	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	3.52 mg/kg	3.125 mg/kg	146	50.0	140	MES
		chlorobenzene	108-90-7	E611D	2.25 mg/kg	3.125 mg/kg	93.2	50.0	140	----
		chloroform	67-66-3	E611D	3.25 mg/kg	3.125 mg/kg	135	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.29 mg/kg	3.125 mg/kg	94.7	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.11 mg/kg	3.125 mg/kg	87.5	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.38 mg/kg	3.125 mg/kg	98.6	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.40 mg/kg	3.125 mg/kg	99.3	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.42 mg/kg	3.125 mg/kg	100	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	2.82 mg/kg	3.125 mg/kg	117	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	3.35 mg/kg	3.125 mg/kg	139	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	2.24 mg/kg	3.125 mg/kg	92.6	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	3.13 mg/kg	3.125 mg/kg	130	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	3.14 mg/kg	3.125 mg/kg	130	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	3.40 mg/kg	3.125 mg/kg	141	50.0	140	MES
		dichloromethane	75-09-2	E611D	3.36 mg/kg	3.125 mg/kg	139	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.31 mg/kg	3.125 mg/kg	95.8	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.14 mg/kg	3.125 mg/kg	88.8	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.11 mg/kg	3.125 mg/kg	87.6	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.36 mg/kg	3.125 mg/kg	97.5	50.0	140	----
		hexane, n-	110-54-3	E611D	3.31 mg/kg	3.125 mg/kg	137	50.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	2.73 mg/kg	3.125 mg/kg	113	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.13 mg/kg	3.125 mg/kg	88.2	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.38 mg/kg	3.125 mg/kg	98.4	50.0	140	----
		styrene	100-42-5	E611D	2.30 mg/kg	3.125 mg/kg	95.2	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.28 mg/kg	3.125 mg/kg	94.5	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.31 mg/kg	3.125 mg/kg	95.8	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 755433) - continued										
WT2222774-002	Anonymous	tetrachloroethylene	127-18-4	E611D	2.25 mg/kg	3.125 mg/kg	93.3	50.0	140	----
		toluene	108-88-3	E611D	2.34 mg/kg	3.125 mg/kg	97.1	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	3.47 mg/kg	3.125 mg/kg	144	50.0	140	MES
		trichloroethane, 1,1,2-	79-00-5	E611D	2.11 mg/kg	3.125 mg/kg	87.5	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.24 mg/kg	3.125 mg/kg	92.7	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	3.34 mg/kg	3.125 mg/kg	138	50.0	140	----
		vinyl chloride	75-01-4	E611D	2.58 mg/kg	3.125 mg/kg	107	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	4.74 mg/kg	6.25 mg/kg	98.1	50.0	140	----
		xylene, o-	95-47-6	E611D	2.33 mg/kg	3.125 mg/kg	96.3	50.0	140	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 802171

Page 1 of 1

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)
Company:	Omni-McCann Inc.	Select Report Format: PDF EXCEL EDD (DIGITAL)	Regular [R] Standard TAT
Contact:	Daniel Elliot	Quality Control (QC) Report with Report: YES NO	PRIORITY (Business Days): 4 day [P4-20%]
Phone:	613-857-4936	Compare Results to Criteria on Report - provide details below if box checked	3 day [P3-25%]
	Company address below will appear on the final report	Select Distribution: EMAIL MAIL FAX	2 day [P2-50%]
Street:	1755 Woodward Dr. Unit 206	Email 1 or Fax: dah@omnimccann.com	Date and Time Required for all E&P TATs:
City/Province:	Ottawa/ON	Email 2: Kristina@omnimccann.com	For tests that can not be performed according to the ser
Postal Code:	K2C 0P9	Email 3: antonia@omnimccann.com	EMERGENCY: 100%
Invoice To	Same as Report To YES NO	Invoice Distribution	
	Copy of Invoice with Report YES NO	Select Invoice Distribution: EMAIL MAIL FAX	
Company:		Email 1 or Fax: Invoicing@omnimccann.com	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	90026	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):	WT2222790	ALS Contact: Eric	Sampler: Daniel Elliot

Environmental Division Waterloo
Work Order Reference
WT2222790

Telephone : +1 519 886 6910

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below	SAMPLES ON ICE	SUSPECTED HAZARD (see Special Instructions)
						VOC		
	22-40 0-1.5	17-Nov-22			3	X		
	22-40 2-3	17-Nov-22			3	X		

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? YES NO	O.Reg. 153/04 Table 7 For RSC
Are samples for human consumption/ use? YES NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen		SIF Observations	Yes		No
Ice Packs	Ice Cubes	Custody seal intact	Yes		No
Cooling Initiated					

INITIAL COOLER TEMPERATURES °C	FINAL COOLER TEMPERATURES °C
11.3	8.6

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Antonia Cuss	Date: 21-Nov-22	Time: 16:25	Received by: Gustaf F.	Date: 11/21/22	Time: 16:25	Received by:	Date: 11/23/22	Time: 1000

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2010 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Canada Ltd.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2223434**	Page	: 1 of 5
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 25-Nov-2022 15:30
PO	: ----	Date Analysis Commenced	: 29-Nov-2022
C-O-C number	: ----	Issue Date	: 02-Dec-2022 17:02
Sampler	: Daniel Elliot		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Niral Patel		Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-41 4-4.5 Sampling date/time: 23-Nov-2022 00:00 WT2223434-001	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
moisture	E144	0.25	%	13.5	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--
chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2223434-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	0.10	%	91.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	0.10	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2300985**	Page	: 1 of 9
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 13-Jan-2023 11:40
PO	: ----	Issue Date	: 17-Jan-2023 14:31
C-O-C number	: 20-1009849		
Sampler	: Daniel Elliot		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-803669-002	----	Dichlorodifluoromethane	75-71-8	E611D	35.2 % LCS-L	50.0-140%	Recovery less than lower control limit

Result Qualifiers

Qualifier	Description
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] 22-24-0-1.25	E581.F1	13-Jan-2023	16-Jan-2023	14 days	3 days	✓	16-Jan-2023	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] DUP9	E581.F1	13-Jan-2023	16-Jan-2023	14 days	3 days	✓	16-Jan-2023	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap 22-24-0-1.25	E601.SG-L	13-Jan-2023	16-Jan-2023	14 days	4 days	✓	17-Jan-2023	40 days	1 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap DUP9	E601.SG-L	13-Jan-2023	16-Jan-2023	14 days	4 days	✓	17-Jan-2023	40 days	1 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap 22-24-0-1.25	E487	13-Jan-2023	17-Jan-2023	180 days	4 days	✓	17-Jan-2023	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap DUP9	E487	13-Jan-2023	17-Jan-2023	180 days	4 days	✓	17-Jan-2023	180 days	0 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap 22-24-0-1.25	E510	13-Jan-2023	17-Jan-2023	----	----		17-Jan-2023	28 days	4 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Mercury in Soil/Solid by CVAAS										
Glass soil jar/Teflon lined cap										
DUP9	E510	13-Jan-2023	17-Jan-2023	----	----		17-Jan-2023	28 days	4 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
22-24-0-1.25	E440	13-Jan-2023	17-Jan-2023	----	----		17-Jan-2023	180 days	4 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
Glass soil jar/Teflon lined cap										
DUP9	E440	13-Jan-2023	17-Jan-2023	----	----		17-Jan-2023	180 days	4 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-24-0-1.25	E144	13-Jan-2023	----	----	----		16-Jan-2023	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP9	E144	13-Jan-2023	----	----	----		16-Jan-2023	----	----	
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
22-24-0-1.25	E641A	13-Jan-2023	16-Jan-2023	14 days	4 days	✓	17-Jan-2023	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap										
DUP9	E641A	13-Jan-2023	16-Jan-2023	14 days	4 days	✓	17-Jan-2023	40 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
22-24-0-1.25	E532	13-Jan-2023	16-Jan-2023	30 days	4 days	✓	17-Jan-2023	7 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap										
DUP9	E532	13-Jan-2023	16-Jan-2023	30 days	4 days	✓	17-Jan-2023	7 days	1 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-24-0-1.25	E611D	13-Jan-2023	16-Jan-2023	14 days	3 days	✓	16-Jan-2023	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
DUP9	E611D	13-Jan-2023	16-Jan-2023	14 days	3 days	✓	16-Jan-2023	40 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Boron-Hot Water Extractable by ICPOES	E487	804528	1	2	50.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	803670	1	20	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	803666	1	6	16.6	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	803746	1	14	7.1	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	804527	1	2	50.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	804526	1	8	12.5	5.0	✓
Moisture Content by Gravimetry	E144	803828	1	19	5.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	803668	1	2	50.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	803669	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Boron-Hot Water Extractable by ICPOES	E487	804528	2	2	100.0	10.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	803670	1	20	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	803666	1	6	16.6	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	803746	2	14	14.2	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	804527	2	2	100.0	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	804526	2	8	25.0	10.0	✓
Moisture Content by Gravimetry	E144	803828	1	19	5.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	803668	1	2	50.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	803669	1	20	5.0	5.0	✓
Method Blanks (MB)							
Boron-Hot Water Extractable by ICPOES	E487	804528	1	2	50.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	803670	1	20	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	803666	1	6	16.6	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	803746	1	14	7.1	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	804527	1	2	50.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	804526	1	8	12.5	5.0	✓
Moisture Content by Gravimetry	E144	803828	1	19	5.2	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	803668	1	2	50.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	803669	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID	E581.F1	803670	1	20	5.0	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	803666	1	6	16.6	5.0	✓
PAHs by Hex:Ace GC-MS	E641A	803668	1	2	50.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	803669	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Metals in Soil/Solid by CRC ICPMS	E440 Waterloo - Environmental	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Boron-Hot Water Extractable by ICPOES	E487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS	E510 Waterloo - Environmental	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 Waterloo - Environmental	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
PAHs by Hex:Ace GC-MS	E641A Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with hexane/acetone and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
F1-BTEX	EC580 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.
F2 to F3 minus PAH	EC600 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	F2-PAH = CCME Fraction 2 (C10-C16) minus Naphthalene F3-PAH = CCME Fraction 3 (C16-C34) minus select Polycyclic Aromatic Hydrocarbons (PAH) as per CCME Soil Tier 1

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Metals and Mercury	EP440 Waterloo - Environmental	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 Waterloo - Environmental	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 Waterloo - Environmental	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.

QUALITY CONTROL REPORT

Work Order	: **WT2300985**	Page	: 1 of 14
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 13-Jan-2023 11:40
PO	: ----	Date Analysis Commenced	: 16-Jan-2023
C-O-C number	: 20-1009849	Issue Date	: 17-Jan-2023 14:31
Sampler	: Daniel Elliot 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Waterloo Centralized Prep, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 803828)											
HA2300010-001	Anonymous	Moisture	----	E144	0.25	%	11.7	12.4	5.97%	20%	----
Metals (QC Lot: 804526)											
WT2300985-001	22-24-0-1.25	Antimony	7440-36-0	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	1.62	1.73	6.88%	30%	----
		Barium	7440-39-3	E440	0.50	mg/kg	261	268	2.36%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	0.65	0.67	0.02	Diff <2x LOR	----
		Boron	7440-42-8	E440	5.0	mg/kg	<5.0	5.2	0.2	Diff <2x LOR	----
		Cadmium	7440-43-9	E440	0.020	mg/kg	0.177	0.178	0.874%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	48.7	50.8	4.26%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	12.5	13.3	5.59%	30%	----
		Copper	7440-50-8	E440	0.50	mg/kg	17.4	18.0	2.92%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	7.38	7.77	5.08%	40%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	0.30	0.32	0.02	Diff <2x LOR	----
		Nickel	7440-02-0	E440	0.50	mg/kg	25.1	26.2	4.49%	30%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	<0.20	0.20	0.003	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		Thallium	7440-28-0	E440	0.050	mg/kg	0.224	0.236	0.012	Diff <2x LOR	----
		Uranium	7440-61-1	E440	0.050	mg/kg	0.670	0.743	10.2%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	63.7	66.3	4.13%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	72.4	75.1	3.62%	30%	----
Metals (QC Lot: 804527)											
WT2300985-001	22-24-0-1.25	Mercury	7439-97-6	E510	0.0050	mg/kg	0.0246	0.0264	6.99%	40%	----
Metals (QC Lot: 804528)											
WT2300985-001	22-24-0-1.25	Boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 803746)											
WT2300983-021	Anonymous	Chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	<0.10 µg/g	<0.10	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 803669)											
HA2300010-001	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		Benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		Bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 803669) - continued											
HA2300010-001	Anonymous	Bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		Dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		Hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		Methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		Styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 803669) - continued											
HA2300010-001	Anonymous	Vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		Xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 803666)											
HA2300010-001	Anonymous	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	<10	0	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 803670)											
HA2300010-001	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Polycyclic Aromatic Hydrocarbons (QC Lot: 803668)											
WT2300985-001	22-24-0-1.25	Acenaphthene	83-32-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Acenaphthylene	208-96-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Anthracene	120-12-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benz(a)anthracene	56-55-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(a)pyrene	50-32-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(b+j)fluoranthene	n/a	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(g,h,i)perylene	191-24-2	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(k)fluoranthene	207-08-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Chrysene	218-01-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dibenz(a,h)anthracene	53-70-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Fluoranthene	206-44-0	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Fluorene	86-73-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Naphthalene	91-20-3	E641A	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Phenanthrene	85-01-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Pyrene	129-00-0	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 803828)						
Moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 804526)						
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
Boron	7440-42-8	E440	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Metals (QCLot: 804527)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 804528)						
Boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Speciated Metals (QCLot: 803746)						
Chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 803669)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
Benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
Bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
Bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
Bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 803669) - continued						
Carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
Chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
Chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
Dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
Dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
Dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
Dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
Dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
Dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
Dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
Dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
Dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
Dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
Dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
Dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
Dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
Dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
Dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
Ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
Hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
Methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
Methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
Styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
Tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
Toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
Trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
Trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
Trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
Trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
Vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
Xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
Xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Hydrocarbons (QCLot: 803666)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Hydrocarbons (QCLot: 803670)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Polycyclic Aromatic Hydrocarbons (QCLot: 803668)						
Acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
Acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
Anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
Benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
Benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
Benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
Benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----
Chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----
Fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
Fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
Methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
Methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
Naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
Phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
Pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 803828)									
Moisture	----	E144	0.25	%	50 %	99.9	90.0	110	----
Metals (QCLot: 804526)									
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	104	80.0	120	----
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	102	80.0	120	----
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	96.3	80.0	120	----
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	88.7	80.0	120	----
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	84.4	80.0	120	----
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	94.6	80.0	120	----
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	97.4	80.0	120	----
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	96.3	80.0	120	----
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	93.1	80.0	120	----
Lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	100	80.0	120	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	97.9	80.0	120	----
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	94.9	80.0	120	----
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	97.0	80.0	120	----
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	83.5	80.0	120	----
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	92.6	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	89.3	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	98.9	80.0	120	----
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	90.0	80.0	120	----
Metals (QCLot: 804527)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	110	80.0	120	----
Metals (QCLot: 804528)									
Boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	1.33333 mg/kg	103	70.0	130	----
Speciated Metals (QCLot: 803746)									
Chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	92.5	80.0	120	----
Volatile Organic Compounds (QCLot: 803669)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	89.7	60.0	140	----
Benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	79.0	70.0	130	----
Bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	77.4	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 803669) - continued									
Bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	85.3	70.0	130	----
Bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	77.0	50.0	140	----
Carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	79.0	70.0	130	----
Chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	88.0	70.0	130	----
Chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	78.0	70.0	130	----
Dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	85.0	60.0	130	----
Dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	83.5	70.0	130	----
Dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	89.3	70.0	130	----
Dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	90.8	70.0	130	----
Dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	84.8	70.0	130	----
Dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	# 35.2	50.0	140	LCS-L
Dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	86.9	60.0	130	----
Dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	77.8	60.0	130	----
Dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	80.1	60.0	130	----
Dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	76.6	70.0	130	----
Dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	84.3	60.0	130	----
Dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	83.3	70.0	130	----
Dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	77.6	70.0	130	----
Dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	85.8	70.0	130	----
Dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	88.3	70.0	130	----
Ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	87.8	70.0	130	----
Hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	79.7	70.0	130	----
Methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	83.5	60.0	140	----
Methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	93.2	60.0	140	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	92.3	70.0	130	----
Styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	89.4	70.0	130	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	88.4	60.0	130	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	86.4	60.0	130	----
Tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	90.9	60.0	130	----
Toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	78.8	70.0	130	----
Trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	92.0	60.0	130	----
Trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	86.1	60.0	130	----
Trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	80.4	60.0	130	----
Trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	76.1	50.0	140	----
Vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	64.4	60.0	140	----
Xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	89.7	70.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 803669) - continued									
Xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	87.9	70.0	130	----
Hydrocarbons (QCLot: 803666)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	883.825 mg/kg	85.0	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1385.22 mg/kg	79.4	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	797.55 mg/kg	77.9	70.0	130	----
Hydrocarbons (QCLot: 803670)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	105	80.0	120	----
Polycyclic Aromatic Hydrocarbons (QCLot: 803668)									
Acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	98.3	60.0	130	----
Acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	106	60.0	130	----
Anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	109	60.0	130	----
Benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	101	60.0	130	----
Benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	113	60.0	130	----
Benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	103	60.0	130	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	97.2	60.0	130	----
Benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	104	60.0	130	----
Chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	99.8	60.0	130	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	98.6	60.0	130	----
Fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	102	60.0	130	----
Fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	102	60.0	130	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	95.8	60.0	130	----
Methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	97.8	60.0	130	----
Methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	93.7	60.0	130	----
Naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	93.0	60.0	130	----
Phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	99.5	60.0	130	----
Pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	101	60.0	130	----

Qualifiers

Qualifier	Description
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 803669)										
HA2300010-001	Anonymous	Acetone	67-64-1	E611D	2.12 mg/kg	3.125 mg/kg	92.2	50.0	140	----
		Benzene	71-43-2	E611D	1.89 mg/kg	3.125 mg/kg	82.0	50.0	140	----
		Bromodichloromethane	75-27-4	E611D	1.84 mg/kg	3.125 mg/kg	79.7	50.0	140	----
		Bromoform	75-25-2	E611D	2.00 mg/kg	3.125 mg/kg	86.7	50.0	140	----
		Bromomethane	74-83-9	E611D	2.10 mg/kg	3.125 mg/kg	91.3	50.0	140	----
		Carbon tetrachloride	56-23-5	E611D	1.88 mg/kg	3.125 mg/kg	81.7	50.0	140	----
		Chlorobenzene	108-90-7	E611D	2.09 mg/kg	3.125 mg/kg	90.6	50.0	140	----
		Chloroform	67-66-3	E611D	1.86 mg/kg	3.125 mg/kg	80.8	50.0	140	----
		Dibromochloromethane	124-48-1	E611D	2.02 mg/kg	3.125 mg/kg	87.6	50.0	140	----
		Dibromoethane, 1,2-	106-93-4	E611D	2.02 mg/kg	3.125 mg/kg	87.7	50.0	140	----
		Dichlorobenzene, 1,2-	95-50-1	E611D	2.10 mg/kg	3.125 mg/kg	91.0	50.0	140	----
		Dichlorobenzene, 1,3-	541-73-1	E611D	2.14 mg/kg	3.125 mg/kg	93.1	50.0	140	----
		Dichlorobenzene, 1,4-	106-46-7	E611D	2.00 mg/kg	3.125 mg/kg	86.7	50.0	140	----
		Dichlorodifluoromethane	75-71-8	E611D	1.56 mg/kg	3.125 mg/kg	67.6	50.0	140	----
		Dichloroethane, 1,1-	75-34-3	E611D	2.10 mg/kg	3.125 mg/kg	91.2	50.0	140	----
		Dichloroethane, 1,2-	107-06-2	E611D	1.88 mg/kg	3.125 mg/kg	81.5	50.0	140	----
		Dichloroethylene, 1,1-	75-35-4	E611D	2.02 mg/kg	3.125 mg/kg	87.7	50.0	140	----
		Dichloroethylene, cis-1,2-	156-59-2	E611D	1.85 mg/kg	3.125 mg/kg	80.2	50.0	140	----
		Dichloroethylene, trans-1,2-	156-60-5	E611D	2.05 mg/kg	3.125 mg/kg	89.0	50.0	140	----
		Dichloromethane	75-09-2	E611D	2.04 mg/kg	3.125 mg/kg	88.4	50.0	140	----
		Dichloropropane, 1,2-	78-87-5	E611D	1.86 mg/kg	3.125 mg/kg	80.7	50.0	140	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611D	2.02 mg/kg	3.125 mg/kg	87.8	50.0	140	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611D	2.10 mg/kg	3.125 mg/kg	91.4	50.0	140	----
		Ethylbenzene	100-41-4	E611D	2.08 mg/kg	3.125 mg/kg	90.5	50.0	140	----
		Hexane, n-	110-54-3	E611D	2.05 mg/kg	3.125 mg/kg	88.9	50.0	140	----
		Methyl ethyl ketone [MEK]	78-93-3	E611D	2.03 mg/kg	3.125 mg/kg	88.0	50.0	140	----
		Methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.20 mg/kg	3.125 mg/kg	95.6	50.0	140	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.16 mg/kg	3.125 mg/kg	94.0	50.0	140	----
		Styrene	100-42-5	E611D	2.10 mg/kg	3.125 mg/kg	91.1	50.0	140	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.09 mg/kg	3.125 mg/kg	90.6	50.0	140	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.02 mg/kg	3.125 mg/kg	87.9	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 803669) - continued										
HA2300010-001	Anonymous	Tetrachloroethylene	127-18-4	E611D	2.14 mg/kg	3.125 mg/kg	93.1	50.0	140	----
		Toluene	108-88-3	E611D	1.89 mg/kg	3.125 mg/kg	82.0	50.0	140	----
		Trichloroethane, 1,1,1-	71-55-6	E611D	2.19 mg/kg	3.125 mg/kg	95.0	50.0	140	----
		Trichloroethane, 1,1,2-	79-00-5	E611D	2.07 mg/kg	3.125 mg/kg	89.9	50.0	140	----
		Trichloroethylene	79-01-6	E611D	1.90 mg/kg	3.125 mg/kg	82.5	50.0	140	----
		Trichlorofluoromethane	75-69-4	E611D	2.02 mg/kg	3.125 mg/kg	87.6	50.0	140	----
		Vinyl chloride	75-01-4	E611D	1.89 mg/kg	3.125 mg/kg	82.1	50.0	140	----
		Xylene, m+p-	179601-23-1	E611D	4.25 mg/kg	6.25 mg/kg	92.2	50.0	140	----
		Xylene, o-	95-47-6	E611D	2.08 mg/kg	3.125 mg/kg	90.1	50.0	140	----
Hydrocarbons (QCLot: 803666)										
HA2300010-001	Anonymous	F2 (C10-C16)	----	E601.SG-L	566 mg/kg	883.825 mg/kg	81.6	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	843 mg/kg	1385.22 mg/kg	77.5	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	499 mg/kg	797.55 mg/kg	79.7	60.0	140	----
Hydrocarbons (QCLot: 803670)										
HA2300010-001	Anonymous	F1 (C6-C10)	----	E581.F1	44.3 mg/kg	62.5 mg/kg	96.1	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 803668)										
WT2300985-001	22-24-0-1.25	Acenaphthene	83-32-9	E641A	0.386 mg/kg	0.5 mg/kg	96.7	50.0	140	----
		Acenaphthylene	208-96-8	E641A	0.427 mg/kg	0.5 mg/kg	107	50.0	140	----
		Anthracene	120-12-7	E641A	0.449 mg/kg	0.5 mg/kg	112	50.0	140	----
		Benz(a)anthracene	56-55-3	E641A	0.379 mg/kg	0.5 mg/kg	95.0	50.0	140	----
		Benzo(a)pyrene	50-32-8	E641A	0.456 mg/kg	0.5 mg/kg	114	50.0	140	----
		Benzo(b+j)fluoranthene	n/a	E641A	0.402 mg/kg	0.5 mg/kg	101	50.0	140	----
		Benzo(g,h,i)perylene	191-24-2	E641A	0.356 mg/kg	0.5 mg/kg	89.2	50.0	140	----
		Benzo(k)fluoranthene	207-08-9	E641A	0.404 mg/kg	0.5 mg/kg	101	50.0	140	----
		Chrysene	218-01-9	E641A	0.356 mg/kg	0.5 mg/kg	89.1	50.0	140	----
		Dibenz(a,h)anthracene	53-70-3	E641A	0.386 mg/kg	0.5 mg/kg	96.7	50.0	140	----
		Fluoranthene	206-44-0	E641A	0.404 mg/kg	0.5 mg/kg	101	50.0	140	----
		Fluorene	86-73-7	E641A	0.408 mg/kg	0.5 mg/kg	102	50.0	140	----
		indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.372 mg/kg	0.5 mg/kg	93.1	50.0	140	----
		Methylnaphthalene, 1-	90-12-0	E641A	0.388 mg/kg	0.5 mg/kg	97.3	50.0	140	----
		Methylnaphthalene, 2-	91-57-6	E641A	0.374 mg/kg	0.5 mg/kg	93.6	50.0	140	----
		Naphthalene	91-20-3	E641A	0.376 mg/kg	0.5 mg/kg	94.3	50.0	140	----
		Phenanthrene	85-01-8	E641A	0.401 mg/kg	0.5 mg/kg	100	50.0	140	----
		Pyrene	129-00-0	E641A	0.405 mg/kg	0.5 mg/kg	102	50.0	140	----

Reference Material (RM) Report

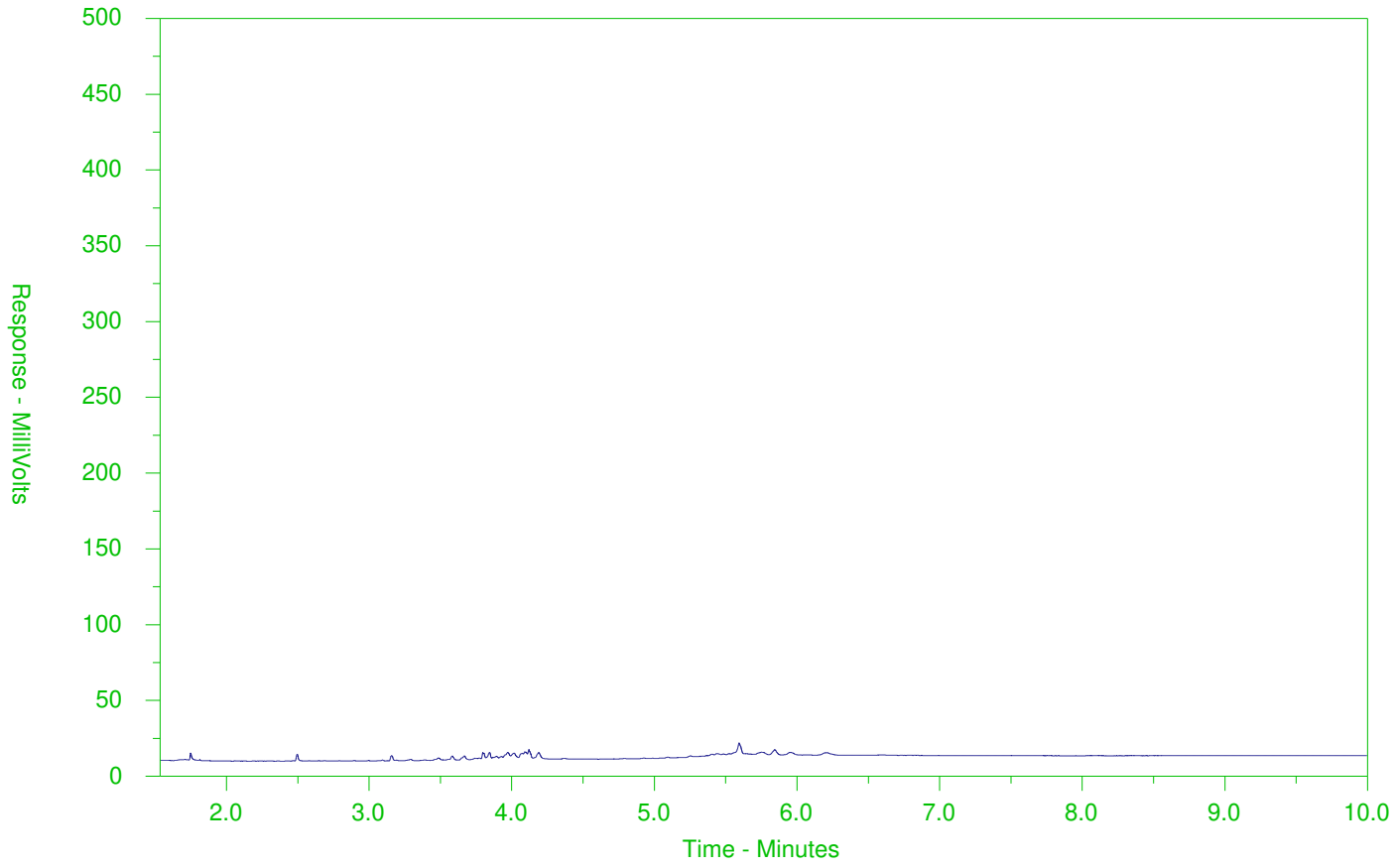
A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 804526)									
	RM	Antimony	7440-36-0	E440	3.99 mg/kg	92.5	70.0	130	----
	RM	Arsenic	7440-38-2	E440	3.73 mg/kg	94.3	70.0	130	----
	RM	Barium	7440-39-3	E440	105 mg/kg	99.6	70.0	130	----
	RM	Beryllium	7440-41-7	E440	0.349 mg/kg	108	70.0	130	----
	RM	Boron	7440-42-8	E440	8.5 mg/kg	101	40.0	160	----
	RM	Cadmium	7440-43-9	E440	0.91 mg/kg	93.2	70.0	130	----
	RM	Chromium	7440-47-3	E440	101 mg/kg	97.0	70.0	130	----
	RM	Cobalt	7440-48-4	E440	6.9 mg/kg	95.9	70.0	130	----
	RM	Copper	7440-50-8	E440	123 mg/kg	96.6	70.0	130	----
	RM	Lead	7439-92-1	E440	267 mg/kg	102	70.0	130	----
	RM	Molybdenum	7439-98-7	E440	1.03 mg/kg	92.7	70.0	130	----
	RM	Nickel	7440-02-0	E440	26.7 mg/kg	96.7	70.0	130	----
	RM	Silver	7440-22-4	E440	4.06 mg/kg	95.6	70.0	130	----
	RM	Thallium	7440-28-0	E440	0.0786 mg/kg	93.8	40.0	160	----
	RM	Uranium	7440-61-1	E440	0.52 mg/kg	86.1	70.0	130	----
	RM	Vanadium	7440-62-2	E440	32.7 mg/kg	97.1	70.0	130	----
	RM	Zinc	7440-66-6	E440	297 mg/kg	91.4	70.0	130	----
Metals (QCLot: 804527)									
	RM	Mercury	7439-97-6	E510	0.0585 mg/kg	105	70.0	130	----
Metals (QCLot: 804528)									
	RM	Boron, hot water soluble	7440-42-8	E487	1.4938 mg/kg	80.8	60.0	140	----
Speciated Metals (QCLot: 803746)									
	RM	Chromium, hexavalent [Cr VI]	18540-29-9	E532	172 mg/kg	118	70.0	130	----

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2300985-001-E601.SG-L
Client Sample ID: 22-24-0-1.25



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

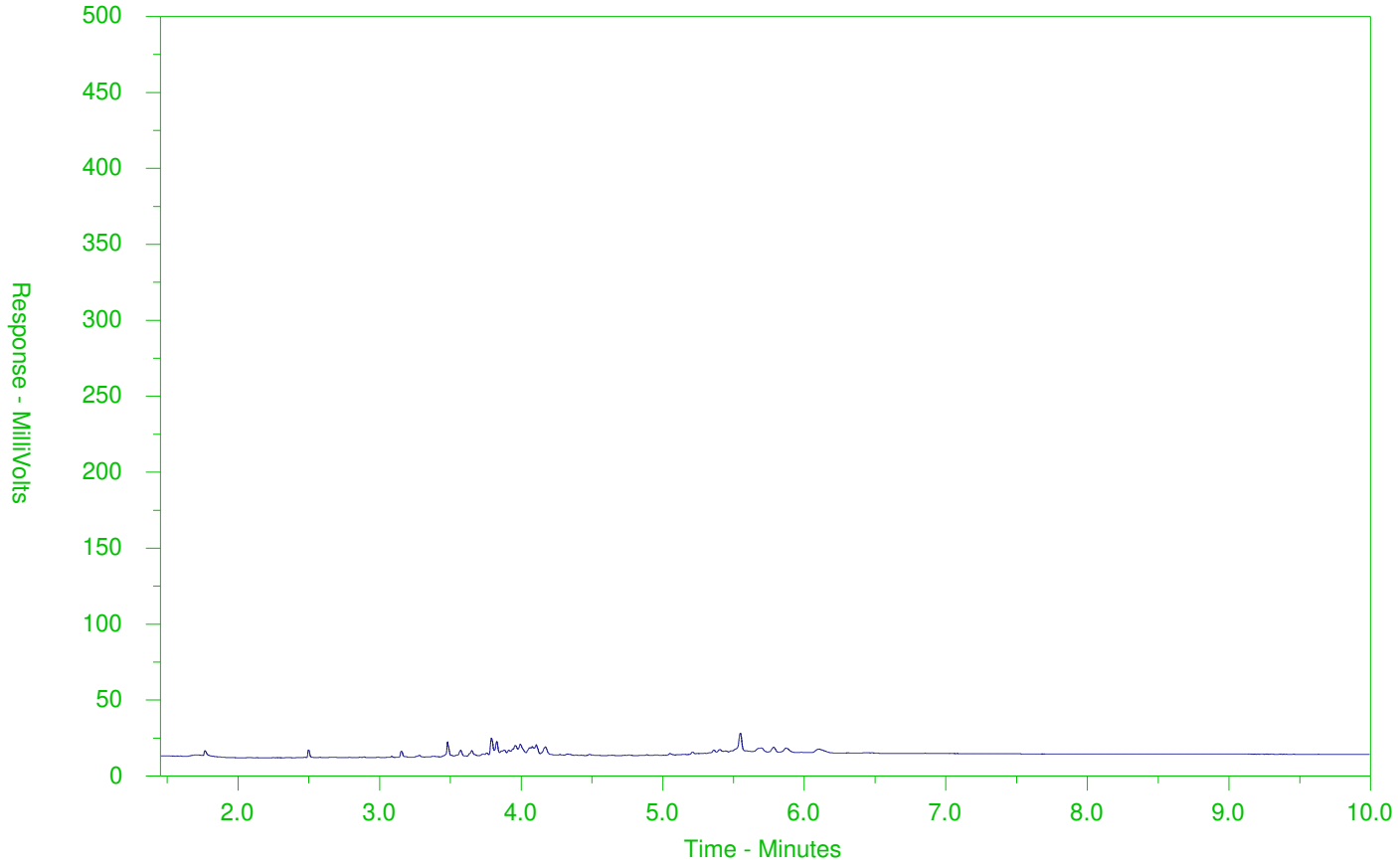
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2300985-002-E601.SG-L
Client Sample ID: DUP9



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009849

Page 1 of 1

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Environmental Division Waterloo

Work Order Reference WT2300985

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni - McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	200 - 1755 Woodward Dr.
City/Province:	Ottawa ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients	
Select Report Format:	☒ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA	☑ YES ☐ NO ☐ N/A
☒ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	DanE@omnimccann.com
Email 2	Kristina@omnimccann.com
Email 3	

Invoice Recipients	
Select Invoice Distribution:	☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	invoicing@omnimccann.com
Email 2	

Turnaround Time (TAT) Requested
☐ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minim
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge mini
☒ 2 day [P2] if received by 3pm M-F - 50% rush surcharge mini
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minir
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. A may apply to rush requests on weekends, statutory holidays and no
Date and Time Required for all E&P TATs:
For all tests with rush TATs requested, plea

Project Information	
ALS Account # / Quote #:	Q90026
Job #:	0006-0103
PO / AFE:	
LSD:	
ALS Lab Work Order # (ALS use only):	WT2300985

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	
ALS Contact:	Sampler:

Analysis

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P)

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC F1-F4	VOC	PAH	Metals	Hg	CrVI	HWS Boron	SAMPLES ON HOLD	EXTENDED STORAGE REQUIR	SUSPECTED HAZARD (see note
	22-24-0-1.25	13-Jan-23		Soil	3	X	X	X	X	X	X	X			
	DUP9	13-Jan-23		Soil	3	X	X	X	X	X	X	X			

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	O.Reg 153/04 - Table 7 for RSC
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☒ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
10.7				-1.4			

SHIPMENT RELEASE (client use)		
Released by: Daniel Elliot	Date: 13-Jan-23	Time: 11:20

INITIAL SHIPMENT RECEPTION (ALS use only)		
Received by:	Date: 01/13/23	Time: 1140

FINAL SHIPMENT RECEPTION (ALS use only)		
Received by: HD	Date: JAN 16, 23	Time: 9

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

SOL440, VS040

ALS Canada Ltd.

right solutions. right partner.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2223434**	Page	: 1 of 5
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 25-Nov-2022 15:30
PO	: ----	Issue Date	: 02-Dec-2022 17:02
C-O-C number	: ----		
Sampler	: Daniel Elliot		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-41 2.75-4	E144	23-Nov-2022	----	----	----		29-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
22-41 4-4.5	E144	23-Nov-2022	----	----	----		29-Nov-2022	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap										
DUP 8	E144	23-Nov-2022	----	----	----		29-Nov-2022	----	----	
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-41 2.75-4	E611D	23-Nov-2022	29-Nov-2022	14 days	7 days	✓	30-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
22-41 4-4.5	E611D	23-Nov-2022	29-Nov-2022	14 days	7 days	✓	30-Nov-2022	40 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
DUP 8	E611D	23-Nov-2022	29-Nov-2022	14 days	7 days	✓	30-Nov-2022	40 days	1 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Moisture Content by Gravimetry	E144	761876	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	762173	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Moisture Content by Gravimetry	E144	761876	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	762173	1	20	5.0	5.0	✓
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	761876	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	762173	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	762173	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

QUALITY CONTROL REPORT

Work Order	: **WT2223434**	Page	: 1 of 10
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 25-Nov-2022 15:30
PO	: ----	Date Analysis Commenced	: 29-Nov-2022
C-O-C number	: ----	Issue Date	: 02-Dec-2022 17:03
Sampler	: Daniel Elliot 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Niral Patel		Waterloo Centralized Prep, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 761876)											
WT2223419-001	Anonymous	moisture	----	E144	0.25	%	13.7	14.1	2.57%	20%	----
Volatile Organic Compounds (QC Lot: 762173)											
WT2223432-001	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 762173) - continued											
WT2223432-001	Anonymous	styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 761876)						
moisture	----	E144	0.25	%	<0.25	----
Volatile Organic Compounds (QCLot: 762173)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 762173) - continued						
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 761876)									
moisture	----	E144	0.25	%	50 %	100	90.0	110	----
Volatile Organic Compounds (QCLot: 762173)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.475 mg/kg	135	60.0	140	----
benzene	71-43-2	E611D	0.005	mg/kg	3.475 mg/kg	101	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.475 mg/kg	97.8	50.0	140	----
bromoform	75-25-2	E611D	0.05	mg/kg	3.475 mg/kg	99.4	70.0	130	----
bromomethane	74-83-9	E611D	0.05	mg/kg	3.475 mg/kg	99.6	50.0	140	----
carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.475 mg/kg	99.4	70.0	130	----
chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.475 mg/kg	98.7	70.0	130	----
chloroform	67-66-3	E611D	0.05	mg/kg	3.475 mg/kg	96.6	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.475 mg/kg	101	60.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.475 mg/kg	94.6	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.475 mg/kg	99.3	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.475 mg/kg	102	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.475 mg/kg	103	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.475 mg/kg	64.8	50.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.475 mg/kg	98.4	60.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.475 mg/kg	99.8	60.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.475 mg/kg	119	60.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.475 mg/kg	96.1	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.475 mg/kg	120	60.0	130	----
dichloromethane	75-09-2	E611D	0.045	mg/kg	3.475 mg/kg	114	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.475 mg/kg	93.3	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.475 mg/kg	98.3	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.475 mg/kg	95.4	70.0	130	----
ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.475 mg/kg	95.2	70.0	130	----
hexane, n-	110-54-3	E611D	0.05	mg/kg	3.475 mg/kg	106	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.475 mg/kg	108	60.0	140	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.475 mg/kg	90.1	60.0	140	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.475 mg/kg	96.7	70.0	130	----
styrene	100-42-5	E611D	0.05	mg/kg	3.475 mg/kg	98.8	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.475 mg/kg	98.9	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 762173) - continued									
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.475 mg/kg	95.3	60.0	130	----
tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.475 mg/kg	101	60.0	130	----
toluene	108-88-3	E611D	0.05	mg/kg	3.475 mg/kg	96.0	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.475 mg/kg	93.6	60.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.475 mg/kg	96.9	60.0	130	----
trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.475 mg/kg	98.5	60.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.475 mg/kg	119	50.0	140	----
vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.475 mg/kg	84.7	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	100	70.0	130	----
xylene, o-	95-47-6	E611D	0.03	mg/kg	3.475 mg/kg	96.8	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 762173)										
WT2223432-001	Anonymous	Acetone	67-64-1	E611D	3.45 mg/kg	4.6875 mg/kg	125	50.0	140	----
		benzene	71-43-2	E611D	2.84 mg/kg	4.6875 mg/kg	103	50.0	140	----
		bromodichloromethane	75-27-4	E611D	2.90 mg/kg	4.6875 mg/kg	105	50.0	140	----
		bromoform	75-25-2	E611D	2.89 mg/kg	4.6875 mg/kg	104	50.0	140	----
		bromomethane	74-83-9	E611D	2.49 mg/kg	4.6875 mg/kg	90.0	50.0	140	----
		carbon tetrachloride	56-23-5	E611D	2.74 mg/kg	4.6875 mg/kg	99.1	50.0	140	----
		chlorobenzene	108-90-7	E611D	2.75 mg/kg	4.6875 mg/kg	99.6	50.0	140	----
		chloroform	67-66-3	E611D	2.80 mg/kg	4.6875 mg/kg	101	50.0	140	----
		dibromochloromethane	124-48-1	E611D	2.90 mg/kg	4.6875 mg/kg	105	50.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	2.79 mg/kg	4.6875 mg/kg	101	50.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	2.78 mg/kg	4.6875 mg/kg	100	50.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	2.78 mg/kg	4.6875 mg/kg	100	50.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	2.81 mg/kg	4.6875 mg/kg	101	50.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	2.06 mg/kg	4.6875 mg/kg	74.3	50.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	2.77 mg/kg	4.6875 mg/kg	100	50.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	3.05 mg/kg	4.6875 mg/kg	110	50.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	2.61 mg/kg	4.6875 mg/kg	94.2	50.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	2.77 mg/kg	4.6875 mg/kg	100	50.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	2.73 mg/kg	4.6875 mg/kg	98.8	50.0	140	----
		dichloromethane	75-09-2	E611D	2.81 mg/kg	4.6875 mg/kg	102	50.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	2.73 mg/kg	4.6875 mg/kg	98.6	50.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	2.63 mg/kg	4.6875 mg/kg	95.0	50.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	2.44 mg/kg	4.6875 mg/kg	88.4	50.0	140	----
		ethylbenzene	100-41-4	E611D	2.54 mg/kg	4.6875 mg/kg	92.0	50.0	140	----
		hexane, n-	110-54-3	E611D	2.52 mg/kg	4.6875 mg/kg	91.1	50.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	3.29 mg/kg	4.6875 mg/kg	119	50.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	2.78 mg/kg	4.6875 mg/kg	101	50.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.71 mg/kg	4.6875 mg/kg	98.1	50.0	140	----
		styrene	100-42-5	E611D	2.72 mg/kg	4.6875 mg/kg	98.2	50.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.78 mg/kg	4.6875 mg/kg	100	50.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.86 mg/kg	4.6875 mg/kg	103	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 762173) - continued										
WT2223432-001	Anonymous	tetrachloroethylene	127-18-4	E611D	2.62 mg/kg	4.6875 mg/kg	94.8	50.0	140	----
		toluene	108-88-3	E611D	2.62 mg/kg	4.6875 mg/kg	94.7	50.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	2.64 mg/kg	4.6875 mg/kg	95.4	50.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	2.90 mg/kg	4.6875 mg/kg	105	50.0	140	----
		trichloroethylene	79-01-6	E611D	2.65 mg/kg	4.6875 mg/kg	95.8	50.0	140	----
		trichlorofluoromethane	75-69-4	E611D	2.60 mg/kg	4.6875 mg/kg	94.0	50.0	140	----
		vinyl chloride	75-01-4	E611D	2.19 mg/kg	4.6875 mg/kg	79.1	50.0	140	----
		xylene, m+p-	179601-23-1	E611D	5.40 mg/kg	9.375 mg/kg	97.5	50.0	140	----
		xylene, o-	95-47-6	E611D	2.62 mg/kg	4.6875 mg/kg	94.6	50.0	140	----

ALS Environmental
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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 -

Page

Environmental Division Waterloo
Work Order Reference
WT2223434

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-957-4936
	Company address below will appear on the final report
Street:	1755 Woodward Drive, unit 200
City/Province:	Ottawa/ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To [X] YES [ ] NO
	Copy of Invoice with Report [ ] YES [X] NO
Company:	
Contact:	

Report Format / Distribution	
Select Report Format:	[X] PDF [X] EXCEL [ ] EDD (DIGITAL)
Quality Control (QC) Report with Report	[X] YES [ ] NO
[X] Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	dan@omnimccann.com
Email 2	Kristina@omnimccann.com
Email 3	antonia@omnimccann.com

Invoice Distribution	
Select Invoice Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	invoicing@omnimccann.com
Email 2	

Select Service Level Below - Contact your AM to confi	
Regular [R]	[X] Standard TAT if received by 3 pm - busin
PRIORITY (Business Days) 4 day [P4-20%]	[ ]
3 day [P3-25%]	[ ]
2 day [P2-50%]	[ ]
EMERGENCY 1 Business day [	
Same Day, Weeke	
(Laboratory openi	
Date and Time Required for all E&P TATs:	
For tests that can not be performed according to the service level selected, you will	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	90026	AFE/Cost Center:	PO#:
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):	WT2223434	ALS Contact: Eric	Sampler: Daniel Elliot

Analysis Request

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOC	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	22-41 4-4.5	23-Nov-22			3	X		
	DUP8	23-Nov-22			3	X		
	22-41 2.75-4	23-Nov-22			3	X		

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? [ ] YES [ ] NO	O. Reg. 153/04 Table 7 For RSC
Are samples for human consumption/ use? [ ] YES [ ] NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	[ ]	SIF Observations	Yes [ ]	No	[ ]
Ice Packs	[X] Ice Cubes [ ]	Custody seal intact	Yes [ ]	No	[ ]
Cooling Initiated	[ ]				

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
11.6			2.7		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Antonia Cass	Date: 23-Nov-22	Time: 15:30	Received by:	Date: 11/24/22	Time: 3:30	Received by:	Date: 11/29/22	Time: 10:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

VG-164 : SN 946

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2300985**	Page	: 1 of 10
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 13-Jan-2023 11:40
PO	: ----	Date Analysis Commenced	: 16-Jan-2023
C-O-C number	: 20-1009849	Issue Date	: 17-Jan-2023 14:31
Sampler	: Daniel Elliot		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Amanda Ganouri-Lumsden	Department Manager - Microbiology and Prep	Centralized Prep, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Metals, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: 22-24-0-1.25 Sampling date/time: 13-Jan-2023 00:00 WT2300985-001	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
Moisture	E144	0.25	%	23.0	--	--	--	--	--	--
Metals										
Antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
Arsenic	E440	0.10	mg/kg	1.62	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
Barium	E440	0.50	mg/kg	261	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
Beryllium	E440	0.10	mg/kg	0.65	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
Boron, hot water soluble	E487	0.10	mg/kg	<0.10	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
Boron	E440	5.0	mg/kg	<5.0	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
Cadmium	E440	0.020	mg/kg	0.177	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
Chromium	E440	0.50	mg/kg	48.7	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
Cobalt	E440	0.10	mg/kg	12.5	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
Copper	E440	0.50	mg/kg	17.4	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
Lead	E440	0.50	mg/kg	7.38	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
Mercury	E510	0.0050	mg/kg	0.0246	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
Molybdenum	E440	0.10	mg/kg	0.30	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
Nickel	E440	0.50	mg/kg	25.1	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
Selenium	E440	0.20	mg/kg	<0.20	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
Silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
Thallium	E440	0.050	mg/kg	0.224	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
Uranium	E440	0.050	mg/kg	0.670	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
Vanadium	E440	0.20	mg/kg	63.7	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
Zinc	E440	2.0	mg/kg	72.4	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
Chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	0.30	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
Benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
Bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
Bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
Bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2300985-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
Chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
Chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
Dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
Dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
Dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
Dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
Dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
Dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
Dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
Dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
Dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
Dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
Dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
Dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
Dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
Ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
Hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
Methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
Methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
Methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
Styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
Tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
Tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
Toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
Trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
Trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
Trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
Vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
Xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
Xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2300985-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
Xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F2-Naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F3-PAH	EC600	50	mg/kg	<50	--	--	--	--	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
Hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
Chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	E601.SG-L	1.0	%	84.8	--	--	--	--	--	--
Dichlorotoluene, 3,4-	E581.F1	1.0	%	89.7	--	--	--	--	--	--
Bromofluorobenzene, 4-	E611D	0.10	%	95.0	--	--	--	--	--	--
Difluorobenzene, 1,4-	E611D	0.10	%	102	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
Acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
Anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
Benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
Benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
Benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
Benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
Benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
Chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
Dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
Fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
Fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
Methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
Methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
Methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
Naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2300985-001 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
Phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
Pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
Acridine-d9	E641A	0.1	%	95.8	--	--	--	--	--	--
Chrysene-d12	E641A	0.1	%	95.4	--	--	--	--	--	--
Naphthalene-d8	E641A	0.1	%	92.4	--	--	--	--	--	--
Phenanthrene-d10	E641A	0.1	%	99.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

Analytical Results

Sub-Matrix: **Soil/Solid**
(Matrix: **Soil/Solid**)

Analyte	Method	LOR	Unit	Client sample ID: DUP9 Sampling date/time: 13-Jan-2023 00:00 WT2300985-002	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Physical Tests										
Moisture	E144	0.25	%	25.6	--	--	--	--	--	--
Metals										
Antimony	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**7.5 mg/kg**	**7.5 mg/kg**	--	--
Arsenic	E440	0.10	mg/kg	1.86	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	**18 mg/kg**	--	--
Barium	E440	0.50	mg/kg	327	**670 mg/kg**	**670 mg/kg**	**390 mg/kg**	**390 mg/kg**	--	--
Beryllium	E440	0.10	mg/kg	0.78	**8 mg/kg**	**10 mg/kg**	**4 mg/kg**	**5 mg/kg**	--	--
Boron, hot water soluble	E487	0.10	mg/kg	<0.10	**2 mg/kg**	**2 mg/kg**	**1.5 mg/kg**	**1.5 mg/kg**	--	--
Boron	E440	5.0	mg/kg	5.2	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
Cadmium	E440	0.020	mg/kg	0.182	**1.9 mg/kg**	**1.9 mg/kg**	**1.2 mg/kg**	**1.2 mg/kg**	--	--
Chromium	E440	0.50	mg/kg	60.4	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	**160 mg/kg**	--	--
Cobalt	E440	0.10	mg/kg	14.7	**80 mg/kg**	**100 mg/kg**	**22 mg/kg**	**22 mg/kg**	--	--
Copper	E440	0.50	mg/kg	20.8	**230 mg/kg**	**300 mg/kg**	**140 mg/kg**	**180 mg/kg**	--	--
Lead	E440	0.50	mg/kg	8.45	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	**120 mg/kg**	--	--
Mercury	E510	0.0050	mg/kg	0.0259	**3.9 mg/kg**	**20 mg/kg**	**0.27 mg/kg**	**1.8 mg/kg**	--	--
Molybdenum	E440	0.10	mg/kg	0.35	**40 mg/kg**	**40 mg/kg**	**6.9 mg/kg**	**6.9 mg/kg**	--	--
Nickel	E440	0.50	mg/kg	31.3	**270 mg/kg**	**340 mg/kg**	**100 mg/kg**	**130 mg/kg**	--	--
Selenium	E440	0.20	mg/kg	0.24	**5.5 mg/kg**	**5.5 mg/kg**	**2.4 mg/kg**	**2.4 mg/kg**	--	--
Silver	E440	0.10	mg/kg	<0.10	**40 mg/kg**	**50 mg/kg**	**20 mg/kg**	**25 mg/kg**	--	--
Thallium	E440	0.050	mg/kg	0.285	**3.3 mg/kg**	**3.3 mg/kg**	**1 mg/kg**	**1 mg/kg**	--	--
Uranium	E440	0.050	mg/kg	0.808	**33 mg/kg**	**33 mg/kg**	**23 mg/kg**	**23 mg/kg**	--	--
Vanadium	E440	0.20	mg/kg	78.2	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	**86 mg/kg**	--	--
Zinc	E440	2.0	mg/kg	88.1	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	**340 mg/kg**	--	--
Speciated Metals										
Chromium, hexavalent [Cr VI]	E532	0.10	mg/kg	0.41	**8 mg/kg**	**10 mg/kg**	**8 mg/kg**	**10 mg/kg**	--	--
Volatile Organic Compounds										
Acetone	E611D	0.50	mg/kg	<0.50	**16 mg/kg**	**28 mg/kg**	**16 mg/kg**	**28 mg/kg**	--	--
Benzene	E611D	0.0050	mg/kg	<0.0050	**0.32 mg/kg**	**0.4 mg/kg**	**0.21 mg/kg**	**0.17 mg/kg**	--	--
Bromodichloromethane	E611D	0.050	mg/kg	<0.050	**18 mg/kg**	**18 mg/kg**	**13 mg/kg**	**13 mg/kg**	--	--
Bromoform	E611D	0.050	mg/kg	<0.050	**0.61 mg/kg**	**1.7 mg/kg**	**0.27 mg/kg**	**0.26 mg/kg**	--	--
Bromomethane	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Carbon tetrachloride	E611D	0.050	mg/kg	<0.050	**0.21 mg/kg**	**1.5 mg/kg**	**0.05 mg/kg**	**0.12 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2300985-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
Chlorobenzene	E611D	0.050	mg/kg	<0.050	**2.4 mg/kg**	**2.7 mg/kg**	**2.4 mg/kg**	**2.7 mg/kg**	--	--
Chloroform	E611D	0.050	mg/kg	<0.050	**0.47 mg/kg**	**0.18 mg/kg**	**0.05 mg/kg**	**0.17 mg/kg**	--	--
Dibromochloromethane	E611D	0.050	mg/kg	<0.050	**13 mg/kg**	**13 mg/kg**	**9.4 mg/kg**	**9.4 mg/kg**	--	--
Dibromoethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Dichlorobenzene, 1,2-	E611D	0.050	mg/kg	<0.050	**6.8 mg/kg**	**8.5 mg/kg**	**3.4 mg/kg**	**4.3 mg/kg**	--	--
Dichlorobenzene, 1,3-	E611D	0.050	mg/kg	<0.050	**9.6 mg/kg**	**12 mg/kg**	**4.8 mg/kg**	**6 mg/kg**	--	--
Dichlorobenzene, 1,4-	E611D	0.050	mg/kg	<0.050	**0.2 mg/kg**	**0.84 mg/kg**	**0.083 mg/kg**	**0.097 mg/kg**	--	--
Dichlorodifluoromethane	E611D	0.050	mg/kg	<0.050	**16 mg/kg**	**25 mg/kg**	**16 mg/kg**	**25 mg/kg**	--	--
Dichloroethane, 1,1-	E611D	0.050	mg/kg	<0.050	**17 mg/kg**	**21 mg/kg**	**3.5 mg/kg**	**11 mg/kg**	--	--
Dichloroethane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Dichloroethylene, 1,1-	E611D	0.050	mg/kg	<0.050	**0.064 mg/kg**	**0.48 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Dichloroethylene, cis-1,2-	E611D	0.050	mg/kg	<0.050	**55 mg/kg**	**37 mg/kg**	**3.4 mg/kg**	**30 mg/kg**	--	--
Dichloroethylene, trans-1,2-	E611D	0.050	mg/kg	<0.050	**1.3 mg/kg**	**9.3 mg/kg**	**0.084 mg/kg**	**0.75 mg/kg**	--	--
Dichloromethane	E611D	0.045	mg/kg	<0.045	**1.6 mg/kg**	**2 mg/kg**	**0.1 mg/kg**	**0.96 mg/kg**	--	--
Dichloropropane, 1,2-	E611D	0.050	mg/kg	<0.050	**0.16 mg/kg**	**0.68 mg/kg**	**0.05 mg/kg**	**0.085 mg/kg**	--	--
Dichloropropylene, cis+trans-1,3-	E611D	0.050	mg/kg	<0.050	**0.18 mg/kg**	**0.21 mg/kg**	**0.05 mg/kg**	**0.083 mg/kg**	--	--
Dichloropropylene, cis-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
Dichloropropylene, trans-1,3-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
Ethylbenzene	E611D	0.015	mg/kg	<0.015	**9.5 mg/kg**	**19 mg/kg**	**2 mg/kg**	**15 mg/kg**	--	--
Hexane, n-	E611D	0.050	mg/kg	<0.050	**46 mg/kg**	**88 mg/kg**	**2.8 mg/kg**	**34 mg/kg**	--	--
Methyl ethyl ketone [MEK]	E611D	0.50	mg/kg	<0.50	**70 mg/kg**	**88 mg/kg**	**16 mg/kg**	**44 mg/kg**	--	--
Methyl isobutyl ketone [MIBK]	E611D	0.50	mg/kg	<0.50	**31 mg/kg**	**210 mg/kg**	**1.7 mg/kg**	**4.3 mg/kg**	--	--
Methyl-tert-butyl ether [MTBE]	E611D	0.040	mg/kg	<0.040	**11 mg/kg**	**3.2 mg/kg**	**0.75 mg/kg**	**1.4 mg/kg**	--	--
Styrene	E611D	0.050	mg/kg	<0.050	**34 mg/kg**	**43 mg/kg**	**0.7 mg/kg**	**2.2 mg/kg**	--	--
Tetrachloroethane, 1,1,1,2-	E611D	0.050	mg/kg	<0.050	**0.087 mg/kg**	**0.11 mg/kg**	**0.058 mg/kg**	**0.05 mg/kg**	--	--
Tetrachloroethane, 1,1,2,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.094 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Tetrachloroethylene	E611D	0.050	mg/kg	<0.050	**4.5 mg/kg**	**21 mg/kg**	**0.28 mg/kg**	**2.3 mg/kg**	--	--
Toluene	E611D	0.050	mg/kg	<0.050	**68 mg/kg**	**78 mg/kg**	**2.3 mg/kg**	**6 mg/kg**	--	--
Trichloroethane, 1,1,1-	E611D	0.050	mg/kg	<0.050	**6.1 mg/kg**	**12 mg/kg**	**0.38 mg/kg**	**3.4 mg/kg**	--	--
Trichloroethane, 1,1,2-	E611D	0.050	mg/kg	<0.050	**0.05 mg/kg**	**0.11 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	--	--
Trichloroethylene	E611D	0.010	mg/kg	<0.010	**0.91 mg/kg**	**0.61 mg/kg**	**0.061 mg/kg**	**0.52 mg/kg**	--	--
Trichlorofluoromethane	E611D	0.050	mg/kg	<0.050	**4 mg/kg**	**5.8 mg/kg**	**4 mg/kg**	**5.8 mg/kg**	--	--
Vinyl chloride	E611D	0.020	mg/kg	<0.020	**0.032 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**	**0.022 mg/kg**	--	--
Xylene, m+p-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--
Xylene, o-	E611D	0.030	mg/kg	<0.030	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2300985-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Volatile Organic Compounds - Continued										
Xylenes, total	E611D	0.050	mg/kg	<0.050	**26 mg/kg**	**30 mg/kg**	**3.1 mg/kg**	**25 mg/kg**	--	--
BTEX, total	E611D	0.10	mg/kg	<0.10	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	**230 mg/kg**	**250 mg/kg**	**98 mg/kg**	**150 mg/kg**	--	--
F2-Naphthalene	EC600	25	mg/kg	<25	--	--	--	--	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	<50	**1700 mg/kg**	**2500 mg/kg**	**300 mg/kg**	**1300 mg/kg**	--	--
F3-PAH	EC600	50	mg/kg	<50	--	--	--	--	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	<50	**3300 mg/kg**	**6600 mg/kg**	**2800 mg/kg**	**5600 mg/kg**	--	--
F1-BTEX	EC580	5.0	mg/kg	<5.0	**55 mg/kg**	**65 mg/kg**	**55 mg/kg**	**65 mg/kg**	--	--
Hydrocarbons, total (C6-C50)	EC581	80	mg/kg	<80	--	--	--	--	--	--
Chromatogram to baseline at nC50	E601.SG-L		-	YES	--	--	--	--	--	--
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	E601.SG-L	1.0	%	84.3	--	--	--	--	--	--
Dichlorotoluene, 3,4-	E581.F1	1.0	%	87.3	--	--	--	--	--	--
Bromofluorobenzene, 4-	E611D	0.10	%	95.1	--	--	--	--	--	--
Difluorobenzene, 1,4-	E611D	0.10	%	103	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**7.9 mg/kg**	**58 mg/kg**	--	--
Acenaphthylene	E641A	0.050	mg/kg	<0.050	**0.15 mg/kg**	**0.17 mg/kg**	**0.15 mg/kg**	**0.17 mg/kg**	--	--
Anthracene	E641A	0.050	mg/kg	<0.050	**0.67 mg/kg**	**0.74 mg/kg**	**0.67 mg/kg**	**0.74 mg/kg**	--	--
Benz(a)anthracene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.5 mg/kg**	**0.63 mg/kg**	--	--
Benzo(a)pyrene	E641A	0.050	mg/kg	<0.050	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	**0.3 mg/kg**	--	--
Benzo(b+j)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
Benzo(g,h,i)perylene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**6.6 mg/kg**	**7.8 mg/kg**	--	--
Benzo(k)fluoranthene	E641A	0.050	mg/kg	<0.050	**0.96 mg/kg**	**0.96 mg/kg**	**0.78 mg/kg**	**0.78 mg/kg**	--	--
Chrysene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**7 mg/kg**	**7.8 mg/kg**	--	--
Dibenz(a,h)anthracene	E641A	0.050	mg/kg	<0.050	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	**0.1 mg/kg**	--	--
Fluoranthene	E641A	0.050	mg/kg	<0.050	**9.6 mg/kg**	**9.6 mg/kg**	**0.69 mg/kg**	**0.69 mg/kg**	--	--
Fluorene	E641A	0.050	mg/kg	<0.050	**62 mg/kg**	**69 mg/kg**	**62 mg/kg**	**69 mg/kg**	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.050	mg/kg	<0.050	**0.76 mg/kg**	**0.95 mg/kg**	**0.38 mg/kg**	**0.48 mg/kg**	--	--
Methylnaphthalene, 1+2-	E641A	0.050	mg/kg	<0.050	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
Methylnaphthalene, 1-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
Methylnaphthalene, 2-	E641A	0.030	mg/kg	<0.030	**76 mg/kg**	**85 mg/kg**	**0.99 mg/kg**	**3.4 mg/kg**	--	--
Naphthalene	E641A	0.010	mg/kg	<0.010	**9.6 mg/kg**	**28 mg/kg**	**0.6 mg/kg**	**0.75 mg/kg**	--	--

Analyte	Method	LOR	Unit	WT2300985-002 (Continued)	ON153/04 T7-ICC-C	ON153/04 T7-ICC-F	ON153/04 T7-RPI-C	ON153/04 T7-RPI-F		
Polycyclic Aromatic Hydrocarbons - Continued										
Phenanthrene	E641A	0.050	mg/kg	<0.050	**12 mg/kg**	**16 mg/kg**	**6.2 mg/kg**	**7.8 mg/kg**	--	--
Pyrene	E641A	0.050	mg/kg	<0.050	**96 mg/kg**	**96 mg/kg**	**78 mg/kg**	**78 mg/kg**	--	--
Acridine-d9	E641A	0.1	%	108	--	--	--	--	--	--
Chrysene-d12	E641A	0.1	%	93.6	--	--	--	--	--	--
Naphthalene-d8	E641A	0.1	%	96.2	--	--	--	--	--	--
Phenanthrene-d10	E641A	0.1	%	107	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-ICC-C	153 T7-Soil-Ind/Com/Commu. Property Use (Coarse)
T7-ICC-F	153 T7-Soil-Ind/Com/Commu. Property Use (Fine)
T7-RPI-C	153 T7-Soil-Res/Park/Inst. Property Use (Coarse)
T7-RPI-F	153 T7-Soil-Res/Park/Inst. Property Use (Fine)

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CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2224015**	Page	: 1 of 44
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 01-Dec-2022 17:00
PO	: ----	Date Analysis Commenced	: 05-Dec-2022
C-O-C number	: 20-1009805	Issue Date	: 09-Dec-2022 15:45
Sampler	: AC		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 15		
No. of samples analysed	: 15		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Metals, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
µg/L	micrograms per litre

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Workorder Comments

RRQC: Matrix spike recovery was above ALS DQO for Methyl Ethyl Ketone (MEK) non detect sample results were considered reliable. Other results if reported were qualified.

Qualifiers

Qualifier	*Description*
DLHC	*Detection Limit Raised: Dilution required due to high concentration of test analyte(s).*
OWP	*Organic water sample contained visible sediment (must be included as part of analysis). Measured concentrations of organic substances in water can be biased high due to presence of sediment.*
RRV	*Reported result verified by repeat analysis.*

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-18-01DEC22 Sampling date/time: 01-Dec-2022 08:30 WT2224015-001	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	95.4	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-20-01DEC22 Sampling date/time: 01-Dec-2022 09:00 WT2224015-002		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Dissolved Metals											
antimony, dissolved	E421	0.10	µg/L	3.73	DLHC	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	3.46	DLHC	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	123	DLHC	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.200	DLHC	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	<100	DLHC	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0500	DLHC	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<5.00	DLHC	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	45.4	DLHC	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	<2.00	DLHC	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.500	DLHC	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050		0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	16.4	DLHC	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	71.9	DLHC	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	4.58	DLHC	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.100	DLHC	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	324000	DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.556	DLHC	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	46.8	DLHC	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<5.00	DLHC	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<10.0	DLHC	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field		--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field		--	--	--	--	--	--
Speciated Metals											
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50		--	--	--	--	--	--
Volatile Organic Compounds											
Acetone	E611D	20	µg/L	<20		100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50		0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50		67000 µg/L	67000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	81.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	105	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	93.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	98.8	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	78.9	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	78.2	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	92.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-21-01DEC22 Sampling date/time: 01-Dec-2022 12:00 WT2224015-003	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-003 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.5	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	95.2	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-22-01DEC22 Sampling date/time: 01-Dec-2022 11:15 WT2224015-004		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Dissolved Metals											
antimony, dissolved	E421	0.10	µg/L	<1.00	DLHC	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	<1.00	DLHC	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	278	DLHC	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.200	DLHC	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	<100	DLHC	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0500	DLHC	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<5.00	DLHC	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	4.53	DLHC	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	16.5	DLHC	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.500	DLHC	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050		0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	6.70	DLHC	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	9.45	DLHC	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	0.950	DLHC	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.100	DLHC	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	514000	DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.106	DLHC	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	13.8	DLHC	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<5.00	DLHC	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<10.0	DLHC	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field		--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field		--	--	--	--	--	--
Speciated Metals											
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50		--	--	--	--	--	--
Volatile Organic Compounds											
Acetone	E611D	20	µg/L	<20		100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50		0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50		67000 µg/L	67000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	92.1	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	95.7	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	92.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.1	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	85.7	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	86.2	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-23-01DEC22 Sampling date/time: 01-Dec-2022 12:15 WT2224015-005	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20 OWP	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50 OWP	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50 OWP	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50 OWP	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20 OWP	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50 OWP	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50 OWP	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50 OWP	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20 OWP	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50 OWP	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50 OWP	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	0.71 OWP	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50 OWP	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50 OWP	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50 OWP	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0 OWP	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50 OWP	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30 OWP	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30 OWP	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50 OWP	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50 OWP	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20 OWP	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20 OWP	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50 OWP	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50 OWP	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-005 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50 OWP	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50 OWP	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50 OWP	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50 OWP	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50 OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40 OWP	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30 OWP	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	95.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	94.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-24-01DEC22 Sampling date/time: 01-Dec-2022 12:40 WT2224015-006	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-006 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	97.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	94.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	22-26-01DEC22								
	Sampling date/time	01-Dec-2022 13:30								
Analyte	*Method*	*LOR*	*Unit*	WT2224015-007	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Dissolved Metals										
antimony, dissolved	E421	0.10	µg/L	<0.10	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	0.12	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	87.5	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.020	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	15	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0050	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<0.50	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	0.30	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	4.63	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.050	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050	0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	0.701	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	1.05	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	0.254	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	0.011	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	147000 DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.076	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	1.48	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<0.50	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<1.0	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field	--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field	--	--	--	--	--	--
Speciated Metals										
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	86.1	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	103	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	93.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	98.6	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	72.1	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	81.2	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	93.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-27-01DEC22 Sampling date/time: 01-Dec-2022 14:45 WT2224015-008	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Dissolved Metals										
antimony, dissolved	E421	0.10	µg/L	0.12	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	0.16	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	62.8	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.020	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	11	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	0.0189	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	0.57	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	0.31	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	7.03	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	0.633	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050	0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	1.24	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	0.96	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	0.581	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.010	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	194000 DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.053	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	1.88	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<0.50	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	1.7	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field	--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field	--	--	--	--	--	--
Speciated Metals										
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-008 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.99	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-008 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	95.9	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	95.0	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	93.2	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	98.6	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-008 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	84.4	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	84.3	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	89.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water** (Matrix: **Water**)				Client sample ID	22-32-01DEC22					
				Sampling date/time	01-Dec-2022 14:10					
Analyte	*Method*	*LOR*	*Unit*	WT2224015-009	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.64	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-009 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	96.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	93.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-33-01DEC22 Sampling date/time: 01-Dec-2022 15:10 WT2224015-010	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	2.41	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-010 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	97.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	93.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
22-33-01DEC22	Water	chloroform		ON153/04	T7-NPGW-C-All	2.41 µg/L	2 µg/L
	Water	chloroform		ON153/04	T7-NPGW-F-All	2.41 µg/L	2 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: 22-36-01DEC22 Sampling date/time: 01-Dec-2022 15:30 WT2224015-011	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Dissolved Metals										
antimony, dissolved	E421	0.10	µg/L	0.14	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	0.18	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	92.8	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.020	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	11	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	0.0666	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<0.50	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	1.82	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	20.5	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	0.880	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050	0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	1.58	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	5.43	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	0.403	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.010	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	68400	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.094	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	5.66	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<0.50	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	3.5	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field	--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field	--	--	--	--	--	--
Speciated Metals										
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-011 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	3.69	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-011 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	83.9	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	98.9	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	108	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-011 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	81.6	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	87.0	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	98.4	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
22-36-01DEC22	Water	chloroform		ON153/04	T7-NPGW-C-All	3.69 µg/L	2 µg/L
	Water	chloroform		ON153/04	T7-NPGW-F-All	3.69 µg/L	2 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: DUP1-01DEC22 Sampling date/time: 01-Dec-2022 12:40 WT2224015-012	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-012 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	98.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	93.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	DUP2-01DEC22								
	Sampling date/time	01-Dec-2022 13:30								
Analyte	*Method*	*LOR*	*Unit*	WT2224015-013	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Dissolved Metals										
antimony, dissolved	E421	0.10	µg/L	<0.10	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	0.12	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	87.6	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.020	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	15	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0050	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<0.50	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	0.30	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	4.57	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.050	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050	0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	0.682	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	1.07	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	0.261	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.010	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	144000 DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.075	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	1.50	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<0.50	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<1.0	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field	--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field	--	--	--	--	--	--
Speciated Metals										
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-013 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-013 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	102	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	107	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	108	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-013 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	83.4	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	87.8	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	98.2	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: TB1-1DEC22 Sampling date/time: 01-Dec-2022 00:00 WT2224015-014	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	2.2 RRV	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-014 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	92.2	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	103	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	98.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	107	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: FB1-1DEC22 Sampling date/time: 01-Dec-2022 12:40 WT2224015-015	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224015-015 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	97.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	93.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2224015**	Page	: 1 of 14
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 01-Dec-2022 17:00
PO	: ----	Issue Date	: 09-Dec-2022 15:45
C-O-C number	: 20-1009805		
Sampler	: AC		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 15		
No. of samples analysed	: 15		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-769388-002	----	Acetone	67-64-1	E611D	142 % MES	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-769647-002	----	Acetone	67-64-1	E611D	137 % LCS-H	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-769647-002	----	bromoform	75-25-2	E611D	133 % LCS-H	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-769647-002	----	dichlorodifluoromethane	75-71-8	E611D	54.8 % LCS-L	60.0-140%	Recovery less than lower control limit
Volatile Organic Compounds	QC-769388-002	----	dichloroethylene, trans-1,2-	156-60-5	E611D	133 % MES	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-769388-002	----	hexane, n-	110-54-3	E611D	135 % MES	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-769647-002	----	methyl ethyl ketone [MEK]	78-93-3	E611D	152 % LCS-H	70.0-130%	Recovery greater than upper control limit
Hydrocarbons	QC-768205-002	----	F1 (C6-C10)	----	E581.F1-L	127 % LCS-H	80.0-120%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	*Description*
LCS-H	*Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	dichlorodifluoromethane	75-71-8	E611D	51.7 % MES	60.0-140%	Recovery less than lower data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	dichlorodifluoromethane	75-71-8	E611D	51.3 % MES	60.0-140%	Recovery less than lower data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	152 % RRQC	60.0-140%	Recovery greater than upper data quality objective

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment

Result Qualifiers

Qualifier	Description
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).
RRQC	Refer to report comments for information regarding this QC result.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) 22-20-01DEC22	E509	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) 22-22-01DEC22	E509	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) 22-26-01DEC22	E509	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) 22-27-01DEC22	E509	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) 22-36-01DEC22	E509	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) DUP2-01DEC22	E509	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved) 22-20-01DEC22	E421	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	180 days	4 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved) 22-22-01DEC22	E421	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	180 days	4 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved) 22-26-01DEC22	E421	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	180 days	4 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved) 22-27-01DEC22	E421	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	180 days	4 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved) 22-36-01DEC22	E421	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	180 days	4 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved) DUP2-01DEC22	E421	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	180 days	4 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) 22-22-01DEC22	E581.F1-L	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	4 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) 22-26-01DEC22	E581.F1-L	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	4 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) 22-27-01DEC22	E581.F1-L	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	4 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) 22-20-01DEC22	E581.F1-L	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) 22-36-01DEC22	E581.F1-L	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) DUP2-01DEC22	E581.F1-L	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) TB1-1DEC22	E581.F1-L	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	6 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) 22-20-01DEC22	E601.SG	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	08-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) 22-22-01DEC22	E601.SG	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	08-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) 22-26-01DEC22	E601.SG	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	08-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) 22-27-01DEC22	E601.SG	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	08-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) 22-36-01DEC22	E601.SG	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	08-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) DUP2-01DEC22	E601.SG	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	08-Dec-2022	40 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
TB1-1DEC22	E601.SG	01-Dec-2022	06-Dec-2022	14 days	6 days	✓	08-Dec-2022	40 days	2 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
22-20-01DEC22	E641A	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
22-22-01DEC22	E641A	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
22-26-01DEC22	E641A	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
22-27-01DEC22	E641A	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
22-36-01DEC22	E641A	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
DUP2-01DEC22	E641A	01-Dec-2022	05-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	1 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
22-20-01DEC22	E532A	01-Dec-2022	----	----	----		06-Dec-2022	28 days	5 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
22-22-01DEC22	E532A	01-Dec-2022	----	----	----		06-Dec-2022	28 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
22-26-01DEC22	E532A	01-Dec-2022	----	----	----		06-Dec-2022	28 days	5 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
22-27-01DEC22	E532A	01-Dec-2022	----	----	----		06-Dec-2022	28 days	5 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
22-36-01DEC22	E532A	01-Dec-2022	----	----	----		06-Dec-2022	28 days	5 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
DUP2-01DEC22	E532A	01-Dec-2022	----	----	----		06-Dec-2022	28 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
22-22-01DEC22	E611D	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
22-26-01DEC22	E611D	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
22-27-01DEC22	E611D	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
22-18-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
22-20-01DEC22	E611D	01-Dec-2022	05-Dec-2022	----	----		05-Dec-2022	14 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) 22-21-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) 22-23-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) 22-24-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) 22-32-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) 22-33-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) 22-36-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP1-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP2-01DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) FB1-1DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
TB1-1DEC22	E611D	01-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	6 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	768205	3	46	6.5	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	768510	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	768412	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	767601	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	768204	4	72	5.5	5.0	✓
Laboratory Control Samples (LCS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	768205	3	46	6.5	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	768510	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	768412	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	767601	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	768011	1	15	6.6	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	768010	2	35	5.7	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	768204	4	72	5.5	5.0	✓
Method Blanks (MB)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	768205	3	46	6.5	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	768510	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	768412	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	767601	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	768011	1	15	6.6	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	768010	2	35	5.7	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	768204	4	72	5.5	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	768205	3	46	6.5	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	768510	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	768412	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	767601	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	768204	4	72	5.5	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals in Water by CRC ICPMS	E421 Waterloo - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Mercury in Water by CVAAS	E509 Waterloo - Environmental	Water	APHA 3030B/EPA 1631E (mod)	Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A Waterloo - Environmental	Water	APHA 3500-Cr C (Ion Chromatography)	Hexavalent Chromium is measured by Ion chromatography-Post column reaction and UV detection. sample pretreatment involved field or lab filtration following by sample preservation.
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Waterloo - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
F1-BTEX	EC580 Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
SUM F1 to F4 where F2-F4 is SG treated	EC581SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fraction F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50), where F2-F4 have been treated with silica gel. F4G-sg is not used within this calculation due to overlap with other fractions.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
F2-F4 (sg) minus PAH	EC600SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F2-F4 (sg) minus PAH is calculated as follows: F2-F4 minus PAH = Sum of CCME Fraction 2 (C10-C16), CCME Fraction 3 (C16-C34), and CCME Fraction 4 (C34-C50), minus select Polycyclic Aromatic Hydrocarbons (PAH).

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Waterloo - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
Dissolved Mercury Water Filtration	EP509 Waterloo - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HCl.
VOCs Preparation for Headspace Analysis	EP581 Waterloo - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Waterloo - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2224015**	Page	: 1 of 28
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 01-Dec-2022 17:00
PO	: ----	Date Analysis Commenced	: 05-Dec-2022
C-O-C number	: 20-1009805	Issue Date	: 09-Dec-2022 15:45
Sampler	: AC 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 15		
No. of samples analysed	: 15		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Waterloo Metals, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 767601)											
WT2222378-001	Anonymous	antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.00021	0.00021	0.000002	Diff <2x LOR	----
		arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00042	0.00038	0.00004	Diff <2x LOR	----
		barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.104	0.105	0.696%	20%	----
		beryllium, dissolved	7440-41-7	E421	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		boron, dissolved	7440-42-8	E421	0.010	mg/L	0.244	0.247	1.30%	20%	----
		cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	0.0000093	0.0000102	0.0000009	Diff <2x LOR	----
		chromium, dissolved	7440-47-3	E421	0.00050	mg/L	<0.00050	0.00053	0.00003	Diff <2x LOR	----
		cobalt, dissolved	7440-48-4	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00076	0.00074	0.00001	Diff <2x LOR	----
		lead, dissolved	7439-92-1	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.000406	0.000417	0.000011	Diff <2x LOR	----
		nickel, dissolved	7440-02-0	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000066	0.000071	0.000005	Diff <2x LOR	----
		silver, dissolved	7440-22-4	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		sodium, dissolved	7440-23-5	E421	0.050	mg/L	104	104	0.0310%	20%	----
		thallium, dissolved	7440-28-0	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.000593	0.000589	0.778%	20%	----
		vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0032	0.0030	0.0002	Diff <2x LOR	----
Dissolved Metals (QC Lot: 768412)											
TY2204630-001	Anonymous	mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 768510)											
WT2224015-002	22-20-01DEC22	chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.00050	mg/L	<0.50 µg/L	<0.00050	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 768204)											
WT2223843-002	Anonymous	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 768204) - continued											
WT2223843-002	Anonymous	chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	1.57	1.56	0.01	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 768336)											
WT2223910-001	Anonymous	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	0.76	0.74	0.02	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	0.73	0.65	0.08	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	0.89	0.90	0.01	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 768336) - continued											
WT2223910-001	Anonymous	trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	0.41	0.40	0.01	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 769388)											
WT2224015-001	22-18-01DEC22	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 769388) - continued											
WT2224015-001	22-18-01DEC22	methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 769647)											
WT2223969-001	Anonymous	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 769647) - continued											
WT2223969-001	Anonymous	dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 768205)											
WT2223843-002	Anonymous	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 768337)											
WT2223910-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 769648)											
WT2223969-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 767601)						
antimony, dissolved	7440-36-0	E421	0.0001	mg/L	<0.00010	----
arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	<0.00010	----
barium, dissolved	7440-39-3	E421	0.0001	mg/L	<0.00010	----
beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	<0.000020	----
boron, dissolved	7440-42-8	E421	0.01	mg/L	<0.010	----
cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	<0.0000050	----
chromium, dissolved	7440-47-3	E421	0.0005	mg/L	<0.00050	----
cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	<0.00010	----
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
lead, dissolved	7439-92-1	E421	0.00005	mg/L	<0.000050	----
molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	<0.000050	----
nickel, dissolved	7440-02-0	E421	0.0005	mg/L	<0.00050	----
selenium, dissolved	7782-49-2	E421	0.00005	mg/L	<0.000050	----
silver, dissolved	7440-22-4	E421	0.00001	mg/L	<0.000010	----
sodium, dissolved	7440-23-5	E421	0.05	mg/L	<0.050	----
thallium, dissolved	7440-28-0	E421	0.00001	mg/L	<0.000010	----
uranium, dissolved	7440-61-1	E421	0.00001	mg/L	<0.000010	----
vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	<0.00050	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 768412)						
mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 768510)						
chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0005	mg/L	<0.00050	----
Volatile Organic Compounds (QCLot: 768204)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 768204) - continued						
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 768336)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 768336) - continued						
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 768336) - continued						
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 769388)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 769388) - continued						
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 769647)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 769647) - continued						
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 768010)						
F2 (C10-C16)	----	E601.SG	100	µg/L	<100	----
F3 (C16-C34)	----	E601.SG	250	µg/L	<250	----
F4 (C34-C50)	----	E601.SG	250	µg/L	<250	----
Hydrocarbons (QCLot: 768205)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Hydrocarbons (QCLot: 768337)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Hydrocarbons (QCLot: 769293)						
F2 (C10-C16)	----	E601.SG	100	µg/L	<100	----
F3 (C16-C34)	----	E601.SG	250	µg/L	<250	----
F4 (C34-C50)	----	E601.SG	250	µg/L	<250	----
Hydrocarbons (QCLot: 769648)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Polycyclic Aromatic Hydrocarbons (QCLot: 768011)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 768011) - continued						
benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	<0.010	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 767601)									
antimony, dissolved	7440-36-0	E421	0.0001	mg/L	0.05 mg/L	106	80.0	120	----
arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	0.05 mg/L	111	80.0	120	----
barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.0125 mg/L	110	80.0	120	----
beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.005 mg/L	105	80.0	120	----
boron, dissolved	7440-42-8	E421	0.01	mg/L	0.05 mg/L	95.4	80.0	120	----
cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.005 mg/L	106	80.0	120	----
chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.0125 mg/L	105	80.0	120	----
cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.0125 mg/L	106	80.0	120	----
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.0125 mg/L	104	80.0	120	----
lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.025 mg/L	104	80.0	120	----
molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.0125 mg/L	107	80.0	120	----
nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.025 mg/L	106	80.0	120	----
selenium, dissolved	7782-49-2	E421	0.00005	mg/L	0.05 mg/L	102	80.0	120	----
silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.005 mg/L	100.0	80.0	120	----
sodium, dissolved	7440-23-5	E421	0.05	mg/L	2.5 mg/L	109	80.0	120	----
thallium, dissolved	7440-28-0	E421	0.00001	mg/L	0.05 mg/L	104	80.0	120	----
uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.00025 mg/L	103	80.0	120	----
vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.025 mg/L	108	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.025 mg/L	104	80.0	120	----
mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0.0001 mg/L	89.7	80.0	120	----
Speciated Metals (QCLot: 768510)									
chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0005	mg/L	0.025 mg/L	101	80.0	120	----
Volatile Organic Compounds (QCLot: 768204)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	87.2	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	96.3	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	103	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	96.7	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	95.5	70.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 768204) - continued									
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	95.1	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	82.5	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	86.0	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	88.7	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	93.1	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	96.6	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	97.7	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	99.0	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	102	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	99.0	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	99.4	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	96.7	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	81.9	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	99.9	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	98.7	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	98.8	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	94.3	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	98.1	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	97.7	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	92.8	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	103	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	98.2	70.0	130	----
Volatile Organic Compounds (QCLot: 768336)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	114	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	96.6	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 768336) - continued									
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	89.7	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	112	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	98.9	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	64.1	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	98.1	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	99.6	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	104	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	93.5	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	96.5	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	113	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	107	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	97.0	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	112	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	109	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	73.5	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	102	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 768336) - continued									
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	108	70.0	130	----
Volatile Organic Compounds (QCLot: 769388)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	# 142	70.0	130	MES
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	125	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	126	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	94.8	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	124	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	119	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	89.4	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	83.5	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	121	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	115	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	98.2	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	# 133	70.0	130	MES
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	127	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	116	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	110	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	# 135	70.0	130	MES
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	115	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	118	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	112	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	115	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 769388) - continued									
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	99.4	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	118	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	136	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	90.2	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	114	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	112	70.0	130	----
Volatile Organic Compounds (QCLot: 769647)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	# 137	70.0	130	LCS-H
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	98.1	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	116	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	# 133	70.0	130	LCS-H
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	82.9	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	121	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	128	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	114	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	# 54.8	60.0	140	LCS-L
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	122	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	118	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	97.5	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	120	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	101	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	109	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	89.5	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	# 152	70.0	130	LCS-H
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	128	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	98.4	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Volatile Organic Compounds (QCLot: 769647) - continued									
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	113	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	123	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	120	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	120	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	95.4	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	62.6	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	109	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	112	70.0	130	----
Hydrocarbons (QCLot: 768010)									
F2 (C10-C16)	----	E601.SG	100	µg/L	5843.789 µg/L	79.7	70.0	130	----
F3 (C16-C34)	----	E601.SG	250	µg/L	10010.02 µg/L	72.6	70.0	130	----
F4 (C34-C50)	----	E601.SG	250	µg/L	4503.074 µg/L	82.0	70.0	130	----
Hydrocarbons (QCLot: 768205)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	# 127	80.0	120	LCS-H
Hydrocarbons (QCLot: 768337)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	109	80.0	120	----
Hydrocarbons (QCLot: 769293)									
F2 (C10-C16)	----	E601.SG	100	µg/L	4961.825 µg/L	91.8	70.0	130	----
F3 (C16-C34)	----	E601.SG	250	µg/L	7776.674 µg/L	98.4	70.0	130	----
F4 (C34-C50)	----	E601.SG	250	µg/L	4477.474 µg/L	108	70.0	130	----
Hydrocarbons (QCLot: 769648)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	115	80.0	120	----
Polycyclic Aromatic Hydrocarbons (QCLot: 768011)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5263 µg/L	109	50.0	140	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5263 µg/L	105	50.0	140	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5263 µg/L	94.3	50.0	140	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5263 µg/L	117	50.0	140	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5263 µg/L	119	50.0	140	----
benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	0.5263 µg/L	97.8	50.0	140	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5263 µg/L	128	50.0	140	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5263 µg/L	128	50.0	140	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 768011) - continued									
chrysene	218-01-9	E641A	0.01	µg/L	0.5263 µg/L	127	50.0	140	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5263 µg/L	116	50.0	140	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5263 µg/L	127	50.0	140	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5263 µg/L	119	50.0	140	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5263 µg/L	128	50.0	140	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5263 µg/L	103	50.0	140	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5263 µg/L	99.8	50.0	140	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5263 µg/L	100	50.0	140	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5263 µg/L	113	50.0	140	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5263 µg/L	124	50.0	140	----

Qualifiers

Qualifier	Description
LCS-H	*Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 767601)										
WT2222378-002	Anonymous	antimony, dissolved	7440-36-0	E421	0.0533 mg/L	0.05 mg/L	107	70.0	130	----
		arsenic, dissolved	7440-38-2	E421	0.0592 mg/L	0.05 mg/L	118	70.0	130	----
		barium, dissolved	7440-39-3	E421	ND mg/L	0.0125 mg/L	ND	70.0	130	----
		beryllium, dissolved	7440-41-7	E421	0.00562 mg/L	0.005 mg/L	112	70.0	130	----
		boron, dissolved	7440-42-8	E421	ND mg/L	0.05 mg/L	ND	70.0	130	----
		cadmium, dissolved	7440-43-9	E421	0.00507 mg/L	0.005 mg/L	101	70.0	130	----
		chromium, dissolved	7440-47-3	E421	0.0137 mg/L	0.0125 mg/L	110	70.0	130	----
		cobalt, dissolved	7440-48-4	E421	0.0131 mg/L	0.0125 mg/L	105	70.0	130	----
		copper, dissolved	7440-50-8	E421	0.0123 mg/L	0.0125 mg/L	98.4	70.0	130	----
		lead, dissolved	7439-92-1	E421	0.0239 mg/L	0.025 mg/L	95.7	70.0	130	----
		molybdenum, dissolved	7439-98-7	E421	0.0139 mg/L	0.0125 mg/L	112	70.0	130	----
		nickel, dissolved	7440-02-0	E421	0.0253 mg/L	0.025 mg/L	101	70.0	130	----
		selenium, dissolved	7782-49-2	E421	0.0572 mg/L	0.05 mg/L	114	70.0	130	----
		silver, dissolved	7440-22-4	E421	0.00471 mg/L	0.005 mg/L	94.3	70.0	130	----
		sodium, dissolved	7440-23-5	E421	ND mg/L	2.5 mg/L	ND	70.0	130	----
		thallium, dissolved	7440-28-0	E421	0.0482 mg/L	0.05 mg/L	96.4	70.0	130	----
		uranium, dissolved	7440-61-1	E421	ND mg/L	0.00025 mg/L	ND	70.0	130	----
		vanadium, dissolved	7440-62-2	E421	0.0285 mg/L	0.025 mg/L	114	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.0250 mg/L	0.025 mg/L	99.8	70.0	130	----
Dissolved Metals (QCLot: 768412)										
WT2223910-002	Anonymous	mercury, dissolved	7439-97-6	E509	0.0000842 mg/L	0.0001 mg/L	84.2	70.0	130	----
Speciated Metals (QCLot: 768510)										
WT2224015-002	22-20-01DEC22	chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0402 mg/L	0.04 mg/L	100	70.0	130	----
Volatile Organic Compounds (QCLot: 768204)										
WT2223843-002	Anonymous	Acetone	67-64-1	E611D	99 µg/L	100 µg/L	99.4	60.0	140	----
		benzene	71-43-2	E611D	99.9 µg/L	100 µg/L	99.9	60.0	140	----
		bromodichloromethane	75-27-4	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		bromoform	75-25-2	E611D	95.2 µg/L	100 µg/L	95.2	60.0	140	----
		bromomethane	74-83-9	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	94.9 µg/L	100 µg/L	94.9	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 768204) - continued										
WT2223843-002	Anonymous	chlorobenzene	108-90-7	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		chloroform	67-66-3	E611D	95.5 µg/L	100 µg/L	95.5	60.0	140	----
		dibromochloromethane	124-48-1	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	70.7 µg/L	100 µg/L	70.7	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	85.5 µg/L	100 µg/L	85.5	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	90.8 µg/L	100 µg/L	90.8	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	89.9 µg/L	100 µg/L	89.9	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	97.0 µg/L	100 µg/L	97.0	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	98.8 µg/L	100 µg/L	98.8	60.0	140	----
		dichloromethane	75-09-2	E611D	99.8 µg/L	100 µg/L	99.8	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	99.4 µg/L	100 µg/L	99.4	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	98.9 µg/L	100 µg/L	98.9	60.0	140	----
		ethylbenzene	100-41-4	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		hexane, n-	110-54-3	E611D	93.7 µg/L	100 µg/L	93.7	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	82 µg/L	100 µg/L	81.7	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		styrene	100-42-5	E611D	98.4 µg/L	100 µg/L	98.4	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	98.8 µg/L	100 µg/L	98.8	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	96.2 µg/L	100 µg/L	96.2	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		toluene	108-88-3	E611D	97.7 µg/L	100 µg/L	97.7	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	99.9 µg/L	100 µg/L	99.9	60.0	140	----
		trichloroethylene	79-01-6	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	92.9 µg/L	100 µg/L	92.9	60.0	140	----
		vinyl chloride	75-01-4	E611D	86.2 µg/L	100 µg/L	86.2	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	201 µg/L	200 µg/L	100	60.0	140	----
		xylene, o-	95-47-6	E611D	95.4 µg/L	100 µg/L	95.4	60.0	140	----
Volatile Organic Compounds (QCLot: 768336)										

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 768336) - continued										
WT2223910-001	Anonymous	Acetone	67-64-1	E611D	140 µg/L	100 µg/L	140	60.0	140	----
		benzene	71-43-2	E611D	95.4 µg/L	100 µg/L	95.4	60.0	140	----
		bromodichloromethane	75-27-4	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		bromoform	75-25-2	E611D	119 µg/L	100 µg/L	119	60.0	140	----
		bromomethane	74-83-9	E611D	84.8 µg/L	100 µg/L	84.8	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		chlorobenzene	108-90-7	E611D	95.9 µg/L	100 µg/L	95.9	60.0	140	----
		chloroform	67-66-3	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		dibromochloromethane	124-48-1	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	97.8 µg/L	100 µg/L	97.8	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	96.8 µg/L	100 µg/L	96.8	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	99.1 µg/L	100 µg/L	99.1	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	51.7 µg/L	100 µg/L	51.7	60.0	140	MES
		dichloroethane, 1,1-	75-34-3	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	90.2 µg/L	100 µg/L	90.2	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		dichloromethane	75-09-2	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		ethylbenzene	100-41-4	E611D	99.6 µg/L	100 µg/L	99.6	60.0	140	----
		hexane, n-	110-54-3	E611D	89.7 µg/L	100 µg/L	89.7	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	136 µg/L	100 µg/L	136	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	131 µg/L	100 µg/L	131	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	95.1 µg/L	100 µg/L	95.1	60.0	140	----
		styrene	100-42-5	E611D	96.5 µg/L	100 µg/L	96.5	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		toluene	108-88-3	E611D	95.2 µg/L	100 µg/L	95.2	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	109 µg/L	100 µg/L	109	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 768336) - continued										
WT2223910-001	Anonymous	trichloroethylene	79-01-6	E611D	99.8 µg/L	100 µg/L	99.8	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	99.4 µg/L	100 µg/L	99.4	60.0	140	----
		vinyl chloride	75-01-4	E611D	64.6 µg/L	100 µg/L	64.6	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	191 µg/L	200 µg/L	95.4	60.0	140	----
		xylene, o-	95-47-6	E611D	101 µg/L	100 µg/L	101	60.0	140	----
Volatile Organic Compounds (QCLot: 769388)										
WT2224015-001	22-18-01DEC22	Acetone	67-64-1	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		benzene	71-43-2	E611D	116 µg/L	100 µg/L	116	60.0	140	----
		bromodichloromethane	75-27-4	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		bromoform	75-25-2	E611D	92.3 µg/L	100 µg/L	92.3	60.0	140	----
		bromomethane	74-83-9	E611D	82.4 µg/L	100 µg/L	82.4	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	116 µg/L	100 µg/L	116	60.0	140	----
		chlorobenzene	108-90-7	E611D	97.8 µg/L	100 µg/L	97.8	60.0	140	----
		chloroform	67-66-3	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		dibromochloromethane	124-48-1	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	76.8 µg/L	100 µg/L	76.8	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	99.4 µg/L	100 µg/L	99.4	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	71.9 µg/L	100 µg/L	71.9	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	88.9 µg/L	100 µg/L	88.9	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	122 µg/L	100 µg/L	122	60.0	140	----
		dichloromethane	75-09-2	E611D	116 µg/L	100 µg/L	116	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	99.2 µg/L	100 µg/L	99.2	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	94.5 µg/L	100 µg/L	94.5	60.0	140	----
		ethylbenzene	100-41-4	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		hexane, n-	110-54-3	E611D	127 µg/L	100 µg/L	127	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	92 µg/L	100 µg/L	92.4	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	96 µg/L	100 µg/L	95.8	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	95.8 µg/L	100 µg/L	95.8	60.0	140	----
		styrene	100-42-5	E611D	103 µg/L	100 µg/L	103	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 769388) - continued										
WT2224015-001	22-18-01DEC22	tetrachloroethane, 1,1,1,2-	630-20-6	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	90.8 µg/L	100 µg/L	90.8	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		toluene	108-88-3	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	87.9 µg/L	100 µg/L	87.9	60.0	140	----
		trichloroethylene	79-01-6	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	125 µg/L	100 µg/L	125	60.0	140	----
		vinyl chloride	75-01-4	E611D	80.7 µg/L	100 µg/L	80.7	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	218 µg/L	200 µg/L	109	60.0	140	----
		xylene, o-	95-47-6	E611D	107 µg/L	100 µg/L	107	60.0	140	----
Volatile Organic Compounds (QCLot: 769647)										
WT2223969-001	Anonymous	Acetone	67-64-1	E611D	138 µg/L	100 µg/L	138	60.0	140	----
		benzene	71-43-2	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		bromodichloromethane	75-27-4	E611D	122 µg/L	100 µg/L	122	60.0	140	----
		bromoform	75-25-2	E611D	135 µg/L	100 µg/L	135	60.0	140	----
		bromomethane	74-83-9	E611D	83.2 µg/L	100 µg/L	83.2	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	130 µg/L	100 µg/L	130	60.0	140	----
		chlorobenzene	108-90-7	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		chloroform	67-66-3	E611D	117 µg/L	100 µg/L	117	60.0	140	----
		dibromochloromethane	124-48-1	E611D	132 µg/L	100 µg/L	132	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	51.3 µg/L	100 µg/L	51.3	60.0	140	MES
		dichloroethane, 1,1-	75-34-3	E611D	123 µg/L	100 µg/L	123	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	121 µg/L	100 µg/L	121	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	113 µg/L	100 µg/L	113	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	115 µg/L	100 µg/L	115	60.0	140	----
		dichloromethane	75-09-2	E611D	123 µg/L	100 µg/L	123	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	110 µg/L	100 µg/L	110	60.0	140	----

Sub-Matrix: **Water**

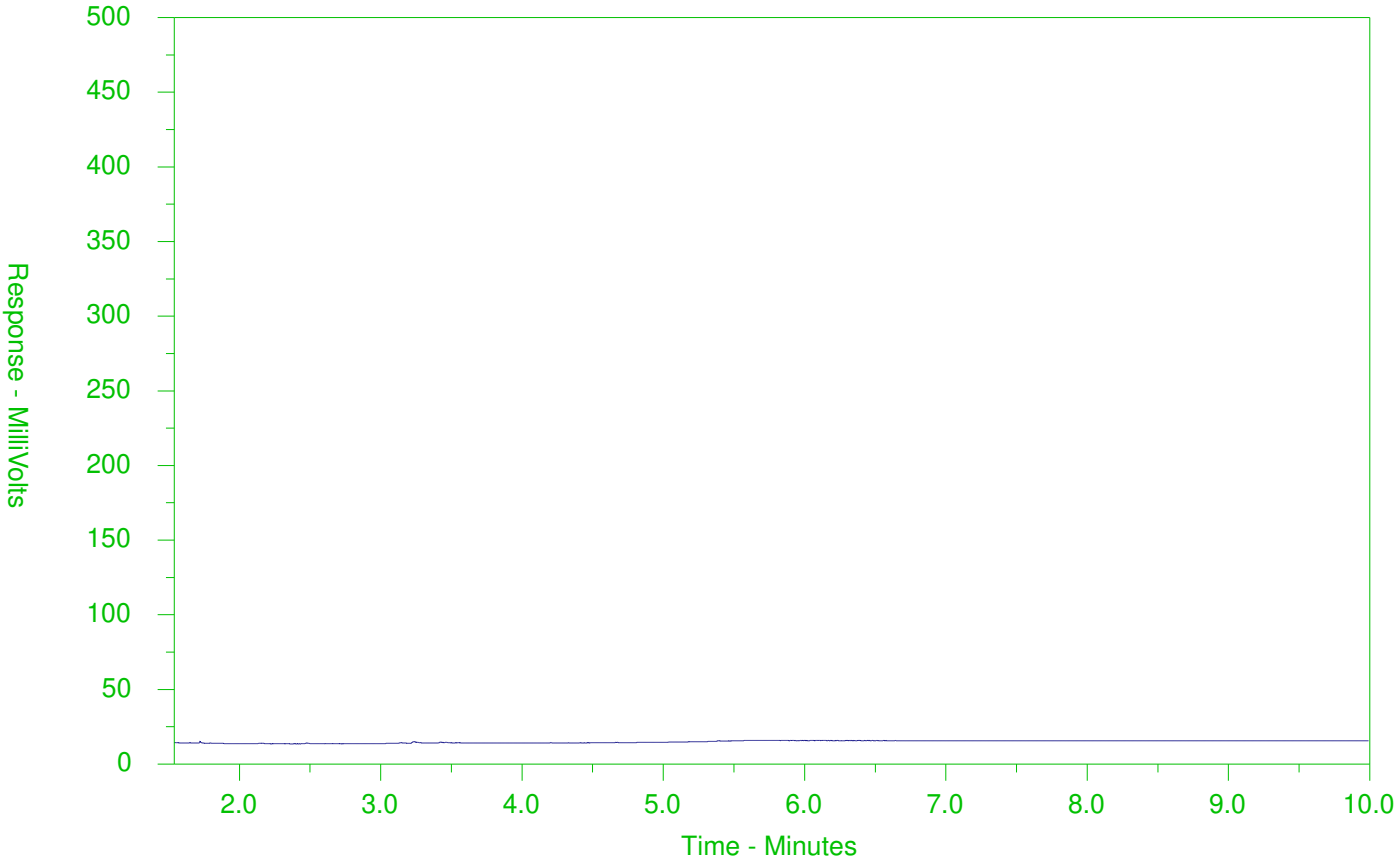
					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 769647) - continued										
WT2223969-001	Anonymous	ethylbenzene	100-41-4	E611D	118 µg/L	100 µg/L	118	60.0	140	----
		hexane, n-	110-54-3	E611D	93.0 µg/L	100 µg/L	93.0	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	152 µg/L	100 µg/L	152	60.0	140	RRQC
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	126 µg/L	100 µg/L	126	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		styrene	100-42-5	E611D	116 µg/L	100 µg/L	116	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	118 µg/L	100 µg/L	118	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	127 µg/L	100 µg/L	127	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	128 µg/L	100 µg/L	128	60.0	140	----
		toluene	108-88-3	E611D	118 µg/L	100 µg/L	118	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	120 µg/L	100 µg/L	120	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	122 µg/L	100 µg/L	122	60.0	140	----
		trichloroethylene	79-01-6	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	98.6 µg/L	100 µg/L	98.6	60.0	140	----
		vinyl chloride	75-01-4	E611D	63.6 µg/L	100 µg/L	63.6	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	238 µg/L	200 µg/L	119	60.0	140	----
		xylene, o-	95-47-6	E611D	120 µg/L	100 µg/L	120	60.0	140	----
Hydrocarbons (QCLot: 768205)										
WT2223843-002	Anonymous	F1 (C6-C10)	----	E581.F1-L	2040 µg/L	2000 µg/L	102	60.0	140	----
Hydrocarbons (QCLot: 768337)										
WT2223910-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	1580 µg/L	2000 µg/L	79.2	60.0	140	----
Hydrocarbons (QCLot: 769648)										
WT2223969-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	1940 µg/L	2000 µg/L	96.9	60.0	140	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*
RRQC	*Refer to report comments for information regarding this QC result.*

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-002-E601.SG
Client Sample ID: 22-20-01DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

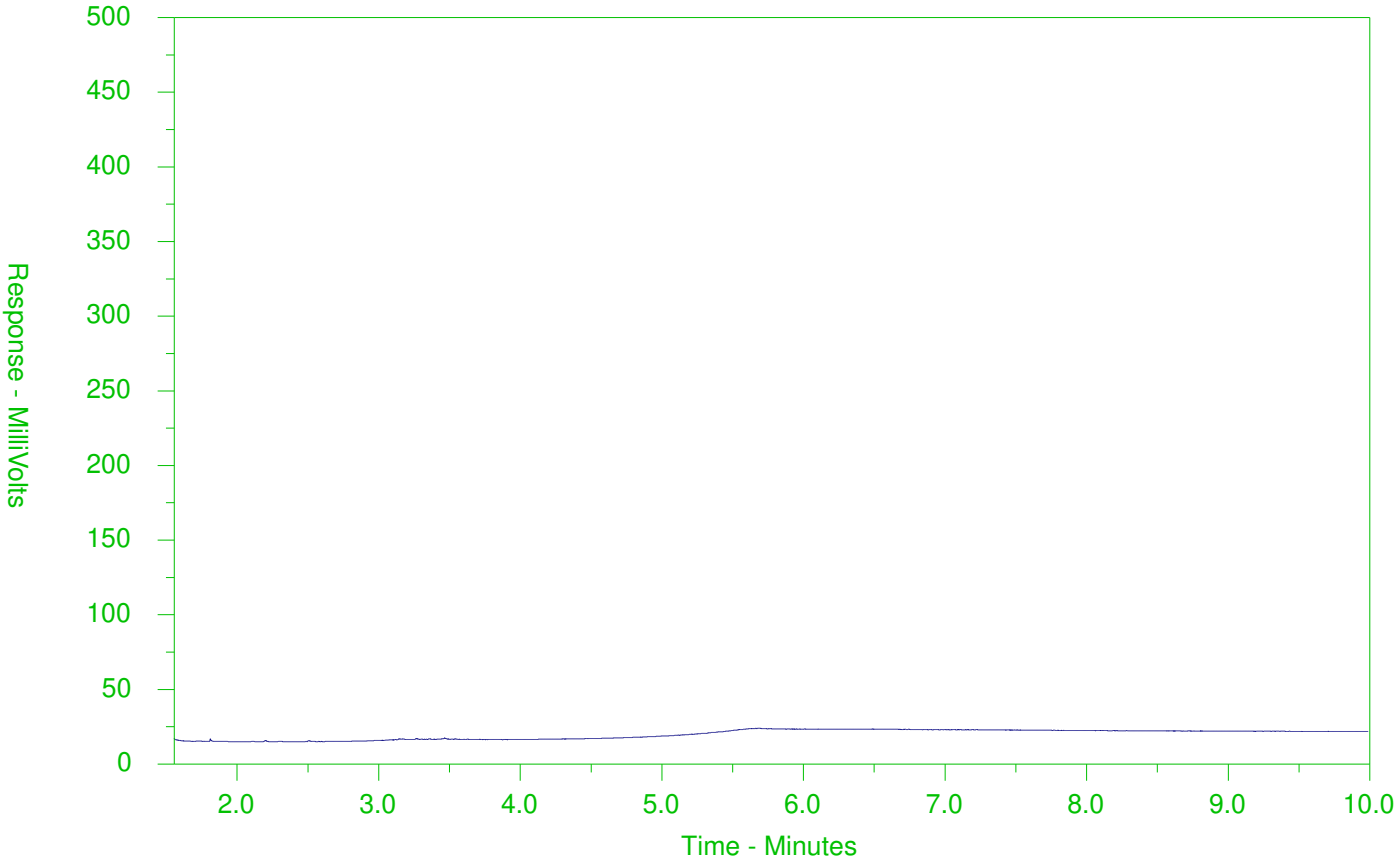
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-004-E601.SG
Client Sample ID: 22-22-01DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

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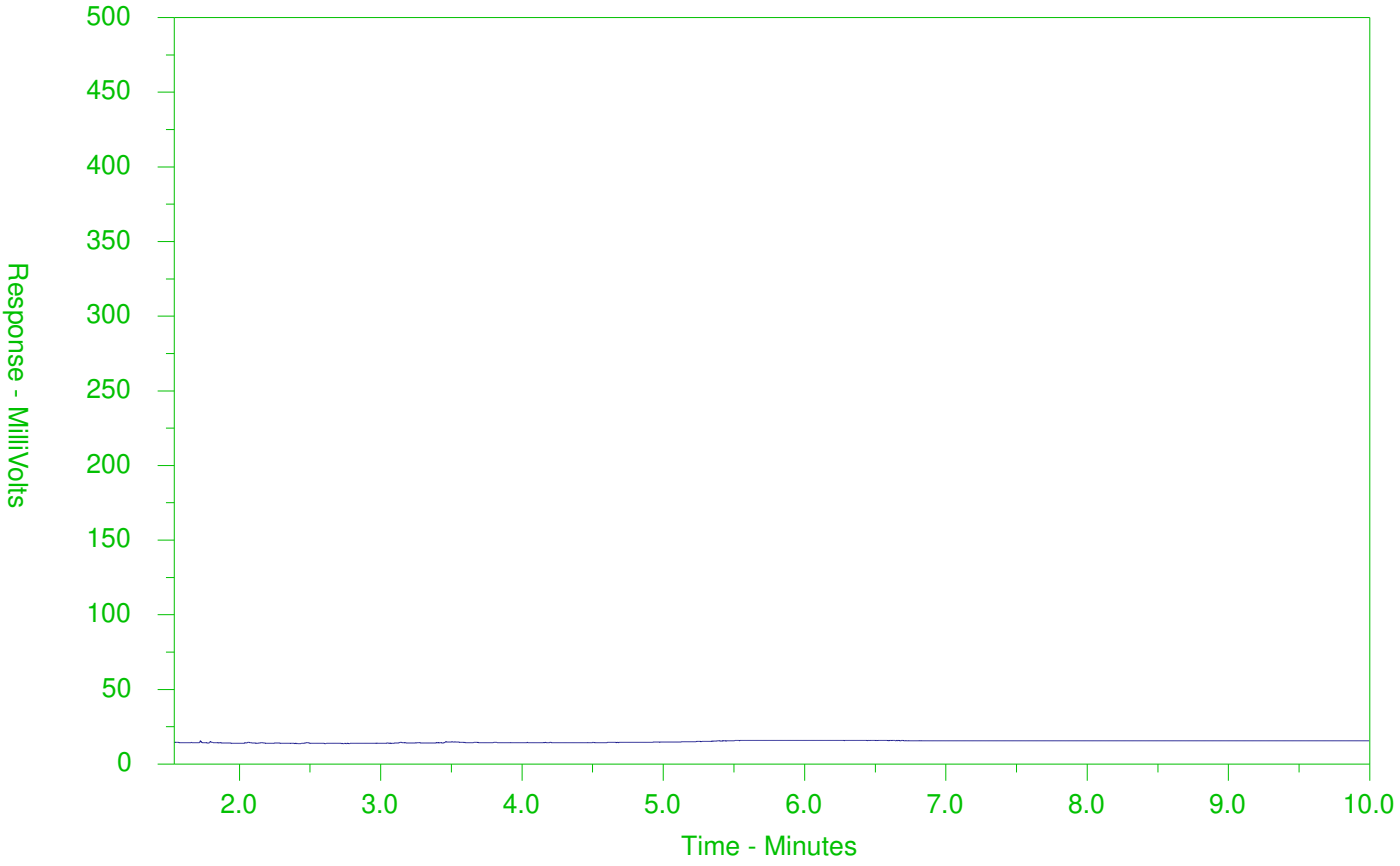
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-007-E601.SG
Client Sample ID: 22-26-01DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

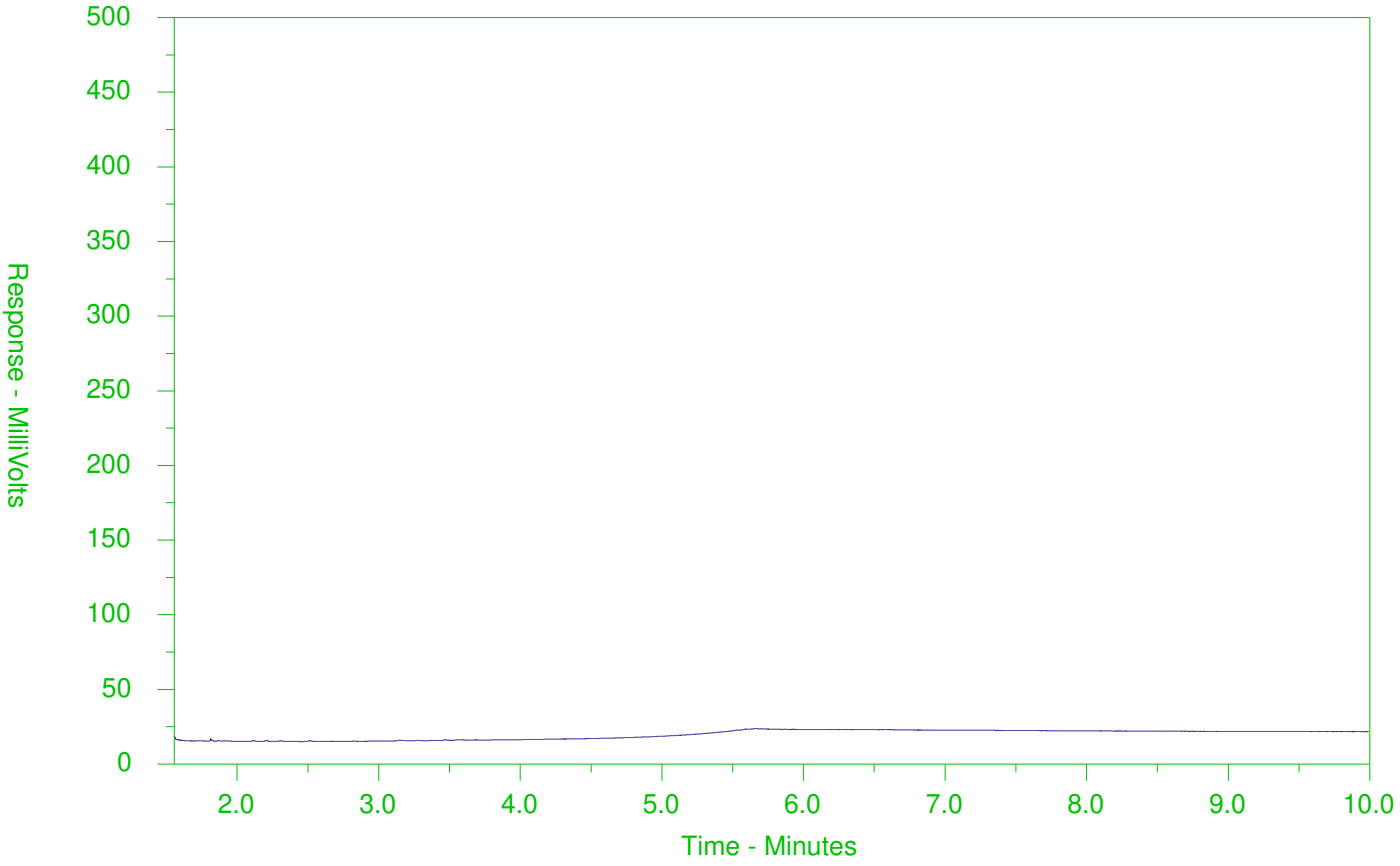
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-008-E601.SG
Client Sample ID: 22-27-01DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

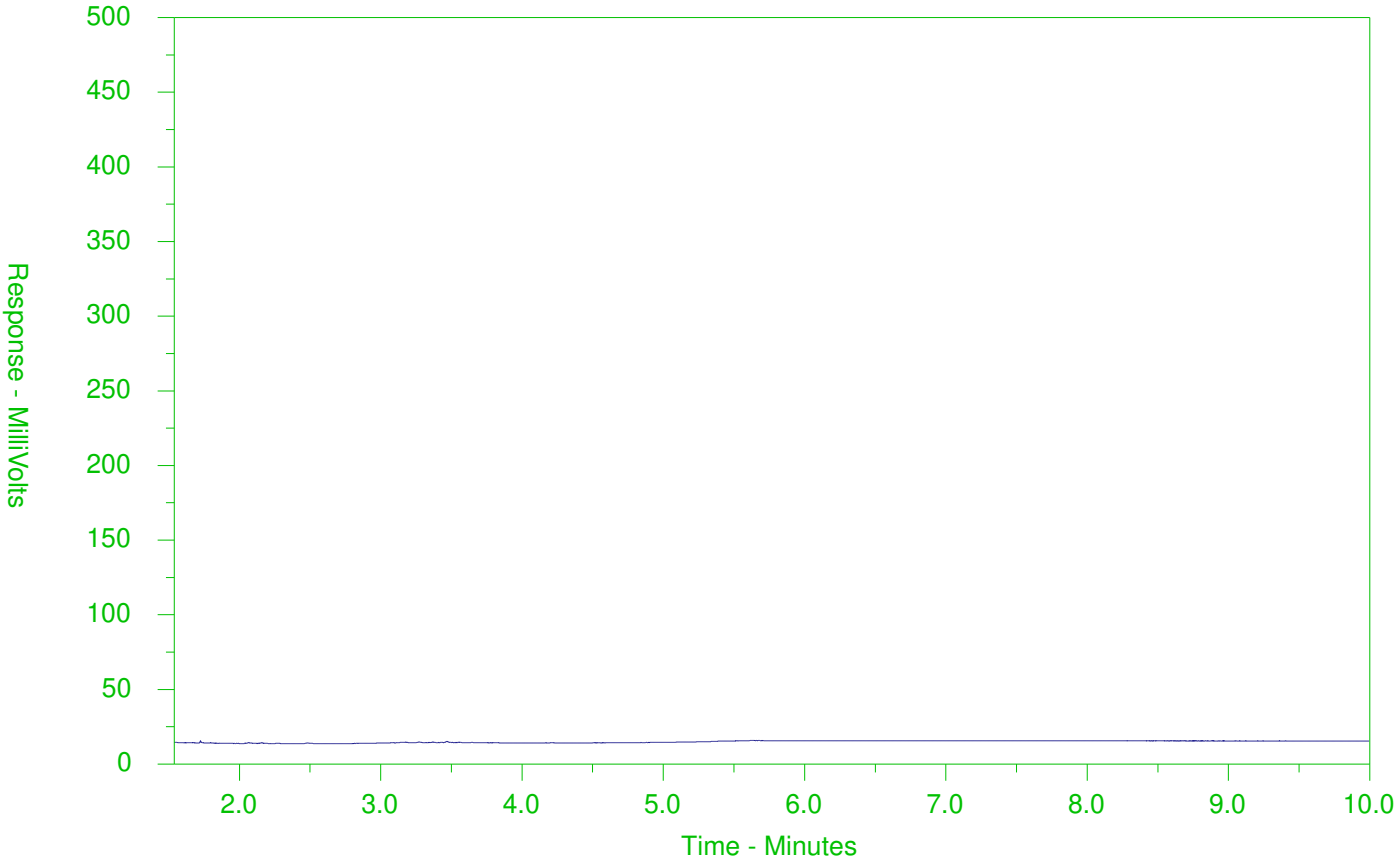
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-011-E601.SG
Client Sample ID: 22-36-01DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

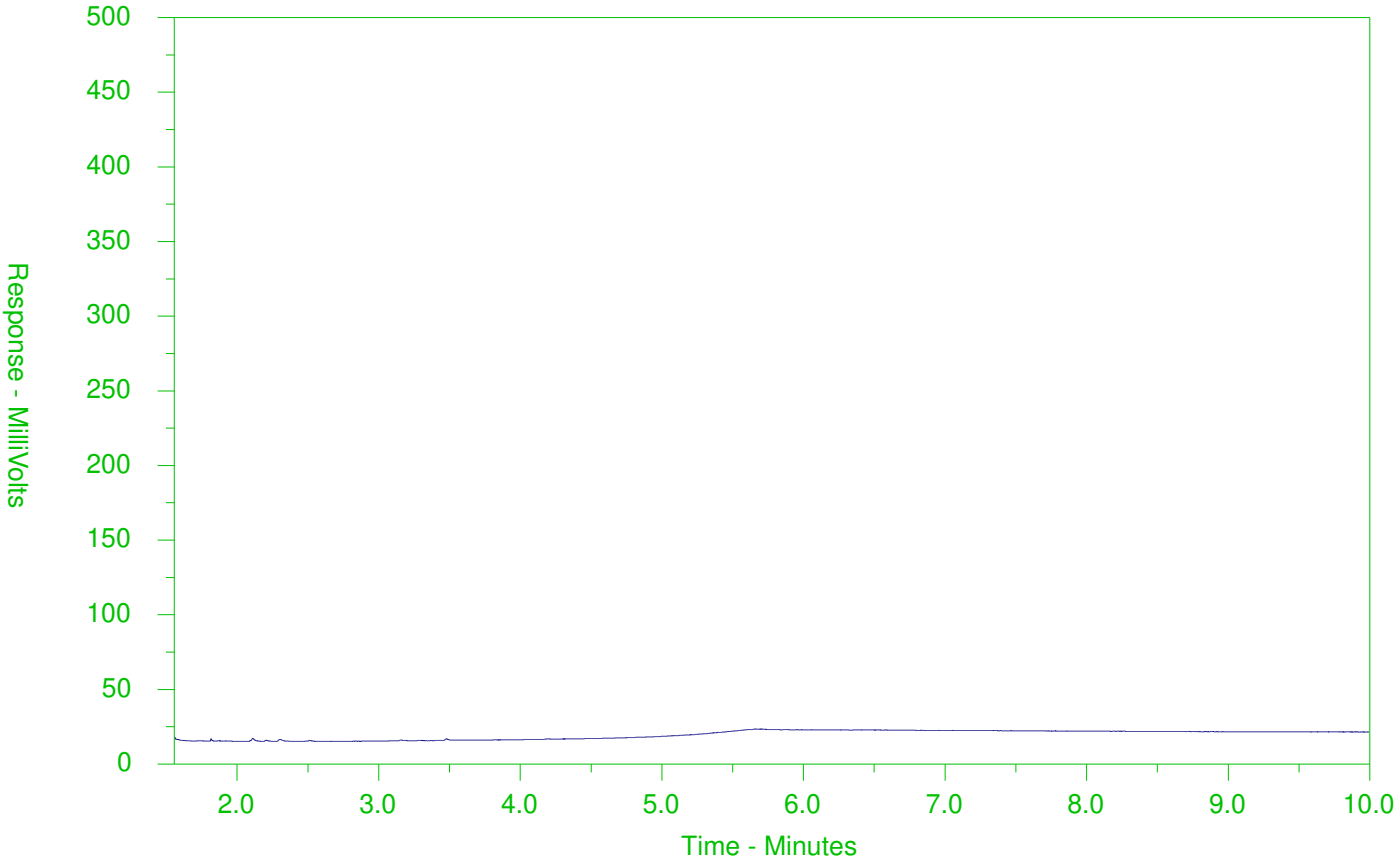
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-013-E601.SG
Client Sample ID: DUP2-01DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

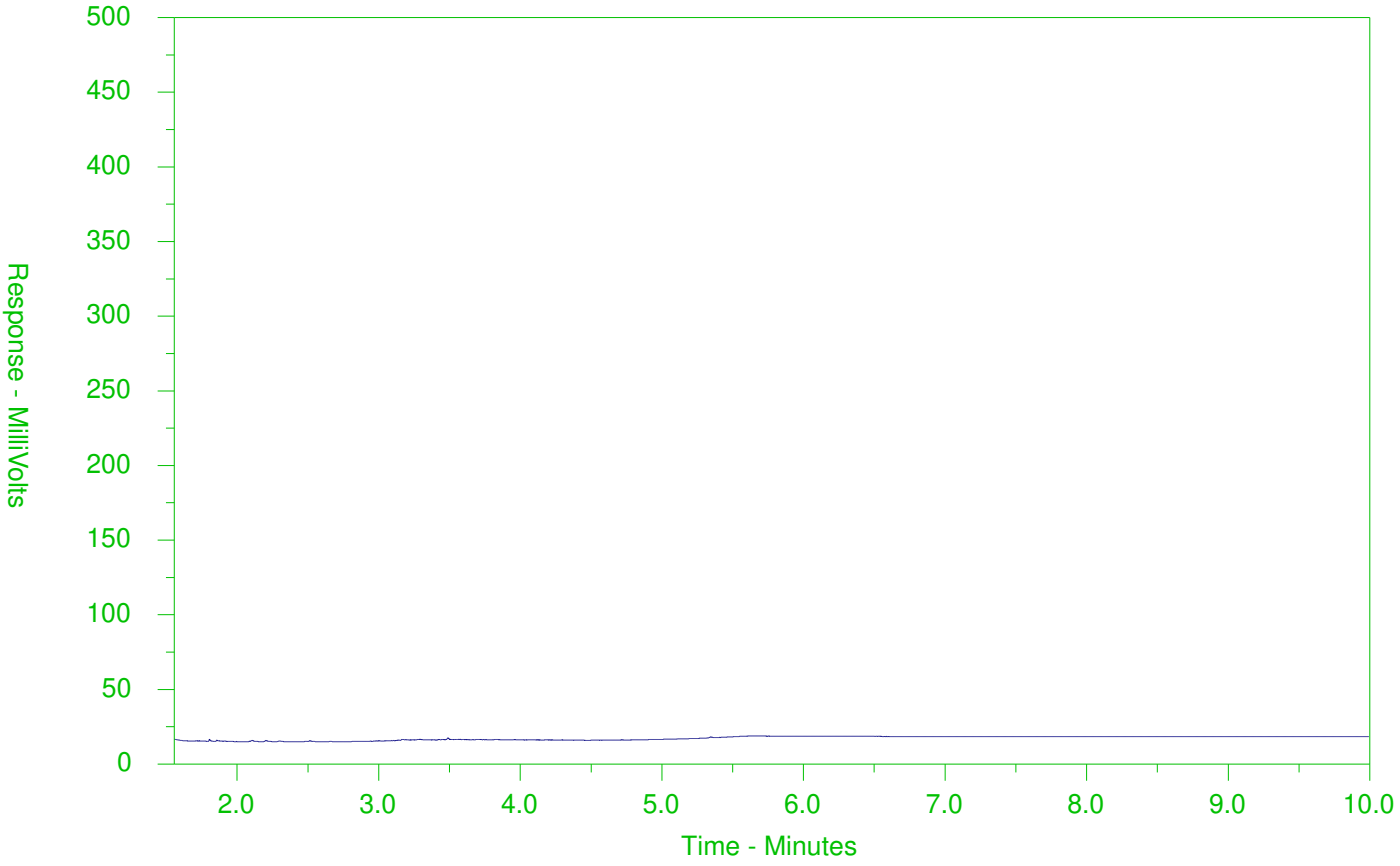
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224015-014-E601.SG
Client Sample ID: TB1-1DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009805

Canada Toll Free: 1 800 668 9878

Page 1 of 2

www.alsglobal.com

Environmental Division Waterloo

Work Order Reference WT2224015

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Omni-McCann Inc.	Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Daniel Elliot	Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimu
Phone:	613-857-4996	☒ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minim
	Company address below will appear on the final report	Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minim
Street:	1755 Woodward Drive, unit 200	Email 1 or Fax dan@omnimccann.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minim
City/Province:	Ottawa, ON	Email 2 antonia@omnimccann.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. A may apply to rush requests on weekends, statutory holidays and no
Postal Code:	K2C 0P9	Email 3 kristina@omnimccann.com	Date and Time Required for all E&P TATs:
Invoice To	Same as Report To ☒ YES ☐ NO	Invoice Recipients	For all tests with rush TATs requested, ple
	Copy of Invoice with Report ☐ YES ☒ NO	Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	Analysis
Company:		Email 1 or Fax invoicing@omnimccann.com	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q40026	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:	JH	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact: Eric	Sampler: Antonia Cass

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOC	PHC	PAH	Metals	Cr(6)	Hg								SAMPLES ON HOLD	EXTENDED STORAGE RE	SUSPECTED HAZARD (see notes)
	22-18-01DEC22	01-Dec-22	08:30		2	X															
	22-20-01DEC22		09:00		10	X	X	X	X	X	X										
	22-21-01DEC22		12:00		2	X															
	22-22-01DEC22		11:15		10	X	X	X	X	X	X										
	22-23-01DEC22		12:15		2	X															
	22-24-01DEC22		12:40		2	X															
	22-26-01DEC22		13:30		10	X	X	X	X	X	X										
	22-27-01DEC22		14:45		10	X	X	X	X	X	X										
	22-32-01DEC22		14:10		2	X															
	22-33-01DEC22		15:10		2	X															
	22-36-01DEC22		15:30		16	X	X	X	X	X	X										
	DUP1-01DEC22		12:40		2	X															

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	O. Reg. 153/04 Table 7 For RSC
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
6.6				4.1	5.9		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Antonia Cass	Date: 01-Dec-22	Time: 17:00	Received by: Eric Dobbins	Date: 01/12/22	Time: 8:00	Received by: MA	Date: 2022-12-03	Time: 10:10

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

VW-154/155, GC-182, MM-487, SC-159, QR-123/124

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009804

Canada Toll Free: 1 800 668 9878

Page 2 of 2

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	Omni-McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	1755 Woodward Drive, unit 200
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☒ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: dan@omnimccann.com

Email 2: antonia@omnimccann.com

Email 3: kristina@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: invoicing@omnimccann.com

Email 2:

Turnaround Time (TAT) Requested

☒ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information

ALS Account # / Quote #:	Q90026
Job #:	0006-0103
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only):

ALS Contact: Eric

Sampler: Antonia Cass

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOC	PHC	BTEX	Metals	Cr(6)	Hg	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	DUP2-01DEC22	01-Dec-22	13:30	WS	10	X	X	X	X	X	X			
	TB1 - 1DEC22	01-Dec-22			2	X	X							
	EB1 - 1DEC22	01-Dec-22	12:40	RNWS	2	X								

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

O. Reg 153/04 Table 7 FOR RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
6.5°C			4.1	5.9	

SHIPMENT RELEASE (client use)

Released by: Antonia Cass Date: 01-Dec-22 Time: 17:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: Eric Dobbin Date: 01/12/22 Time: 8:20

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: MA Date: 2022-12-03 Time: 10:10

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

ALS 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

ALS Canada Ltd.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2224326**	Page	: 1 of 36
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 05-Dec-2022 16:52
PO	: ----	Date Analysis Commenced	: 07-Dec-2022
C-O-C number	: ----	Issue Date	: 14-Dec-2022 16:37
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 16		
No. of samples analysed	: 16		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Supervisor - Inorganic	Metals, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Inorganics, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
µg/L	micrograms per litre
pH units	pH units

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Workorder Comments

RRQC - Matrix spike recovery was below ALS DQO for DCDF. Non-detect sample results are considered reliable. Other results, if reported, have been qualified.

Qualifiers

Qualifier	*Description*
DLHC	*Detection Limit Raised: Dilution required due to high concentration of test analyte(s).*
RRV	*Reported result verified by repeat analysis.*

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

				Client sample ID	MW22-37-5DEC22					
				Sampling date/time	05-Dec-2022 15:40					
Analyte	*Method*	*LOR*	*Unit*	WT2224326-001	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Physical Tests										
pH	E108	0.10	pH units	7.87	--	--	--	--	--	--
Dissolved Metals										
antimony, dissolved	E421	0.10	µg/L	0.30	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	0.61	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	233	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.020	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	27	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	0.0169	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<0.50	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	1.68	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	4.57	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	0.104	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050	0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	3.87	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	5.32	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	0.395	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.010	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	177000 DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.360	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	6.79	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<0.50	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	3.0	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field	--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field	--	--	--	--	--	--
Speciated Metals										
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50	--	--	--	--	--	--
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	88.2	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	92.3	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	103	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	92.1	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	82.8	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	90.0	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	95.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-08-5DEC22 Sampling date/time: 05-Dec-2022 11:45 WT2224326-002	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.89	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	103	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-08-5DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.89 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.89 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-04A-5DEC22 Sampling date/time: 05-Dec-2022 13:20 WT2224326-003	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-003 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.5	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW21-04B-5DEC22							
	Sampling date/time	05-Dec-2022 14:10							
Analyte	Method	LOR	Unit	WT2224326-004	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-04C-5DEC22 Sampling date/time: 05-Dec-2022 14:40 WT2224326-005	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-005 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	103	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.4	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-05A-5DEC22 Sampling date/time: 05-Dec-2022 14:45 WT2224326-006	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-006 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	90.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-05B-5DEC22 Sampling date/time: 05-Dec-2022 15:10 WT2224326-007	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	102	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	90.4	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-05C-5DEC22 Sampling date/time: 05-Dec-2022 15:30 WT2224326-008	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-008 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	90.2	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-03A-5DEC22 Sampling date/time: 05-Dec-2022 11:15 WT2224326-009	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-009 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	90.3	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-03B-5DEC22 Sampling date/time: 05-Dec-2022 11:35 WT2224326-010	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-010 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.53	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	101	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	89.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-03B-5DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.53 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.53 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-03C-5DEC22 Sampling date/time: 05-Dec-2022 12:35 WT2224326-011	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-011 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.5	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	92.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-17A-5DEC22 Sampling date/time: 05-Dec-2022 12:40 WT2224326-012	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-012 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	1.08	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.1	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-17A-5DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	1.08 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	1.08 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW22-17B-5DEC22								
	Sampling date/time	05-Dec-2022 13:10								
Analyte	*Method*	*LOR*	*Unit*	WT2224326-013	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-013 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	DUP3-5DEC22								
	Sampling date/time	05-Dec-2022 14:10								
Analyte	*Method*	*LOR*	*Unit*	WT2224326-014	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.63	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-014 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: TB2-5DEC22 Sampling date/time: 05-Dec-2022 00:00 WT2224326-015	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	3.0 RRV	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-015 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	94.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.2	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water** (Matrix: **Water**)			Client sample ID	FB2-5DEC22						
			Sampling date/time	05-Dec-2022 00:00						
Analyte	*Method*	*LOR*	*Unit*	WT2224326-016	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224326-016 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	91.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2224326**	Page	: 1 of 9
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 05-Dec-2022 16:52
PO	: ----	Issue Date	: 14-Dec-2022 16:35
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 16		
No. of samples analysed	: 16		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-771211-002	----	Acetone	67-64-1	E611D	144 % MES	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-770505-002	----	dichlorodifluoromethane	75-71-8	E611D	44.6 % LCS-L	60.0-140%	Recovery less than lower control limit
Volatile Organic Compounds	QC-771211-002	----	hexane, n-	110-54-3	E611D	134 % MES	70.0-130%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
LCS-L	*Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	WT2224326-001	MW22-37-5DEC22	dichlorodifluoromethane	75-71-8	E611D	35.4 % RRQC	60.0-140%	Recovery less than lower data quality objective

Result Qualifiers

Qualifier	Description
RRQC	*Refer to report comments for information regarding this QC result.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) MW22-37-5DEC22	E509	05-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	28 days	3 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) MW22-37-5DEC22	E421	05-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	180 days	3 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW22-37-5DEC22	E581.F1-L	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) MW22-37-5DEC22	E601.SG	05-Dec-2022	08-Dec-2022	14 days	2 days	✓	12-Dec-2022	40 days	5 days	✓
Physical Tests : pH by Meter										
HDPE [ON MECP] MW22-37-5DEC22	E108	05-Dec-2022	13-Dec-2022	----	----		13-Dec-2022	14 days	8 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) MW22-37-5DEC22	E641A	05-Dec-2022	07-Dec-2022	14 days	2 days	✓	12-Dec-2022	40 days	5 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP] MW22-37-5DEC22	E532A	05-Dec-2022	----	----	----		08-Dec-2022	28 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP3-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-03A-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-03B-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-04A-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-04B-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-05A-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-05B-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-08-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-17A-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-03C-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-04C-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-05C-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-17B-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-37-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	2 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) FB2-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) TB2-5DEC22	E611D	05-Dec-2022	07-Dec-2022	----	----		07-Dec-2022	14 days	3 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	770506	1	1	100.0	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	771524	1	18	5.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	771414	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	771150	1	20	5.0	5.0	✓
pH by Meter	E108	776112	1	2	50.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	770505	3	25	12.0	5.0	✓
Laboratory Control Samples (LCS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	770506	1	1	100.0	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	771524	1	18	5.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	771414	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	771150	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	775869	1	1	100.0	5.0	✓
pH by Meter	E108	776112	1	2	50.0	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	770652	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	770505	2	25	8.0	5.0	✓
Method Blanks (MB)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	770506	1	1	100.0	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	771524	1	18	5.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	771414	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	771150	1	20	5.0	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	775869	1	1	100.0	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	770652	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	770505	2	25	8.0	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	770506	1	1	100.0	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	771524	1	18	5.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	771414	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	771150	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	770505	2	25	8.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter	E108 Waterloo - Environmental	Water	APHA 4500-H (mod)	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C). For high accuracy test results, pH should be measured in the field within the recommended 15 minute hold time.
Dissolved Metals in Water by CRC ICPMS	E421 Waterloo - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Mercury in Water by CVAAS	E509 Waterloo - Environmental	Water	APHA 3030B/EPA 1631E (mod)	Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A Waterloo - Environmental	Water	APHA 3500-Cr C (Ion Chromatography)	Hexavalent Chromium is measured by Ion chromatography-Post column reaction and UV detection. sample pretreatment involved field or lab filtration following by sample preservation.
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Waterloo - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
F1-BTEX	EC580 Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
SUM F1 to F4 where F2-F4 is SG treated	EC581SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fraction F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50), where F2-F4 have been treated with silica gel. F4G-sg is not used within this calculation due to overlap with other fractions.
F2-F4 (sg) minus PAH	EC600SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F2-F4 (sg) minus PAH is calculated as follows: F2-F4 minus PAH = Sum of CCME Fraction 2 (C10-C16), CCME Fraction 3 (C16-C34), and CCME Fraction 4 (C34-C50), minus select Polycyclic Aromatic Hydrocarbons (PAH).

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Waterloo - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
Dissolved Mercury Water Filtration	EP509 Waterloo - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HCl.
VOCs Preparation for Headspace Analysis	EP581 Waterloo - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Waterloo - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2224326**	Page	: 1 of 19
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 05-Dec-2022 16:52
PO	: ----	Date Analysis Commenced	: 07-Dec-2022
C-O-C number	: ----	Issue Date	: 14-Dec-2022 16:35
Sampler	: ---- 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 16		
No. of samples analysed	: 16		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Supervisor - Inorganic	Waterloo Metals, Waterloo, Ontario
Jeremy Gingras	Team Leader - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 776112)											
WT2224326-001	MW22-37-5DEC22	pH	----	E108	0.10	pH units	7.87	7.85	0.254%	4%	----
Dissolved Metals (QC Lot: 771150)											
WT2224087-003	Anonymous	antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.29 µg/L	0.00029	0.0000002	Diff <2x LOR	----
		arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	1.23 µg/L	0.00120	2.70%	20%	----
		barium, dissolved	7440-39-3	E421	0.00010	mg/L	188 µg/L	0.190	0.875%	20%	----
		beryllium, dissolved	7440-41-7	E421	0.000020	mg/L	<0.020 µg/L	<0.000020	0	Diff <2x LOR	----
		boron, dissolved	7440-42-8	E421	0.010	mg/L	219 µg/L	0.220	0.294%	20%	----
		cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	0.0067 µg/L	0.0000061	0.0000006	Diff <2x LOR	----
		chromium, dissolved	7440-47-3	E421	0.00050	mg/L	<0.50 µg/L	<0.00050	0	Diff <2x LOR	----
		cobalt, dissolved	7440-48-4	E421	0.00010	mg/L	0.26 µg/L	0.00026	0.000003	Diff <2x LOR	----
		copper, dissolved	7440-50-8	E421	0.00020	mg/L	2.05 µg/L	0.00202	1.21%	20%	----
		lead, dissolved	7439-92-1	E421	0.000050	mg/L	0.056 µg/L	0.000055	0.0000008	Diff <2x LOR	----
		molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	10.0 µg/L	0.0102	2.51%	20%	----
		nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.92 µg/L	0.00090	0.00001	Diff <2x LOR	----
		selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.098 µg/L	0.000098	0.0000003	Diff <2x LOR	----
		silver, dissolved	7440-22-4	E421	0.000010	mg/L	<0.010 µg/L	<0.000010	0	Diff <2x LOR	----
		sodium, dissolved	7440-23-5	E421	0.050	mg/L	28100 µg/L	27.8	0.807%	20%	----
		thallium, dissolved	7440-28-0	E421	0.000010	mg/L	<0.010 µg/L	<0.000010	0	Diff <2x LOR	----
		uranium, dissolved	7440-61-1	E421	0.000010	mg/L	2.15 µg/L	0.00214	0.582%	20%	----
		vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	1.15 µg/L	0.00111	0.00003	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	<1.0 µg/L	<0.0010	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 771414)											
WT2224326-001	MW22-37-5DEC22	mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0050 µg/L	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 771524)											
WT2224326-001	MW22-37-5DEC22	chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.00050	mg/L	<0.50 µg/L	<0.00050	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 770505)											
WT2224326-001	MW22-37-5DEC22	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 770505) - continued											
WT2224326-001	MW22-37-5DEC22	bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 770505) - continued											
WT2224326-001	MW22-37-5DEC22	xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 771211)											
WT2224025-001	Anonymous	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
WT2224025-001	Anonymous	benzene	71-43-2	E611D	0.50	µg/L	1.89	1.91	0.02	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	0.50	0.53	0.03	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 771211) - continued											
WT2224025-001	Anonymous	tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 770506)											
WT2224326-001	MW22-37-5DEC22	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 771150)						
antimony, dissolved	7440-36-0	E421	0.0001	mg/L	<0.00010	----
arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	<0.00010	----
barium, dissolved	7440-39-3	E421	0.0001	mg/L	<0.00010	----
beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	<0.000020	----
boron, dissolved	7440-42-8	E421	0.01	mg/L	<0.010	----
cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	<0.0000050	----
chromium, dissolved	7440-47-3	E421	0.0005	mg/L	<0.00050	----
cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	<0.00010	----
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
lead, dissolved	7439-92-1	E421	0.00005	mg/L	<0.000050	----
molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	<0.000050	----
nickel, dissolved	7440-02-0	E421	0.0005	mg/L	<0.00050	----
selenium, dissolved	7782-49-2	E421	0.00005	mg/L	<0.000050	----
silver, dissolved	7440-22-4	E421	0.00001	mg/L	<0.000010	----
sodium, dissolved	7440-23-5	E421	0.05	mg/L	<0.050	----
thallium, dissolved	7440-28-0	E421	0.00001	mg/L	<0.000010	----
uranium, dissolved	7440-61-1	E421	0.00001	mg/L	<0.000010	----
vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	<0.00050	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Dissolved Metals (QCLot: 771414)						
mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 771524)						
chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0005	mg/L	<0.00050	----
Volatile Organic Compounds (QCLot: 770505)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 770505) - continued						
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 771211)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 771211) - continued						
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 771211) - continued						
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 770506)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Hydrocarbons (QCLot: 770652)						
F2 (C10-C16)	----	E601.SG	100	µg/L	<100	----
F3 (C16-C34)	----	E601.SG	250	µg/L	<250	----
F4 (C34-C50)	----	E601.SG	250	µg/L	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 775869)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	<0.010	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 776112)									
pH	----	E108	----	pH units	7 pH units	101	98.0	102	----
Dissolved Metals (QCLot: 771150)									
antimony, dissolved	7440-36-0	E421	0.0001	mg/L	0.05 mg/L	101	80.0	120	----
arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	0.05 mg/L	110	80.0	120	----
barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.0125 mg/L	106	80.0	120	----
beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.005 mg/L	104	80.0	120	----
boron, dissolved	7440-42-8	E421	0.01	mg/L	0.05 mg/L	99.3	80.0	120	----
cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.005 mg/L	107	80.0	120	----
chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.0125 mg/L	108	80.0	120	----
cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.0125 mg/L	106	80.0	120	----
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.0125 mg/L	105	80.0	120	----
lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.025 mg/L	103	80.0	120	----
molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.0125 mg/L	103	80.0	120	----
nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.025 mg/L	107	80.0	120	----
selenium, dissolved	7782-49-2	E421	0.00005	mg/L	0.05 mg/L	107	80.0	120	----
silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.005 mg/L	95.0	80.0	120	----
sodium, dissolved	7440-23-5	E421	0.05	mg/L	2.5 mg/L	111	80.0	120	----
thallium, dissolved	7440-28-0	E421	0.00001	mg/L	0.05 mg/L	104	80.0	120	----
uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.00025 mg/L	107	80.0	120	----
vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.025 mg/L	109	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.025 mg/L	112	80.0	120	----
mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0.0001 mg/L	101	80.0	120	----
Speciated Metals (QCLot: 771524)									
chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0005	mg/L	0.025 mg/L	97.5	80.0	120	----
Volatile Organic Compounds (QCLot: 770505)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	105	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	87.3	60.0	140	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 770505) - continued									
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	106	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	99.8	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	92.8	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	# 44.6	60.0	140	LCS-L
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	91.2	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	96.2	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	90.2	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	96.9	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	97.4	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	95.8	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	100	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	99.6	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	98.8	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	103	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	103	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	95.3	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	121	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	98.8	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	93.9	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	70.1	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	102	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	108	70.0	130	----
Volatile Organic Compounds (QCLot: 771211)									

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 771211) - continued									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	# 144	70.0	130	MES
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	120	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	119	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	90.5	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	115	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	99.4	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	112	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	84.4	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	95.3	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	119	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	91.5	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	129	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	124	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	111	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	106	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	# 134	70.0	130	MES
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	115	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	118	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	97.5	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	98.1	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	94.3	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Volatile Organic Compounds (QCLot: 771211) - continued									
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	132	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	90.4	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	108	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	106	70.0	130	----
Hydrocarbons (QCLot: 770506)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	99.4	80.0	120	----
Hydrocarbons (QCLot: 770652)									
F2 (C10-C16)	----	E601.SG	100	µg/L	4961.825 µg/L	90.8	70.0	130	----
F3 (C16-C34)	----	E601.SG	250	µg/L	7776.674 µg/L	98.2	70.0	130	----
F4 (C34-C50)	----	E601.SG	250	µg/L	4477.474 µg/L	103	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 775869)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5263 µg/L	97.1	50.0	140	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5263 µg/L	97.2	50.0	140	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5263 µg/L	99.2	50.0	140	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5263 µg/L	120	50.0	140	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5263 µg/L	104	50.0	140	----
benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	0.5263 µg/L	96.8	50.0	140	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5263 µg/L	114	50.0	140	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5263 µg/L	103	50.0	140	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5263 µg/L	124	50.0	140	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5263 µg/L	118	50.0	140	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5263 µg/L	126	50.0	140	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5263 µg/L	110	50.0	140	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5263 µg/L	134	50.0	140	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5263 µg/L	86.0	50.0	140	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5263 µg/L	89.3	50.0	140	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5263 µg/L	85.7	50.0	140	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5263 µg/L	113	50.0	140	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5263 µg/L	124	50.0	140	----

Qualifiers

Qualifier	Description
LCS-L	Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 771150)										
WT2224326-001	MW22-37-5DEC22	antimony, dissolved	7440-36-0	E421	0.0484 mg/L	0.05 mg/L	96.9	70.0	130	----
		arsenic, dissolved	7440-38-2	E421	0.0567 mg/L	0.05 mg/L	113	70.0	130	----
		barium, dissolved	7440-39-3	E421	ND mg/L	0.0125 mg/L	ND	70.0	130	----
		beryllium, dissolved	7440-41-7	E421	0.00503 mg/L	0.005 mg/L	100	70.0	130	----
		boron, dissolved	7440-42-8	E421	0.045 mg/L	0.05 mg/L	89.5	70.0	130	----
		cadmium, dissolved	7440-43-9	E421	0.00484 mg/L	0.005 mg/L	96.8	70.0	130	----
		chromium, dissolved	7440-47-3	E421	0.0128 mg/L	0.0125 mg/L	102	70.0	130	----
		cobalt, dissolved	7440-48-4	E421	0.0123 mg/L	0.0125 mg/L	98.5	70.0	130	----
		copper, dissolved	7440-50-8	E421	0.0117 mg/L	0.0125 mg/L	93.5	70.0	130	----
		lead, dissolved	7439-92-1	E421	0.0230 mg/L	0.025 mg/L	92.0	70.0	130	----
		molybdenum, dissolved	7439-98-7	E421	0.0123 mg/L	0.0125 mg/L	98.6	70.0	130	----
		nickel, dissolved	7440-02-0	E421	0.0239 mg/L	0.025 mg/L	95.8	70.0	130	----
		selenium, dissolved	7782-49-2	E421	0.0592 mg/L	0.05 mg/L	118	70.0	130	----
		silver, dissolved	7440-22-4	E421	0.00386 mg/L	0.005 mg/L	77.2	70.0	130	----
		sodium, dissolved	7440-23-5	E421	ND mg/L	2.5 mg/L	ND	70.0	130	----
		thallium, dissolved	7440-28-0	E421	0.0465 mg/L	0.05 mg/L	93.0	70.0	130	----
		uranium, dissolved	7440-61-1	E421	ND mg/L	0.00025 mg/L	ND	70.0	130	----
		vanadium, dissolved	7440-62-2	E421	0.0267 mg/L	0.025 mg/L	107	70.0	130	----
		zinc, dissolved	7440-66-6	E421	0.0235 mg/L	0.025 mg/L	94.0	70.0	130	----
Dissolved Metals (QCLot: 771414)										
WT2224351-001	Anonymous	mercury, dissolved	7439-97-6	E509	0.0000983 mg/L	0.0001 mg/L	98.3	70.0	130	----
Speciated Metals (QCLot: 771524)										
WT2224326-001	MW22-37-5DEC22	chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0387 mg/L	0.04 mg/L	96.7	70.0	130	----
Volatile Organic Compounds (QCLot: 770505)										
WT2224326-001	MW22-37-5DEC22	Acetone	67-64-1	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		benzene	71-43-2	E611D	99.0 µg/L	100 µg/L	99.0	60.0	140	----
		bromodichloromethane	75-27-4	E611D	98.8 µg/L	100 µg/L	98.8	60.0	140	----
		bromoform	75-25-2	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		bromomethane	74-83-9	E611D	79.4 µg/L	100 µg/L	79.4	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	95.0 µg/L	100 µg/L	95.0	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 770505) - continued										
WT2224326-001	MW22-37-5DEC22	chlorobenzene	108-90-7	E611D	94.1 µg/L	100 µg/L	94.1	60.0	140	----
		chloroform	67-66-3	E611D	93.8 µg/L	100 µg/L	93.8	60.0	140	----
		dibromochloromethane	124-48-1	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	91.2 µg/L	100 µg/L	91.2	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	35.4 µg/L	100 µg/L	35.4	60.0	140	RRQC
		dichloroethane, 1,1-	75-34-3	E611D	84.4 µg/L	100 µg/L	84.4	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	94.4 µg/L	100 µg/L	94.4	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	80.5 µg/L	100 µg/L	80.5	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	95.4 µg/L	100 µg/L	95.4	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	87.3 µg/L	100 µg/L	87.3	60.0	140	----
		dichloromethane	75-09-2	E611D	91.8 µg/L	100 µg/L	91.8	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	91.5 µg/L	100 µg/L	91.5	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	96.4 µg/L	100 µg/L	96.4	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	95.3 µg/L	100 µg/L	95.3	60.0	140	----
		ethylbenzene	100-41-4	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		hexane, n-	110-54-3	E611D	86.3 µg/L	100 µg/L	86.3	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	98.2 µg/L	100 µg/L	98.2	60.0	140	----
		styrene	100-42-5	E611D	96.3 µg/L	100 µg/L	96.3	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	97.6 µg/L	100 µg/L	97.6	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		toluene	108-88-3	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	92.9 µg/L	100 µg/L	92.9	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	97.2 µg/L	100 µg/L	97.2	60.0	140	----
		trichloroethylene	79-01-6	E611D	94.7 µg/L	100 µg/L	94.7	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	82.6 µg/L	100 µg/L	82.6	60.0	140	----
		vinyl chloride	75-01-4	E611D	60.6 µg/L	100 µg/L	60.6	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	188 µg/L	200 µg/L	94.2	60.0	140	----
		xylene, o-	95-47-6	E611D	101 µg/L	100 µg/L	101	60.0	140	----
Volatile Organic Compounds (QCLot: 771211)										

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 771211) - continued										
WT2224025-001	Anonymous	benzene	71-43-2	E611D	121 µg/L	100 µg/L	121	60.0	140	----
		bromodichloromethane	75-27-4	E611D	123 µg/L	100 µg/L	123	60.0	140	----
		bromoform	75-25-2	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		bromomethane	74-83-9	E611D	85.8 µg/L	100 µg/L	85.8	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		chlorobenzene	108-90-7	E611D	99.9 µg/L	100 µg/L	99.9	60.0	140	----
		chloroform	67-66-3	E611D	114 µg/L	100 µg/L	114	60.0	140	----
		dibromochloromethane	124-48-1	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	86.3 µg/L	100 µg/L	86.3	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	82.7 µg/L	100 µg/L	82.7	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	121 µg/L	100 µg/L	121	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	91.1 µg/L	100 µg/L	91.1	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	127 µg/L	100 µg/L	127	60.0	140	----
		dichloromethane	75-09-2	E611D	121 µg/L	100 µg/L	121	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	119 µg/L	100 µg/L	119	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		ethylbenzene	100-41-4	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	119 µg/L	100 µg/L	119	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	122 µg/L	100 µg/L	122	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	97.6 µg/L	100 µg/L	97.6	60.0	140	----
		styrene	100-42-5	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		toluene	108-88-3	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	125 µg/L	100 µg/L	125	60.0	140	----
		vinyl chloride	75-01-4	E611D	83.7 µg/L	100 µg/L	83.7	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	218 µg/L	200 µg/L	109	60.0	140	----

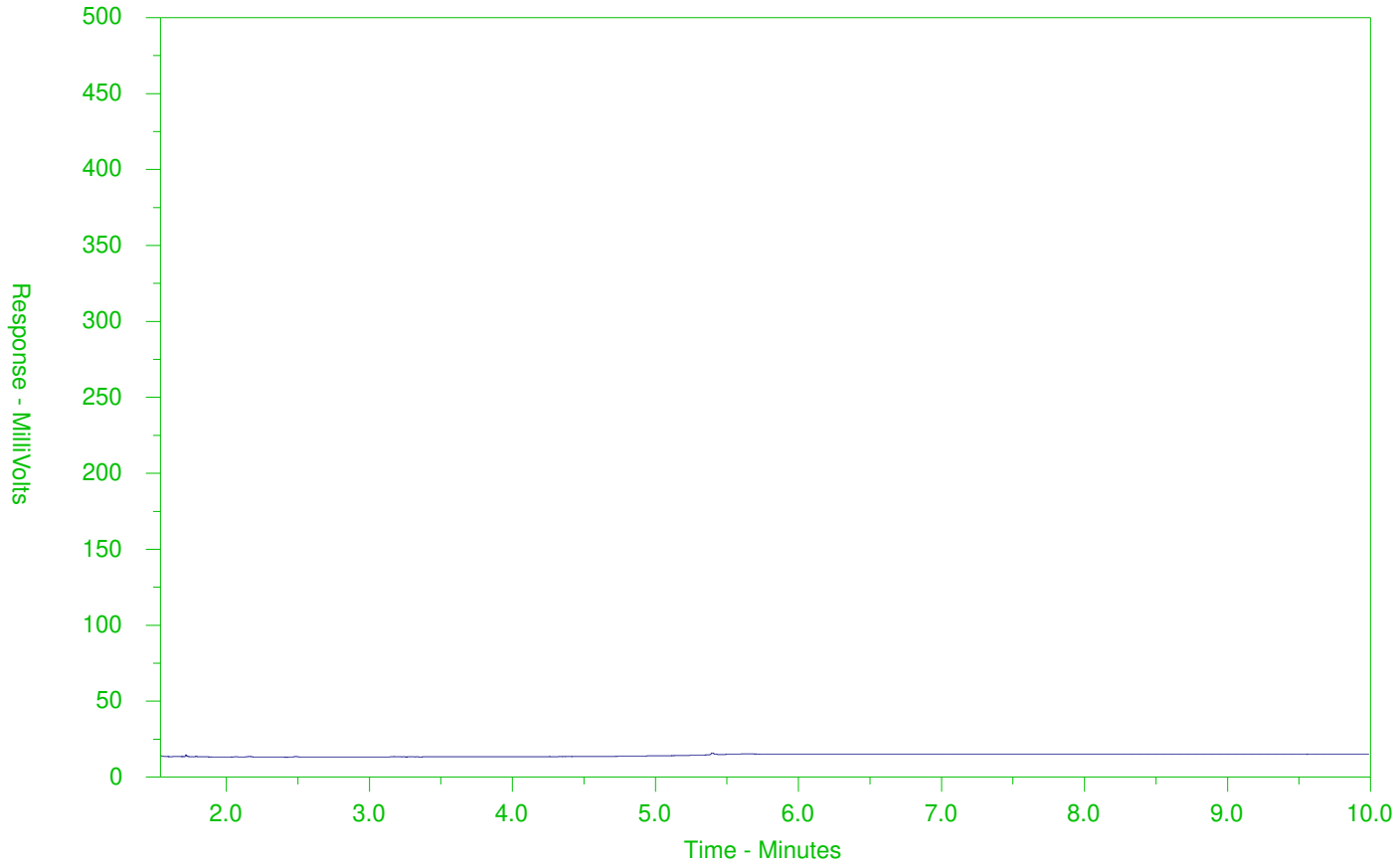
Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*Concentration*	*Target*	*MS*	*Low*	*High*	*Qualifier*
Volatile Organic Compounds (QCLot: 771211) - continued										
WT2224025-001	Anonymous	xylene, o-	95-47-6	E611D	108 µg/L	100 µg/L	108	60.0	140	----
Hydrocarbons (QCLot: 770506)										
WT2224326-001	MW22-37-5DEC22	F1 (C6-C10)	----	E581.F1-L	1770 µg/L	2000 µg/L	88.5	60.0	140	----

RRQC *Refer to report comments for information regarding this QC result.*

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224326-001-E601.SG
Client Sample ID: MW22-37-5DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20

Page

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Environmental Division Waterloo

Work Order Reference

WT2224326

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni - McCann
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	200 - 1755 Woodward Dr.
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients	
Select Report Format:	☑ PDF ☒ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA	☒ YES ☐ NO ☐ N/A
☑ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☐ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	Dan@Omnimccann.com
Email 2	Kristine@Omnimccann.com
Email 3	Antonia@Omnimccann.com

Invoice Recipients	
Select Invoice Distribution:	☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	Invoicing@Omnimccann.com
Email 2	

Turnaround Time (TAT) Requested
☒ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additio may apply to rush requests on weekends, statutory holidays and non-routi
Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q90026	AFE/Cost Center:	PO#:
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC F1 - F4 (P)	VOC (P)	PAH (F)	Metals (F/P)	Hg (F/P)	CrVI (F/P)	pH (F/P)	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MW22-37-5DEC22	05-DEC-22	GW →	15:40	7	X	X	X	X	X	X	X			
	MW21-08-5DEC22			11:45	2		X								
	MW21-04A-5DEC22			13:20			X								
	MW21-04B-5DEC22			14:10			X								
	MW22-04C-5DEC22			14:40			X								
	MW21-05A-5DEC22			14:45			X								
	MW21-05B-5DEC22			15:10			X								
	MW22-05C-5DEC22			15:30			X								
	MW21-03A-5DEC22			11:15			X								
	MW21-03B-5DEC22			11:35			X								
	MW22-03C-5DEC22			12:35			X								
	MW21-17A-5DEC22		←	12:40			X								

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO

Are samples for human consumption/ use? ☐ YES ☒ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

Reg. 153/04 - Table 7 For RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☒ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
8.9				6.4			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by:	Date: 5-Dec-22	Time: 16:52	Received by:	Date: 12/5/22	Time: 16:52	Received by:	Date: 7 Dec 22	Time: 9:15

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

GC-193 MM-493 SC-162 OR-127 VW-161

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

COC Number: 20 - 1009820

Page 2 of 2

Report To	Contact and company name below will appear on the final report
Company:	OMNI-MCANN
Contact:	
Phone:	
	Company address below will appear on the final report
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☐ PDF ☐ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☐ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Email 3

Invoice Recipients

Select Invoice Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Turnaround Time (TAT) Requested

☐ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #		AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P	VOC	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MW22-17B-5DEC22	5-DEC-22	13:10	GW	2		X			
	DUP3-5DEC22	↓	14:10	↓	2		X			
	TB2-5DEC22				2		X			
	FB2-5DEC22				2		X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?

☐ YES ☑ NO

Are samples for human consumption/ use?

☐ YES ☒ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				6.9			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by: AP	Date: 7-Dec-22	Time: 9:16

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

ALS Canada Ltd.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2224485**	Page	: 1 of 63
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 07-Dec-2022 07:45
PO	: ----	Date Analysis Commenced	: 08-Dec-2022
C-O-C number	: 20-1009821	Issue Date	: 16-Dec-2022 14:38
Sampler	: DE		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 26		
No. of samples analysed	: 26		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Inorganics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Metals, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
µg/L	micrograms per litre
pH units	pH units

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Workorder Comments

RRR - Detection limit raised due to suspected laboratory contamination.

Qualifiers

Qualifier	*Description*
DLHC	*Detection Limit Raised: Dilution required due to high concentration of test analyte(s).*
OWP	*Organic water sample contained visible sediment (must be included as part of analysis). Measured concentrations of organic substances in water can be biased high due to presence of sediment.*
RRR	*Refer to report comments for issues regarding this analysis.*

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW22-34-5DEC22							
	Sampling date/time	05-Dec-2022 00:00							
Analyte	*Method*	*LOR*	*Unit*	WT2224485-001	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	1.07	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	110	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	102	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-34-5DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	1.07 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	1.07 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-01A-6DEC22 Sampling date/time: 06-Dec-2022 15:45 WT2224485-002	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.88	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	110	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	102	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-01A-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.88 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.88 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-01B-6DEC22 Sampling date/time: 06-Dec-2022 16:15 WT2224485-003	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-003 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.82	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	110	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-01B-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.82 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.82 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-01C-6DEC22 Sampling date/time: 06-Dec-2022 16:45 WT2224485-004	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	110	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	102	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-02A-6DEC22 Sampling date/time: 06-Dec-2022 14:05 WT2224485-005	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-005 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.84	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	110	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-02A-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.84 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.84 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-02B-6DEC22 Sampling date/time: 06-Dec-2022 15:00 WT2224485-006	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-006 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.65	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	109	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-02B-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.65 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.65 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-06A-6DEC22 Sampling date/time: 06-Dec-2022 12:15 WT2224485-007	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	92.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	97.1	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	110	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1221	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1232	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1242	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1248	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1254	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1260	E687	0.020	µg/L	<0.020	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polychlorinated Biphenyls - Continued										
Aroclor 1262	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1268	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.060	µg/L	<0.060	0.2 µg/L	0.2 µg/L	--	--	--	--
decachlorobiphenyl	E687	0.1	%	102	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	82.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-06B-6DEC22 Sampling date/time: 06-Dec-2022 12:45 WT2224485-008	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-008 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	109	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-07-6DEC22 Sampling date/time: 06-Dec-2022 10:05 WT2224485-009	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-009 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.71	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	109	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	102	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-07-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.71 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.71 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-14A-6DEC22 Sampling date/time: 06-Dec-2022 13:00 WT2224485-010		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Physical Tests											
pH	E108	0.10	pH units	7.43		--	--	--	--	--	--
Dissolved Metals											
antimony, dissolved	E421	0.10	µg/L	<1.00	DLHC	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	<1.00	DLHC	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	176	DLHC	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.200	DLHC	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	<100	DLHC	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0500	DLHC	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<5.00	DLHC	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	<1.00	DLHC	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	5.12	DLHC	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.500	DLHC	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050		0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	1.07	DLHC	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	6.15	DLHC	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	1.10	DLHC	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.100	DLHC	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	418000	DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.458	DLHC	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	12.2	DLHC	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<5.00	DLHC	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<10.0	DLHC	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field		--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field		--	--	--	--	--	--
Speciated Metals											
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50		--	--	--	--	--	--
Volatile Organic Compounds											
Acetone	E611D	20	µg/L	<20		100000 µg/L	100000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-010 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-010 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.65	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	91.1	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	89.2	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	109	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-010 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	121	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	100	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	124	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-14A-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.65 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.65 µg/L	0.5 µg/L

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-14B-6DEC22 Sampling date/time: 06-Dec-2022 12:15 WT2224485-011	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-011 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	94.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-15A-6DEC22 Sampling date/time: 06-Dec-2022 16:15 WT2224485-012	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-012 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.73	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	94.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-15A-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.73 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.73 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-15B-6DEC22 Sampling date/time: 06-Dec-2022 15:50 WT2224485-013	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-013 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	94.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-16A-6DEC22 Sampling date/time: 06-Dec-2022 14:50 WT2224485-014	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-014 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.97	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW21-16A-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.97 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.97 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-16B-6DEC22 Sampling date/time: 06-Dec-2022 15:20 WT2224485-015	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-015 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-28-6DEC22 Sampling date/time: 06-Dec-2022 08:30 WT2224485-016		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Physical Tests											
pH	E108	0.10	pH units	7.51		--	--	--	--	--	--
Dissolved Metals											
antimony, dissolved	E421	0.10	µg/L	<1.00	DLHC	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	<1.00	DLHC	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	227	DLHC	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.200	DLHC	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	<100	DLHC	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0500	DLHC	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<5.00	DLHC	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	1.22	DLHC	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	4.93	DLHC	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.500	DLHC	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050		0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	4.38	DLHC	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	8.02	DLHC	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	1.12	DLHC	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.100	DLHC	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	388000	DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.352	DLHC	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	14.8	DLHC	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<5.00	DLHC	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<10.0	DLHC	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field		--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field		--	--	--	--	--	--
Speciated Metals											
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50		--	--	--	--	--	--
Volatile Organic Compounds											
Acetone	E611D	20	µg/L	<20		100000 µg/L	100000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-016 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-016 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.84	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	88.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	98.5	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	93.2	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-016 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	107	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	91.6	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	114	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-28-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.84 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.84 µg/L	0.5 µg/L

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-29-6DEC22 Sampling date/time: 06-Dec-2022 09:40 WT2224485-017		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Physical Tests											
pH	E108	0.10	pH units	7.68		--	--	--	--	--	--
Dissolved Metals											
antimony, dissolved	E421	0.10	µg/L	<1.00	DLHC	16000 µg/L	16000 µg/L	--	--	--	--
arsenic, dissolved	E421	0.10	µg/L	<1.00	DLHC	1500 µg/L	1500 µg/L	--	--	--	--
barium, dissolved	E421	0.10	µg/L	95.8	DLHC	23000 µg/L	23000 µg/L	--	--	--	--
beryllium, dissolved	E421	0.020	µg/L	<0.200	DLHC	53 µg/L	53 µg/L	--	--	--	--
boron, dissolved	E421	10	µg/L	<100	DLHC	36000 µg/L	36000 µg/L	--	--	--	--
cadmium, dissolved	E421	0.0050	µg/L	<0.0500	DLHC	2.1 µg/L	2.1 µg/L	--	--	--	--
chromium, dissolved	E421	0.50	µg/L	<5.00	DLHC	640 µg/L	640 µg/L	--	--	--	--
cobalt, dissolved	E421	0.10	µg/L	4.18	DLHC	52 µg/L	52 µg/L	--	--	--	--
copper, dissolved	E421	0.20	µg/L	2.04	DLHC	69 µg/L	69 µg/L	--	--	--	--
lead, dissolved	E421	0.050	µg/L	<0.500	DLHC	20 µg/L	20 µg/L	--	--	--	--
mercury, dissolved	E509	0.0050	µg/L	<0.0050		0.1 µg/L	0.1 µg/L	--	--	--	--
molybdenum, dissolved	E421	0.050	µg/L	0.837	DLHC	7300 µg/L	7300 µg/L	--	--	--	--
nickel, dissolved	E421	0.50	µg/L	6.36	DLHC	390 µg/L	390 µg/L	--	--	--	--
selenium, dissolved	E421	0.050	µg/L	<0.500	DLHC	50 µg/L	50 µg/L	--	--	--	--
silver, dissolved	E421	0.010	µg/L	<0.100	DLHC	1.2 µg/L	1.2 µg/L	--	--	--	--
sodium, dissolved	E421	50	µg/L	317000	DLHC	1800000 µg/L	1800000 µg/L	--	--	--	--
thallium, dissolved	E421	0.010	µg/L	0.152	DLHC	400 µg/L	400 µg/L	--	--	--	--
uranium, dissolved	E421	0.010	µg/L	11.7	DLHC	330 µg/L	330 µg/L	--	--	--	--
vanadium, dissolved	E421	0.50	µg/L	<5.00	DLHC	200 µg/L	200 µg/L	--	--	--	--
zinc, dissolved	E421	1.0	µg/L	<10.0	DLHC	890 µg/L	890 µg/L	--	--	--	--
dissolved mercury filtration location	EP509		-	Field		--	--	--	--	--	--
dissolved metals filtration location	EP421		-	Field		--	--	--	--	--	--
Speciated Metals											
chromium, hexavalent [Cr VI], dissolved	E532A	0.50	µg/L	<0.50		--	--	--	--	--	--
Volatile Organic Compounds											
Acetone	E611D	20	µg/L	<20		100000 µg/L	100000 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-017 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-017 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F2-naphthalene	EC600SG	100	µg/L	<100	--	--	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F3-PAH	EC600SG	250	µg/L	<250	--	--	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	87.4	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	81.8	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	91.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.6	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons										
acenaphthene	E641A	0.010	µg/L	<0.010	17 µg/L	17 µg/L	--	--	--	--
acenaphthylene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
anthracene	E641A	0.010	µg/L	<0.010	1 µg/L	1 µg/L	--	--	--	--
benz(a)anthracene	E641A	0.010	µg/L	<0.010	1.8 µg/L	1.8 µg/L	--	--	--	--
benzo(a)pyrene	E641A	0.0050	µg/L	<0.0050	0.81 µg/L	0.81 µg/L	--	--	--	--
benzo(b+j)fluoranthene	E641A	0.010	µg/L	<0.010	0.75 µg/L	0.75 µg/L	--	--	--	--
benzo(g,h,i)perylene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
benzo(k)fluoranthene	E641A	0.010	µg/L	<0.010	0.4 µg/L	0.4 µg/L	--	--	--	--
chrysene	E641A	0.010	µg/L	<0.010	0.7 µg/L	0.7 µg/L	--	--	--	--
dibenz(a,h)anthracene	E641A	0.0050	µg/L	<0.0050	0.4 µg/L	0.4 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-017 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polycyclic Aromatic Hydrocarbons - Continued										
fluoranthene	E641A	0.010	µg/L	<0.010	44 µg/L	44 µg/L	--	--	--	--
fluorene	E641A	0.010	µg/L	<0.010	290 µg/L	290 µg/L	--	--	--	--
indeno(1,2,3-c,d)pyrene	E641A	0.010	µg/L	<0.010	0.2 µg/L	0.2 µg/L	--	--	--	--
methylnaphthalene, 1+2-	E641A	0.015	µg/L	<0.015	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 1-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
methylnaphthalene, 2-	E641A	0.010	µg/L	<0.010	1500 µg/L	1500 µg/L	--	--	--	--
naphthalene	E641A	0.050	µg/L	<0.050	7 µg/L	7 µg/L	--	--	--	--
phenanthrene	E641A	0.020	µg/L	<0.020	380 µg/L	380 µg/L	--	--	--	--
pyrene	E641A	0.010	µg/L	<0.010	5.7 µg/L	5.7 µg/L	--	--	--	--
chrysene-d12	E641A	0.1	%	115	--	--	--	--	--	--
naphthalene-d8	E641A	0.1	%	97.1	--	--	--	--	--	--
phenanthrene-d10	E641A	0.1	%	121	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-30-6DEC22 Sampling date/time: 06-Dec-2022 10:55 WT2224485-018	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-018 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-31-6DEC22 Sampling date/time: 06-Dec-2022 14:00 WT2224485-019		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds											
Acetone	E611D	20	µg/L	<20	OWP	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	OWP	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	OWP	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	OWP	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	OWP	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	OWP	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	OWP	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	OWP	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	OWP	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	OWP	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	OWP	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	OWP	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	OWP	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	OWP	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	OWP	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	OWP	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	OWP	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	OWP	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	OWP	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	OWP	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	OWP	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	OWP	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	OWP	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	OWP	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	OWP	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-019 (Continued)		ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued											
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	OWP	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	OWP	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	OWP	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	1.37	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	OWP	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	OWP	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	OWP	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	OWP	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	OWP	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	OWP	--	--	--	--	--	--
Volatile Organic Compounds Surrogates											
bromofluorobenzene, 4-	E611D	1.0	%	93.0		--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100		--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-31-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	1.37 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	1.37 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-35-6DEC22 Sampling date/time: 06-Dec-2022 13:35 WT2224485-020	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-020 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: BH4-10-6DEC22 Sampling date/time: 06-Dec-2022 07:55 WT2224485-021	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-021 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.1	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: DUP4-6DEC22 Sampling date/time: 06-Dec-2022 00:00 WT2224485-022	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-022 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	87.5	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	98.7	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	92.1	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1221	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1232	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1242	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1248	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1254	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1260	E687	0.020	µg/L	<0.020	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-022 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polychlorinated Biphenyls - Continued										
Aroclor 1262	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1268	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.060	µg/L	<0.060	0.2 µg/L	0.2 µg/L	--	--	--	--
decachlorobiphenyl	E687	0.1	%	101	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	84.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: DUP5-6DEC22 Sampling date/time: 06-Dec-2022 00:00 WT2224485-023	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-023 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.67	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
DUP5-6DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.67 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.67 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-38-6DEC22 Sampling date/time: 06-Dec-2022 09:05 WT2224485-024	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-024 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	86.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	96.3	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	91.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--
Polychlorinated Biphenyls										
Aroclor 1016	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1221	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1232	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1242	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1248	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1254	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1260	E687	0.020	µg/L	<0.020	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-024 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Polychlorinated Biphenyls - Continued										
Aroclor 1262	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
Aroclor 1268	E687	0.020	µg/L	<0.020	--	--	--	--	--	--
polychlorinated biphenyls [PCBs], total	E687	0.060	µg/L	<0.060	0.2 µg/L	0.2 µg/L	--	--	--	--
decachlorobiphenyl	E687	0.1	%	107	--	--	--	--	--	--
tetrachloro-m-xylene	E687	0.1	%	89.1	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: TB3-6DEC22 Sampling date/time: 06-Dec-2022 00:00 WT2224485-025	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.5 RRR	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-025 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	103	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	95.2	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: FB3-6DEC22 Sampling date/time: 06-Dec-2022 00:00 WT2224485-026	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224485-026 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2224485**	Page	: 1 of 12
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 07-Dec-2022 07:45
PO	: ----	Issue Date	: 16-Dec-2022 14:38
C-O-C number	: 20-1009821		
Sampler	: DE		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 26		
No. of samples analysed	: 26		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) MW21-14A-6DEC22	E509	06-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	28 days	2 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) MW22-28-6DEC22	E509	06-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	28 days	2 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid) MW22-29-6DEC22	E509	06-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	28 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) MW21-14A-6DEC22	E421	06-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	180 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) MW22-28-6DEC22	E421	06-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	180 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid) MW22-29-6DEC22	E421	06-Dec-2022	08-Dec-2022	----	----		08-Dec-2022	180 days	2 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW21-06A-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW21-14A-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW22-28-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW22-29-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW22-38-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) DUP4-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) TB3-6DEC22	E581.F1-L	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) MW21-06A-6DEC22	E601.SG	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	14-Dec-2022	40 days	6 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) MW21-14A-6DEC22	E601.SG	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	14-Dec-2022	40 days	6 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) MW22-28-6DEC22	E601.SG	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	14-Dec-2022	40 days	6 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW22-29-6DEC22	E601.SG	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	14-Dec-2022	40 days	6 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW22-38-6DEC22	E601.SG	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	14-Dec-2022	40 days	6 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
DUP4-6DEC22	E601.SG	06-Dec-2022	08-Dec-2022	14 days	3 days	✓	14-Dec-2022	40 days	6 days	✓
Physical Tests : pH by Meter										
HDPE [ON MECP]										
MW21-14A-6DEC22	E108	06-Dec-2022	12-Dec-2022	----	----		13-Dec-2022	14 days	7 days	✓
Physical Tests : pH by Meter										
HDPE [ON MECP]										
MW22-28-6DEC22	E108	06-Dec-2022	12-Dec-2022	----	----		13-Dec-2022	14 days	7 days	✓
Physical Tests : pH by Meter										
HDPE [ON MECP]										
MW22-29-6DEC22	E108	06-Dec-2022	12-Dec-2022	----	----		13-Dec-2022	14 days	7 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Amber glass/Teflon lined cap										
DUP4-6DEC22	E687	06-Dec-2022	09-Dec-2022	14 days	3 days	✓	12-Dec-2022	40 days	3 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Amber glass/Teflon lined cap										
MW21-06A-6DEC22	E687	06-Dec-2022	09-Dec-2022	14 days	3 days	✓	12-Dec-2022	40 days	3 days	✓
Polychlorinated Biphenyls : PCB Aroclors by GC-MS										
Amber glass/Teflon lined cap										
MW22-38-6DEC22	E687	06-Dec-2022	09-Dec-2022	14 days	3 days	✓	12-Dec-2022	40 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW21-14A-6DEC22	E641A	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	12-Dec-2022	40 days	4 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW22-28-6DEC22	E641A	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	12-Dec-2022	40 days	4 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW22-29-6DEC22	E641A	06-Dec-2022	08-Dec-2022	14 days	2 days	✓	12-Dec-2022	40 days	4 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
MW21-14A-6DEC22	E532A	06-Dec-2022	----	----	----		09-Dec-2022	28 days	3 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
MW22-28-6DEC22	E532A	06-Dec-2022	----	----	----		09-Dec-2022	28 days	3 days	✓
Speciated Metals : Dissolved Hexavalent Chromium (Cr VI) by IC										
HDPE - dissolved (NaOH+Buf) [ON MECP]										
MW22-29-6DEC22	E532A	06-Dec-2022	----	----	----		09-Dec-2022	28 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
BH4-10-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
MW21-01A-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
MW21-01B-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-02A-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-02B-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-06A-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-07-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-14A-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-15A-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-16A-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-01C-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-06B-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-14B-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-15B-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-16B-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-28-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-29-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-30-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-31-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-35-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-38-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP4-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP5-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) FB3-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-34-5DEC22	E611D	05-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) TB3-6DEC22	E611D	06-Dec-2022	09-Dec-2022	----	----		09-Dec-2022	14 days	4 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	773922	2	12	16.6	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	773334	1	12	8.3	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	772458	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	772573	1	19	5.2	5.0	✓
pH by Meter	E108	775260	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	773921	2	36	5.5	5.0	✓
Laboratory Control Samples (LCS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	773922	2	12	16.6	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	773334	1	12	8.3	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	772458	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	772573	1	19	5.2	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	772516	1	12	8.3	5.0	✓
PCB Aroclors by GC-MS	E687	772970	1	9	11.1	4.7	✓
pH by Meter	E108	775260	1	20	5.0	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	772515	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	773921	2	36	5.5	5.0	✓
Method Blanks (MB)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	773922	2	12	16.6	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	773334	1	12	8.3	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	772458	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	772573	1	19	5.2	5.0	✓
PAHs by Hexane LVI GC-MS	E641A	772516	1	12	8.3	5.0	✓
PCB Aroclors by GC-MS	E687	772970	1	9	11.1	4.7	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	772515	1	20	5.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	773921	2	36	5.5	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	773922	2	12	16.6	5.0	✓
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A	773334	1	12	8.3	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	772458	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	772573	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	773921	2	36	5.5	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter	E108 Waterloo - Environmental	Water	APHA 4500-H (mod)	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C). For high accuracy test results, pH should be measured in the field within the recommended 15 minute hold time.
Dissolved Metals in Water by CRC ICPMS	E421 Waterloo - Environmental	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Mercury in Water by CVAAS	E509 Waterloo - Environmental	Water	APHA 3030B/EPA 1631E (mod)	Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.
Dissolved Hexavalent Chromium (Cr VI) by IC	E532A Waterloo - Environmental	Water	APHA 3500-Cr C (Ion Chromatography)	Hexavalent Chromium is measured by Ion chromatography-Post column reaction and UV detection. sample pretreatment involved field or lab filtration following by sample preservation.
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by Hexane LVI GC-MS	E641A Waterloo - Environmental	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
PCB Aroclors by GC-MS	E687 Waterloo - Environmental	Water	EPA 8270E (mod)	PCB Aroclors are analyzed by GC-MS

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
F1-BTEX	EC580 Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
SUM F1 to F4 where F2-F4 is SG treated	EC581SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fraction F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50), where F2-F4 have been treated with silica gel. F4G-sg is not used within this calculation due to overlap with other fractions.
F2-F4 (sg) minus PAH	EC600SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F2-F4 (sg) minus PAH is calculated as follows: F2-F4 minus PAH = Sum of CCME Fraction 2 (C10-C16), CCME Fraction 3 (C16-C34), and CCME Fraction 4 (C34-C50), minus select Polycyclic Aromatic Hydrocarbons (PAH).

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 Waterloo - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
Dissolved Mercury Water Filtration	EP509 Waterloo - Environmental	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HCl.
VOCs Preparation for Headspace Analysis	EP581 Waterloo - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Waterloo - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.
Pesticides, PCB, and Neutral Extractable Chlorinated Hydrocarbons Extraction	EP660 Waterloo - Environmental	Water	EPA 3511 (mod)	Samples are extracted from aqueous sample using an organic solvent liquid-liquid extraction.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2224485**	Page	: 1 of 20
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 07-Dec-2022 07:45
PO	: ----	Date Analysis Commenced	: 08-Dec-2022
C-O-C number	: 20-1009821	Issue Date	: 16-Dec-2022 14:39
Sampler	: DE 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 26		
No. of samples analysed	: 26		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 775260)											
WT2224463-001	Anonymous	pH	----	E108	0.10	pH units	7.58	7.63	0.657%	4%	----
Dissolved Metals (QC Lot: 772458)											
TY2204786-001	Anonymous	mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 772573)											
WT2224479-001	Anonymous	antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.00010	0.00010	0.0000001	Diff <2x LOR	----
		arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00017	0.00018	0.000009	Diff <2x LOR	----
		barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.0242	0.0236	2.58%	20%	----
		beryllium, dissolved	7440-41-7	E421	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		boron, dissolved	7440-42-8	E421	0.010	mg/L	0.016	0.016	0.0002	Diff <2x LOR	----
		cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	0.0000084	0.0000062	0.0000022	Diff <2x LOR	----
		chromium, dissolved	7440-47-3	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		cobalt, dissolved	7440-48-4	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00229	0.00228	0.236%	20%	----
		lead, dissolved	7439-92-1	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.00314	0.00310	1.15%	20%	----
		nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.00119	0.00118	0.000007	Diff <2x LOR	----
		selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000308	0.000354	0.000046	Diff <2x LOR	----
		silver, dissolved	7440-22-4	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		sodium, dissolved	7440-23-5	E421	0.050	mg/L	18.3	18.8	2.71%	20%	----
		thallium, dissolved	7440-28-0	E421	0.000010	mg/L	0.000042	0.000043	0.0000009	Diff <2x LOR	----
		uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.00518	0.00524	1.12%	20%	----
		vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0336	0.0331	1.44%	20%	----
Speciated Metals (QC Lot: 773334)											
WT2224483-001	Anonymous	chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.00050	mg/L	<0.50 µg/L	<0.00050	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 773233)											
WT2224485-007	MW21-06A-6DEC22	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 773233) - continued											
WT2224485-007	MW21-06A-6DEC22	bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 773233) - continued											
WT2224485-007	MW21-06A-6DEC22	xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 773921)											
WT2224485-016	MW22-28-6DEC22	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 773921) - continued											
WT2224485-016	MW22-28-6DEC22	tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	0.84	0.81	0.03	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 773234)											
WT2224485-007	MW21-06A-6DEC22	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 773922)											
WT2224485-016	MW22-28-6DEC22	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 772458)						
mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 772573)						
antimony, dissolved	7440-36-0	E421	0.0001	mg/L	<0.00010	----
arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	<0.00010	----
barium, dissolved	7440-39-3	E421	0.0001	mg/L	<0.00010	----
beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	<0.000020	----
boron, dissolved	7440-42-8	E421	0.01	mg/L	<0.010	----
cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	<0.0000050	----
chromium, dissolved	7440-47-3	E421	0.0005	mg/L	<0.00050	----
cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	<0.00010	----
copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
lead, dissolved	7439-92-1	E421	0.00005	mg/L	<0.000050	----
molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	<0.000050	----
nickel, dissolved	7440-02-0	E421	0.0005	mg/L	<0.00050	----
selenium, dissolved	7782-49-2	E421	0.00005	mg/L	<0.000050	----
silver, dissolved	7440-22-4	E421	0.00001	mg/L	<0.000010	----
sodium, dissolved	7440-23-5	E421	0.05	mg/L	<0.050	----
thallium, dissolved	7440-28-0	E421	0.00001	mg/L	<0.000010	----
uranium, dissolved	7440-61-1	E421	0.00001	mg/L	<0.000010	----
vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	<0.00050	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Speciated Metals (QCLot: 773334)						
chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0005	mg/L	<0.00050	----
Volatile Organic Compounds (QCLot: 773233)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 773233) - continued						
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 773921)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 773921) - continued						
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 773921) - continued						
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 772515)						
F2 (C10-C16)	----	E601.SG	100	µg/L	<100	----
F3 (C16-C34)	----	E601.SG	250	µg/L	<250	----
F4 (C34-C50)	----	E601.SG	250	µg/L	<250	----
Hydrocarbons (QCLot: 773234)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Hydrocarbons (QCLot: 773922)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Polycyclic Aromatic Hydrocarbons (QCLot: 772516)						
acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	<0.010	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
Polychlorinated Biphenyls (QCLot: 772970)						
Aroclor 1016	12674-11-2	E687	0.02	µg/L	<0.020	----
Aroclor 1221	11104-28-2	E687	0.02	µg/L	<0.020	----
Aroclor 1232	11141-16-5	E687	0.02	µg/L	<0.020	----
Aroclor 1242	53469-21-9	E687	0.02	µg/L	<0.020	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polychlorinated Biphenyls (QCLot: 772970) - continued						
Aroclor 1248	12672-29-6	E687	0.02	µg/L	<0.020	----
Aroclor 1254	11097-69-1	E687	0.02	µg/L	<0.020	----
Aroclor 1260	11096-82-5	E687	0.02	µg/L	<0.020	----
Aroclor 1262	37324-23-5	E687	0.02	µg/L	<0.020	----
Aroclor 1268	11100-14-4	E687	0.02	µg/L	<0.020	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 775260)									
pH	----	E108	----	pH units	7 pH units	101	98.0	102	----
mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0.0001 mg/L	92.2	80.0	120	----
Dissolved Metals (QCLot: 772573)									
antimony, dissolved	7440-36-0	E421	0.0001	mg/L	0.05 mg/L	102	80.0	120	----
arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	0.05 mg/L	105	80.0	120	----
barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.0125 mg/L	104	80.0	120	----
beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.005 mg/L	102	80.0	120	----
boron, dissolved	7440-42-8	E421	0.01	mg/L	0.05 mg/L	97.0	80.0	120	----
cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.005 mg/L	102	80.0	120	----
chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.0125 mg/L	99.3	80.0	120	----
cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.0125 mg/L	99.8	80.0	120	----
copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.0125 mg/L	98.1	80.0	120	----
lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.025 mg/L	101	80.0	120	----
molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.0125 mg/L	97.2	80.0	120	----
nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.025 mg/L	99.3	80.0	120	----
selenium, dissolved	7782-49-2	E421	0.00005	mg/L	0.05 mg/L	98.9	80.0	120	----
silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.005 mg/L	89.1	80.0	120	----
sodium, dissolved	7440-23-5	E421	0.05	mg/L	2.5 mg/L	101	80.0	120	----
thallium, dissolved	7440-28-0	E421	0.00001	mg/L	0.05 mg/L	101	80.0	120	----
uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.00025 mg/L	108	80.0	120	----
vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.025 mg/L	101	80.0	120	----
zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.025 mg/L	98.4	80.0	120	----
Speciated Metals (QCLot: 773334)									
chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0005	mg/L	0.025 mg/L	96.8	80.0	120	----
Volatile Organic Compounds (QCLot: 773233)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	97.6	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	98.0	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	97.7	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	96.7	60.0	140	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 773233) - continued									
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	108	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	95.0	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	99.5	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	97.4	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	99.5	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	99.4	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	77.8	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	88.1	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	93.7	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	86.9	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	98.7	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	90.9	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	99.5	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	91.1	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	95.4	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	88.1	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	92.7	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	89.0	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	103	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	94.2	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	94.5	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	96.2	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	97.0	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	94.9	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	98.0	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	96.5	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	99.8	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	75.2	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	93.6	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	93.1	70.0	130	----
Volatile Organic Compounds (QCLot: 773921)									

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 773921) - continued									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	116	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	92.2	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	106	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	97.8	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	94.3	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	97.6	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	96.9	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	99.4	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	99.9	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	92.7	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	99.4	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	96.3	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	99.8	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	102	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	114	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	112	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	98.1	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	96.8	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	102	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	106	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	99.0	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	93.7	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	99.2	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	95.0	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	98.3	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	99.6	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	99.0	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	95.1	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 773921) - continued									
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	97.4	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	90.5	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	101	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	97.5	70.0	130	----
Hydrocarbons (QCLot: 772515)									
F2 (C10-C16)	----	E601.SG	100	µg/L	5034.53 µg/L	76.2	70.0	130	----
F3 (C16-C34)	----	E601.SG	250	µg/L	7141.89 µg/L	72.3	70.0	130	----
F4 (C34-C50)	----	E601.SG	250	µg/L	4466.46 µg/L	70.5	70.0	130	----
Hydrocarbons (QCLot: 773234)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	103	80.0	120	----
Hydrocarbons (QCLot: 773922)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	97.6	80.0	120	----
Polycyclic Aromatic Hydrocarbons (QCLot: 772516)									
acenaphthene	83-32-9	E641A	0.01	µg/L	0.5263 µg/L	108	50.0	140	----
acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5263 µg/L	107	50.0	140	----
anthracene	120-12-7	E641A	0.01	µg/L	0.5263 µg/L	101	50.0	140	----
benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5263 µg/L	128	50.0	140	----
benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5263 µg/L	102	50.0	140	----
benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	0.5263 µg/L	98.3	50.0	140	----
benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5263 µg/L	128	50.0	140	----
benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5263 µg/L	110	50.0	140	----
chrysene	218-01-9	E641A	0.01	µg/L	0.5263 µg/L	133	50.0	140	----
dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5263 µg/L	105	50.0	140	----
fluoranthene	206-44-0	E641A	0.01	µg/L	0.5263 µg/L	135	50.0	140	----
fluorene	86-73-7	E641A	0.01	µg/L	0.5263 µg/L	121	50.0	140	----
indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5263 µg/L	134	50.0	140	----
methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5263 µg/L	99.0	50.0	140	----
methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5263 µg/L	104	50.0	140	----
naphthalene	91-20-3	E641A	0.05	µg/L	0.5263 µg/L	98.2	50.0	140	----
phenanthrene	85-01-8	E641A	0.02	µg/L	0.5263 µg/L	125	50.0	140	----
pyrene	129-00-0	E641A	0.01	µg/L	0.5263 µg/L	133	50.0	140	----
Polychlorinated Biphenyls (QCLot: 772970)									
Aroclor 1016	12674-11-2	E687	0.02	µg/L	0.2 µg/L	114	60.0	140	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Polychlorinated Biphenyls (QCLot: 772970) - continued									
Aroclor 1221	11104-28-2	E687	0.02	µg/L	0.2 µg/L	114	60.0	140	----
Aroclor 1232	11141-16-5	E687	0.02	µg/L	0.2 µg/L	114	60.0	140	----
Aroclor 1242	53469-21-9	E687	0.02	µg/L	0.2 µg/L	114	60.0	140	----
Aroclor 1248	12672-29-6	E687	0.02	µg/L	0.2 µg/L	86.7	60.0	140	----
Aroclor 1254	11097-69-1	E687	0.02	µg/L	0.2 µg/L	103	60.0	140	----
Aroclor 1260	11096-82-5	E687	0.02	µg/L	0.2 µg/L	115	60.0	140	----
Aroclor 1262	37324-23-5	E687	0.02	µg/L	0.2 µg/L	115	60.0	140	----
Aroclor 1268	11100-14-4	E687	0.02	µg/L	0.2 µg/L	115	60.0	140	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 772458)										
TY2204786-002	Anonymous	mercury, dissolved	7439-97-6	E509	0.0000901 mg/L	0.0001 mg/L	90.1	70.0	130	----
Dissolved Metals (QCLot: 772573)										
WT2224479-002	Anonymous	antimony, dissolved	7440-36-0	E421	0.0514 mg/L	0.05 mg/L	103	70.0	130	----
		arsenic, dissolved	7440-38-2	E421	0.0548 mg/L	0.05 mg/L	110	70.0	130	----
		barium, dissolved	7440-39-3	E421	ND mg/L	0.0125 mg/L	ND	70.0	130	----
		beryllium, dissolved	7440-41-7	E421	0.00518 mg/L	0.005 mg/L	104	70.0	130	----
		boron, dissolved	7440-42-8	E421	0.046 mg/L	0.05 mg/L	92.3	70.0	130	----
		cadmium, dissolved	7440-43-9	E421	0.00511 mg/L	0.005 mg/L	102	70.0	130	----
		chromium, dissolved	7440-47-3	E421	0.0124 mg/L	0.0125 mg/L	99.5	70.0	130	----
		cobalt, dissolved	7440-48-4	E421	0.0122 mg/L	0.0125 mg/L	97.9	70.0	130	----
		copper, dissolved	7440-50-8	E421	0.0115 mg/L	0.0125 mg/L	92.1	70.0	130	----
		lead, dissolved	7439-92-1	E421	0.0243 mg/L	0.025 mg/L	97.2	70.0	130	----
		molybdenum, dissolved	7439-98-7	E421	0.0122 mg/L	0.0125 mg/L	97.4	70.0	130	----
		nickel, dissolved	7440-02-0	E421	0.0244 mg/L	0.025 mg/L	97.8	70.0	130	----
		selenium, dissolved	7782-49-2	E421	0.0556 mg/L	0.05 mg/L	111	70.0	130	----
		silver, dissolved	7440-22-4	E421	0.00442 mg/L	0.005 mg/L	88.3	70.0	130	----
		sodium, dissolved	7440-23-5	E421	ND mg/L	2.5 mg/L	ND	70.0	130	----
		thallium, dissolved	7440-28-0	E421	0.0507 mg/L	0.05 mg/L	101	70.0	130	----
		uranium, dissolved	7440-61-1	E421	0.000252 mg/L	0.00025 mg/L	101	70.0	130	----
		vanadium, dissolved	7440-62-2	E421	0.0251 mg/L	0.025 mg/L	100	70.0	130	----
		zinc, dissolved	7440-66-6	E421	ND mg/L	0.025 mg/L	ND	70.0	130	----
Speciated Metals (QCLot: 773334)										
WT2224483-001	Anonymous	chromium, hexavalent [Cr VI], dissolved	18540-29-9	E532A	0.0384 mg/L	0.04 mg/L	95.9	70.0	130	----
Volatile Organic Compounds (QCLot: 773233)										
WT2224485-007	MW21-06A-6DEC22	Acetone	67-64-1	E611D	96 µg/L	100 µg/L	96.3	60.0	140	----
		benzene	71-43-2	E611D	97.8 µg/L	100 µg/L	97.8	60.0	140	----
		bromodichloromethane	75-27-4	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		bromoform	75-25-2	E611D	98.2 µg/L	100 µg/L	98.2	60.0	140	----
		bromomethane	74-83-9	E611D	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	107 µg/L	100 µg/L	107	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 773233) - continued										
WT2224485-007	MW21-06A-6DEC22	chlorobenzene	108-90-7	E611D	94.4 µg/L	100 µg/L	94.4	60.0	140	----
		chloroform	67-66-3	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dibromochloromethane	124-48-1	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	99.0 µg/L	100 µg/L	99.0	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	99.0 µg/L	100 µg/L	99.0	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	99.0 µg/L	100 µg/L	99.0	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	71.3 µg/L	100 µg/L	71.3	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	88.3 µg/L	100 µg/L	88.3	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	95.0 µg/L	100 µg/L	95.0	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	84.8 µg/L	100 µg/L	84.8	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	98.4 µg/L	100 µg/L	98.4	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	88.3 µg/L	100 µg/L	88.3	60.0	140	----
		dichloromethane	75-09-2	E611D	99.2 µg/L	100 µg/L	99.2	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	91.6 µg/L	100 µg/L	91.6	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	93.1 µg/L	100 µg/L	93.1	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	85.0 µg/L	100 µg/L	85.0	60.0	140	----
		ethylbenzene	100-41-4	E611D	91.8 µg/L	100 µg/L	91.8	60.0	140	----
		hexane, n-	110-54-3	E611D	85.7 µg/L	100 µg/L	85.7	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	96 µg/L	100 µg/L	96.3	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		styrene	100-42-5	E611D	94.8 µg/L	100 µg/L	94.8	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	98.5 µg/L	100 µg/L	98.5	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		toluene	108-88-3	E611D	94.2 µg/L	100 µg/L	94.2	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	97.2 µg/L	100 µg/L	97.2	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	----
		trichloroethylene	79-01-6	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	96.9 µg/L	100 µg/L	96.9	60.0	140	----
		vinyl chloride	75-01-4	E611D	71.6 µg/L	100 µg/L	71.6	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	185 µg/L	200 µg/L	92.4	60.0	140	----
		xylene, o-	95-47-6	E611D	92.3 µg/L	100 µg/L	92.3	60.0	140	----
Volatile Organic Compounds (QCLot: 773921)										

Sub-Matrix: **Water**

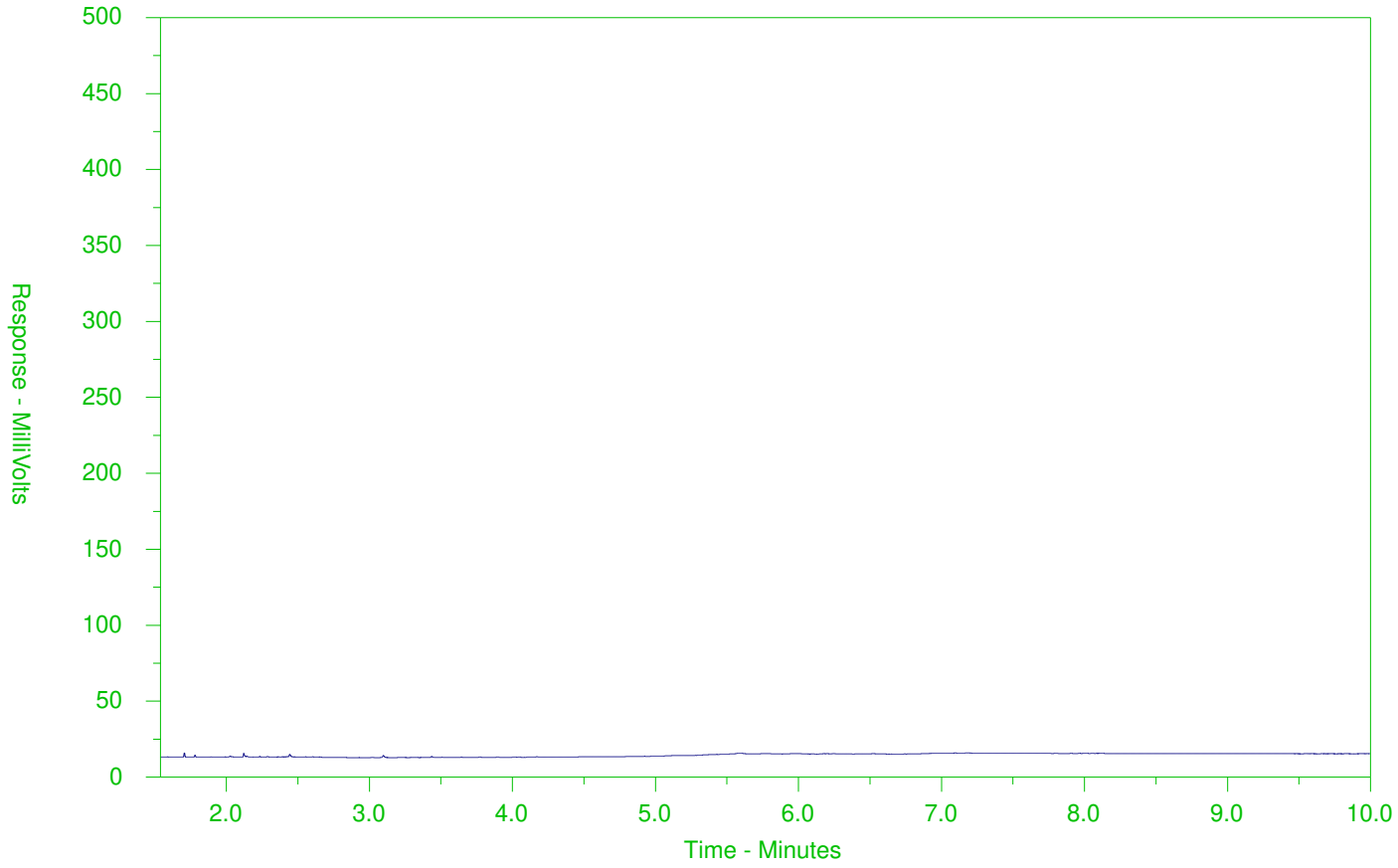
					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 773921) - continued										
WT2224485-016	MW22-28-6DEC22	Acetone	67-64-1	E611D	124 µg/L	100 µg/L	124	60.0	140	----
		benzene	71-43-2	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		bromodichloromethane	75-27-4	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		bromoform	75-25-2	E611D	93.2 µg/L	100 µg/L	93.2	60.0	140	----
		bromomethane	74-83-9	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	95.1 µg/L	100 µg/L	95.1	60.0	140	----
		chlorobenzene	108-90-7	E611D	94.6 µg/L	100 µg/L	94.6	60.0	140	----
		chloroform	67-66-3	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		dibromochloromethane	124-48-1	E611D	98.2 µg/L	100 µg/L	98.2	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	99.4 µg/L	100 µg/L	99.4	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	99.0 µg/L	100 µg/L	99.0	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	99.9 µg/L	100 µg/L	99.9	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	82.7 µg/L	100 µg/L	82.7	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	99.1 µg/L	100 µg/L	99.1	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	94.3 µg/L	100 µg/L	94.3	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	97.3 µg/L	100 µg/L	97.3	60.0	140	----
		dichloromethane	75-09-2	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		ethylbenzene	100-41-4	E611D	96.8 µg/L	100 µg/L	96.8	60.0	140	----
		hexane, n-	110-54-3	E611D	91.6 µg/L	100 µg/L	91.6	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		styrene	100-42-5	E611D	98.5 µg/L	100 µg/L	98.5	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	92.3 µg/L	100 µg/L	92.3	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	90.4 µg/L	100 µg/L	90.4	60.0	140	----
		toluene	108-88-3	E611D	97.7 µg/L	100 µg/L	97.7	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	98.4 µg/L	100 µg/L	98.4	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	102 µg/L	100 µg/L	102	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 773921) - continued										
WT2224485-016	MW22-28-6DEC22	trichloroethylene	79-01-6	E611D	92.0 µg/L	100 µg/L	92.0	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	93.7 µg/L	100 µg/L	93.7	60.0	140	----
		vinyl chloride	75-01-4	E611D	86.3 µg/L	100 µg/L	86.3	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	201 µg/L	200 µg/L	100	60.0	140	----
		xylene, o-	95-47-6	E611D	97.2 µg/L	100 µg/L	97.2	60.0	140	----
Hydrocarbons (QCLot: 773234)										
WT2224485-007	MW21-06A-6DEC22	F1 (C6-C10)	----	E581.F1-L	1870 µg/L	2000 µg/L	93.5	60.0	140	----
Hydrocarbons (QCLot: 773922)										
WT2224485-016	MW22-28-6DEC22	F1 (C6-C10)	----	E581.F1-L	1730 µg/L	2000 µg/L	86.7	60.0	140	----

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224485-007-E601.SG
Client Sample ID: MW21-06A-6DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

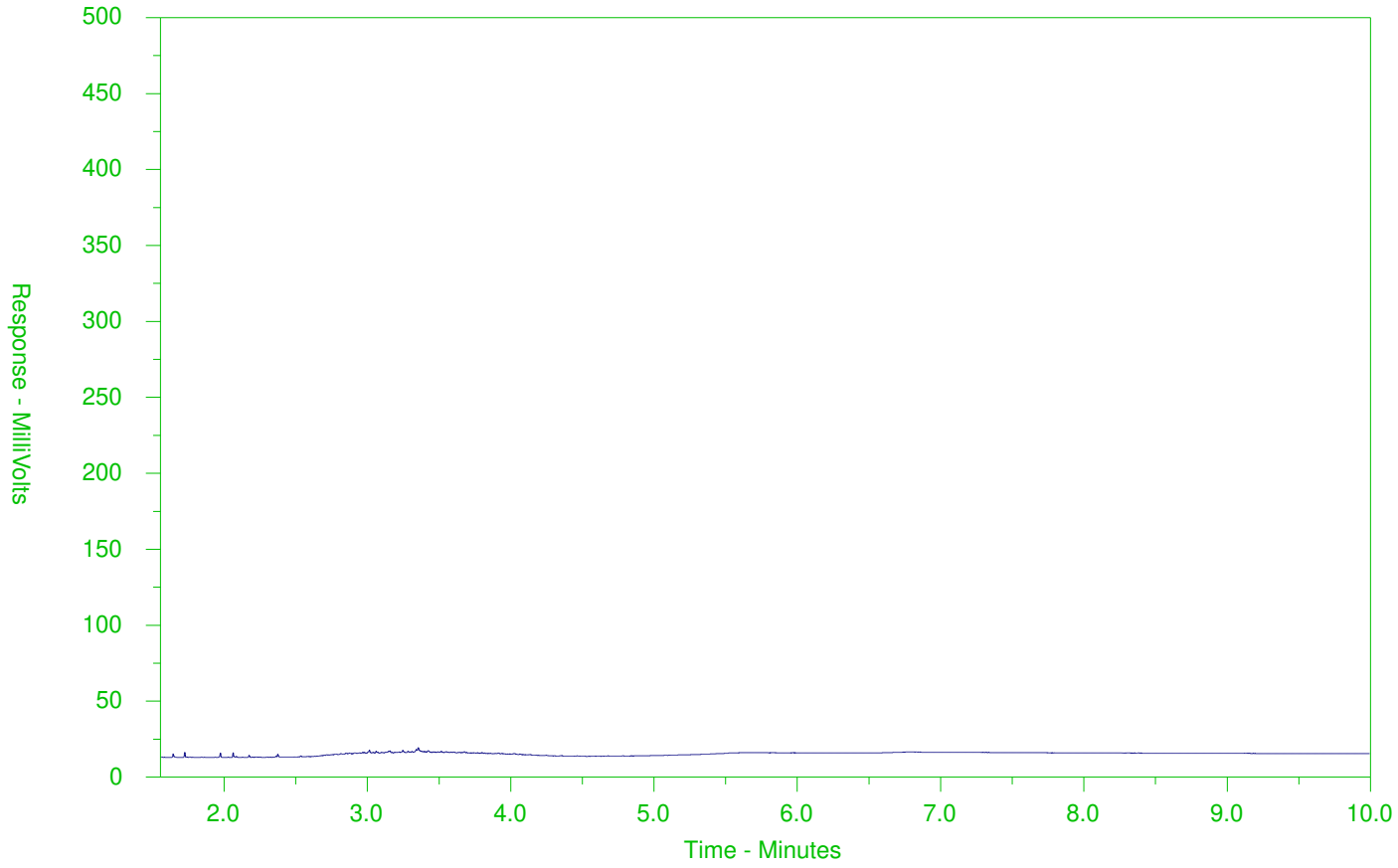
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224485-010-E601.SG
Client Sample ID: MW21-14A-6DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

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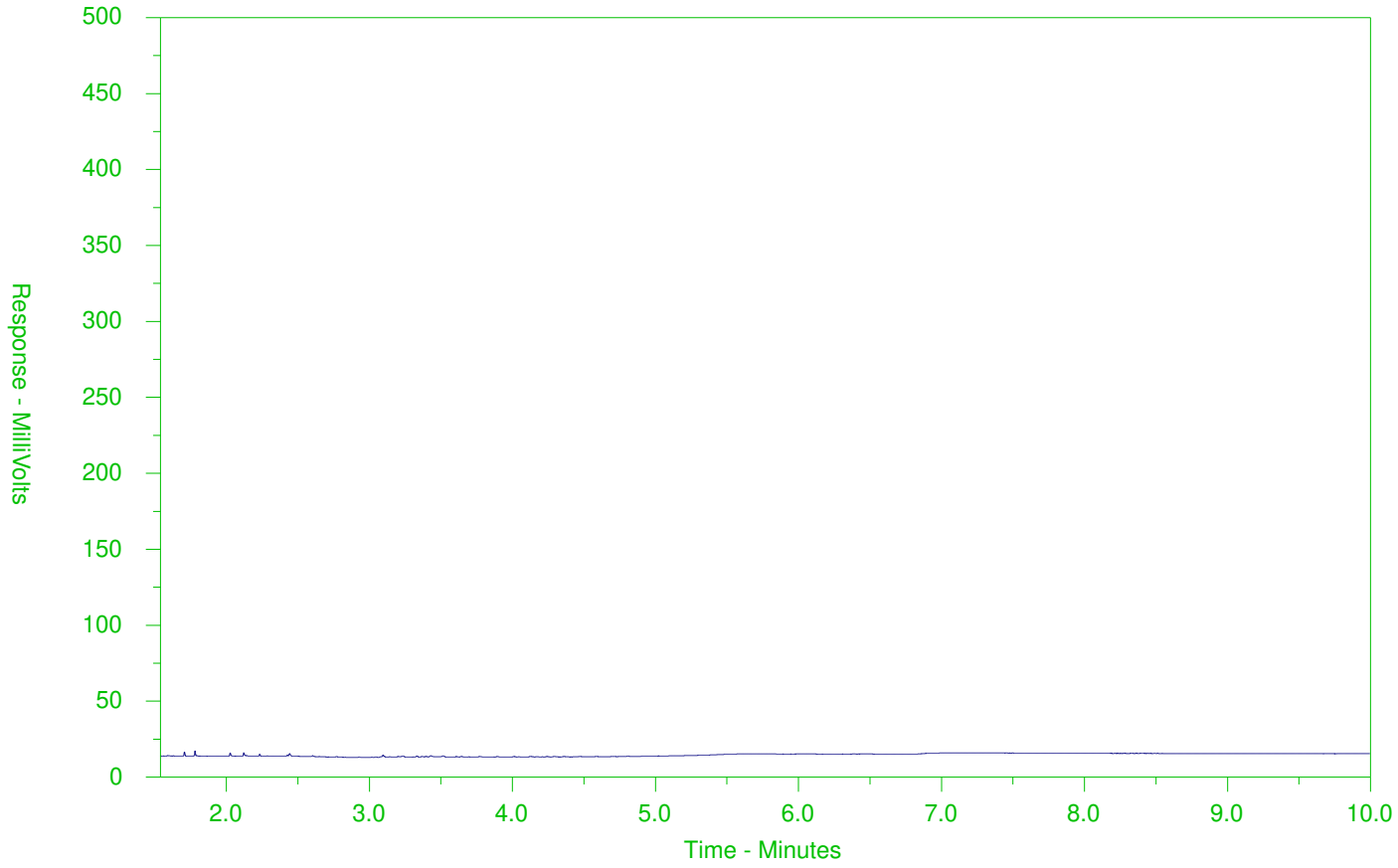
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224485-016-E601.SG
Client Sample ID: MW22-28-6DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Diesel/Jet Fuels →	← Motor Oils/Lube Oils/Grease →	

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

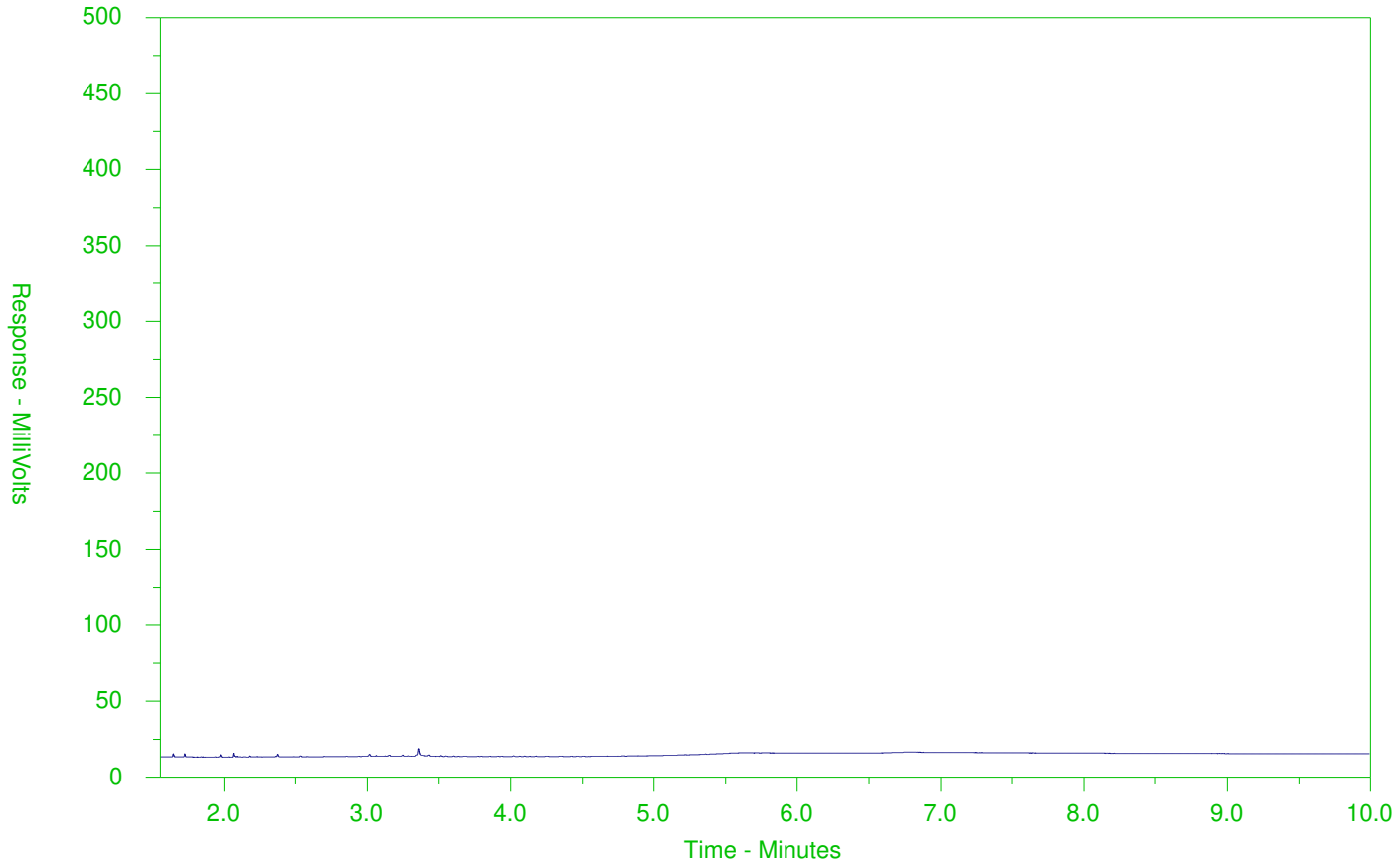
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224485-017-E601.SG
Client Sample ID: MW22-29-6DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

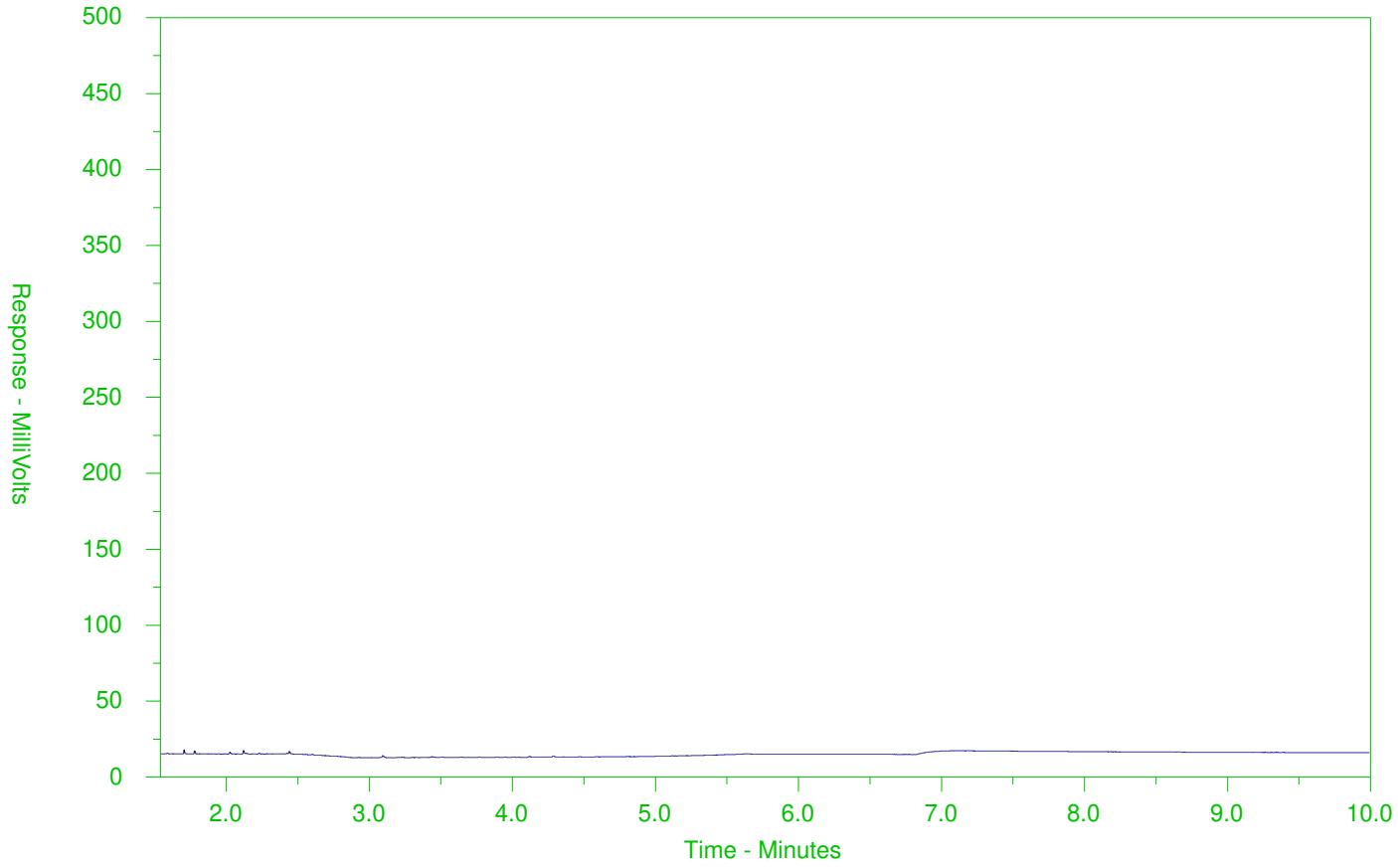
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224485-022-E601.SG
Client Sample ID: DUP4-6DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

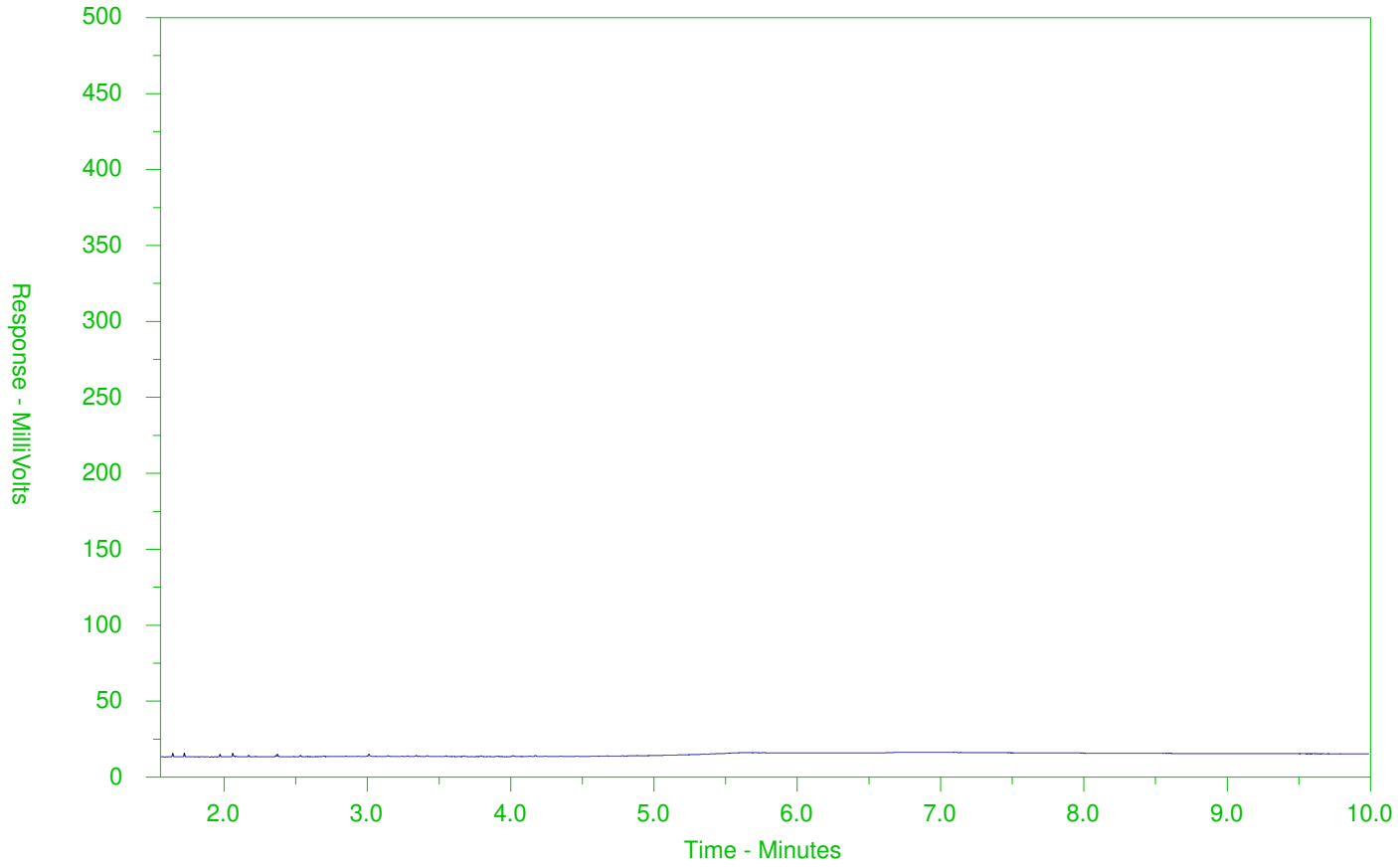
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224485-024-E601.SG
Client Sample ID: MW22-38-6DEC22



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

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Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20

Page

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Environmental Division Waterloo
Work Order Reference
WT2224485

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
Company address below will appear on the final report	
Street:	200-1755 Woodward Dr.
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A
☒ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax Dan@omnimccann.com
Email 2 Kristina@omnimccann.com
Email 3 Antonia@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax Invoicing@omnimccann.com
Email 2

Turnaround Time (TAT) Requested

☒ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Addit may apply to rush requests on weekends, statutory holidays and non-ro

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information

ALS Account # / Quote #: Q90026
Job #: 0006-0103
PO / AFE:
LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#
Major/Minor Code: Routing Code:
Requisitioner:
Location:

ALS Lab Work Order # (ALS use only): [illegible]
ALS Contact: Eric Dobbins
Sampler: D. Elliot

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	PHC F1-F4 (P)	VOC (P)	PAH (P)	Metals (F/P)	Hg (F)	CrVI (F/P)	pH (F/P)	PCB	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MW22-34-5DEC22	5-DEC-22		GW	2		X									
	MW21-01A-6DEC22	06-DEC-22	15:45		2		X									
	MW21-01B-6DEC22		16:15		2		X									
	MW21-01C-6DEC22		16:45		2		X									
	MW21-02A-6DEC22		14:05		2		X									
	MW21-02B-6DEC22		15:00		2		X									
	MW21-06A-6DEC22		12:15		6	X	X						X			
	MW22-06B-6DEC22		12:45		2		X									
	MW21-07-6DEC22		10:05		2		X									
	MW21-14A-6DEC22		13:00		8	X	X	X	X	X	X	X				
	MW22-14B-6DEC22		12:15		2		X									
	MW21-15A-6DEC22		16:15		2		X									

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO
Are samples for human consumption/ use? ☐ YES ☒ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

O.Reg. 153/04 - Table 7
For RSC

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☒ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED
Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO
Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
7.6			8.1	7.6	8.2

SHIPMENT RELEASE (client use)

Released by: Daniel Elliot Date: 6-Dec-22 Time: 17:30

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: [signature] Date: 12/7/22 Time: 7:44

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: [signature] Date: 12/08/22 Time: 9:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

OR-134.

VW-168; M-496; SC-163; GC-201; OR-133;

Chain of Custody (COC) / Analytical Request Form

COC Number: 2(

Page

Environmental Division Waterloo

Work Order Reference WT2224485

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni - McCann Inc.
Contact:	
Phone:	
Company address below will appear on the final report	
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☐ PDF ☐ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☐ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Email 3

Invoice Recipients

Select Invoice Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Turnaround Time (TAT) Requested

☐ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additio may apply to rush requests on weekends, statutory holidays and non-rout

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):	JD	ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P PHC F1-F4	P VOC	P PAH	F/P Metals	F/P Hg	F/P Cr VI	F/P pH	F/P PCB	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MW22-15B-6DEC22	06-DEC-22	15:50	GW	2		X									
	MW22-16A-6DEC22	06-DEC-22	14:50		2		X									
	MW22-16B-6DEC22		15:20		2		X									
	MW22-28-6DEC22		8:30		8	X	X	X	X	X	X	X				
	MW22-29-6DEC22		9:40		8	X	X	X	X	X	X	X				
	MW22-30-6DEC22		10:55		2		X									
	MW22-31-6DEC22		14:00		2		X									
	~~MW22-34-6DEC22~~															
	MW22-35-6DEC22		13:35		2		X									
	BH4-10-6DEC22		7:55		2		X									
	DUP4-6DEC22				1	X	X						X			
	DUP5-6DEC22				2		X									

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☑ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
7.6			5.1	7.6	8.2

SHIPMENT RELEASE (client use)

Released by: | Date: 6-Dec-22 | Time: 17:30

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: | Date: 12/7/22 | Time: 7:44

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: | Date: 12/08/22 | Time: 9:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

COC Number: 20 - 1009823

Report To	Contact and company name below will appear on the final report
Company:	Omni - McCann Inc.
Contact:	
Phone:	
Company address below will appear on the final report	
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☐ PDF ☐ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☐ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Email 3

Invoice Recipients

Select Invoice Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Turnaround Time (TAT) Requested

☐ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm or/ou

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P PHC F1-F4	P VOC	PCB	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MW22-38-6DEC22	06-DEC-22	9:05	GW	6	X	X	X			
	TB3-6DEC22	↓		Water	3	X	X				
	FB3-6DEC22	↓		↓	2		X				

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☑ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
7.6			3.1	7.6	8.9

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Daniel Elliot	Date: 6-Dec-22	Time: 17:30	Received by:	Date: 12/07/22	Time: 7:45	Received by:	Date: 12/08/20	Time: 9:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2224609**	Page	: 1 of 56
Amendment	: **1**		
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 08-Dec-2022 07:35
PO	: ----	Date Analysis Commenced	: 12-Dec-2022
C-O-C number	: ----	Issue Date	: 15-Dec-2022 14:36
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 27		
No. of samples analysed	: 27		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
µg/L	micrograms per litre

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Workorder Comments

RRQC: Matrix spike recovery was outside ALS DQO. LCS results were acceptable.

Qualifiers

Qualifier	*Description*
RRV	*Reported result verified by repeat analysis.*

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-13A-07DEC22 Sampling date/time: 07-Dec-2022 13:45 WT2224609-001	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	82.0	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	90.0	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	95.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.6	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW21-13B-07DEC22 Sampling date/time: 07-Dec-2022 14:20 WT2224609-002	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	94.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.7	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-39-01-07DEC22 Sampling date/time: 07-Dec-2022 15:30 WT2224609-003	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-003 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	1.48	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.70	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-39-01-07DEC22	Water	tetrachloroethylene		ON153/04	T7-NPGW-C-All	1.48 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.70 µg/L	0.5 µg/L
	Water	tetrachloroethylene		ON153/04	T7-NPGW-F-All	1.48 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.70 µg/L	0.5 µg/L

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW22-39-03-07DEC22								
	Sampling date/time	07-Dec-2022 16:05								
Analyte	*Method*	*LOR*	*Unit*	WT2224609-004	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.62	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW22-39-04-07DEC22								
	Sampling date/time	07-Dec-2022 16:20								
Analyte	*Method*	*LOR*	*Unit*	WT2224609-005	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-005 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-39-05-07DEC22 Sampling date/time: 07-Dec-2022 16:40 WT2224609-006	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-006 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-39-06-07DEC22 Sampling date/time: 07-Dec-2022 17:05 WT2224609-007	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-007 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.81	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-39-06-07DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.81 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.81 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-39-07-07DEC22 Sampling date/time: 07-Dec-2022 17:20 WT2224609-008	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-008 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-40-01-07DEC22 Sampling date/time: 07-Dec-2022 09:15 WT2224609-009	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-009 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.53	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-40-01-07DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.53 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.53 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW22-40-02-07DEC22								
	Sampling date/time	07-Dec-2022 09:35								
Analyte	*Method*	*LOR*	*Unit*	WT2224609-010	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	1.23	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-010 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	92.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-40-03-07DEC22 Sampling date/time: 07-Dec-2022 10:10 WT2224609-011	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.98	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-011 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	0.84	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	0.45	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	1.3	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-40-04-07DEC22 Sampling date/time: 07-Dec-2022 10:30 WT2224609-012	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-012 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.5	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-40-05-07DEC22 Sampling date/time: 07-Dec-2022 10:55 WT2224609-013	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-013 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.66	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.7	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-40-05-07DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.66 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.66 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-40-06-07DEC22 Sampling date/time: 07-Dec-2022 11:05 WT2224609-014	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	27	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.81	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-014 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-40-07-07DEC22 Sampling date/time: 07-Dec-2022 11:35 WT2224609-015	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-015 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-41-01-07DEC22 Sampling date/time: 07-Dec-2022 17:20 WT2224609-016	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-016 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	10.2	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-41-01-07DEC22	Water	tetrachloroethylene		ON153/04	T7-NPGW-C-All	10.2 µg/L	0.5 µg/L
	Water	tetrachloroethylene		ON153/04	T7-NPGW-F-All	10.2 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-41-02-07DEC22 Sampling date/time: 07-Dec-2022 17:00 WT2224609-017	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-017 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-41-03-07DEC22 Sampling date/time: 07-Dec-2022 16:40 WT2224609-018	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-018 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-41-04-07DEC22 Sampling date/time: 07-Dec-2022 16:15 WT2224609-019	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-019 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.4	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	100	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-41-05-07DEC22 Sampling date/time: 07-Dec-2022 16:10 WT2224609-020	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-020 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.73	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	91.5	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-41-05-07DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.73 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.73 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: MW22-41-06-07DEC22 Sampling date/time: 07-Dec-2022 15:45 WT2224609-021	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-021 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	87.8	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	95.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

	Client sample ID	MW22-41-07-07DEC22								
	Sampling date/time	07-Dec-2022 15:15								
Analyte	*Method*	*LOR*	*Unit*	WT2224609-022	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-022 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	90.9	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	93.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: DUP6-07DEC22 Sampling date/time: 07-Dec-2022 00:00 WT2224609-023	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-023 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	86.2	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	93.2	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	86.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	97.9	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: DUP7-07DEC22 Sampling date/time: 07-Dec-2022 00:00 WT2224609-024	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-024 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	0.64	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	86.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	99.0	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
DUP7-07DEC22	Water	trichloroethylene		ON153/04	T7-NPGW-C-All	0.64 µg/L	0.5 µg/L
	Water	trichloroethylene		ON153/04	T7-NPGW-F-All	0.64 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: DUP8-07DEC22 Sampling date/time: 07-Dec-2022 00:00 WT2224609-025	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-025 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	8.24	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	87.6	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	98.3	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
DUP8-07DEC22	Water	tetrachloroethylene		ON153/04	T7-NPGW-C-All	8.24 µg/L	0.5 µg/L
	Water	tetrachloroethylene		ON153/04	T7-NPGW-F-All	8.24 µg/L	0.5 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: TB4-07DEC22 Sampling date/time: 07-Dec-2022 00:00 WT2224609-026	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	1.3 RRV	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-026 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1-L	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
F2 (C10-C16)	E601.SG	100	µg/L	<100	150 µg/L	150 µg/L	--	--	--	--
F3 (C16-C34)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F4 (C34-C50)	E601.SG	250	µg/L	<250	500 µg/L	500 µg/L	--	--	--	--
F1-BTEX	EC580	25	µg/L	<25	420 µg/L	420 µg/L	--	--	--	--
hydrocarbons, total (C6-C50)	EC581SG	240	µg/L	<370	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG		-	YES	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG	1.0	%	79.3	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1-L	1.0	%	106	--	--	--	--	--	--
bromofluorobenzene, 4-	E611D	1.0	%	86.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	98.4	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: FB4-07DEC22 Sampling date/time: 07-Dec-2022 00:00 WT2224609-027	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2224609-027 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	86.5	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	98.8	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2224609**	Page	: 1 of 9
Amendment	: 1		
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 08-Dec-2022 07:35
PO	: ----	Issue Date	: 15-Dec-2022 14:36
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 27		
No. of samples analysed	: 27		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	dichlorodifluoromethane	75-71-8	E611D	22.5 % RRQC	60.0-140%	Recovery less than lower data quality objective
Volatile Organic Compounds	Anonymous	Anonymous	vinyl chloride	75-01-4	E611D	41.8 % RRQC	60.0-140%	Recovery less than lower data quality objective

Result Qualifiers

Qualifier	*Description*
RRQC	*Refer to report comments for information regarding this QC result.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW21-13A-07DEC22	E581.F1-L	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) DUP6-07DEC22	E581.F1-L	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) TB4-07DEC22	E581.F1-L	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) DUP6-07DEC22	E601.SG	07-Dec-2022	12-Dec-2022	14 days	5 days	✓	15-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) MW21-13A-07DEC22	E601.SG	07-Dec-2022	12-Dec-2022	14 days	5 days	✓	15-Dec-2022	40 days	3 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) TB4-07DEC22	E601.SG	07-Dec-2022	12-Dec-2022	14 days	5 days	✓	15-Dec-2022	40 days	3 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-13A-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW21-13B-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-39-01-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-39-03-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-39-04-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-39-05-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-39-06-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-39-07-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-01-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-02-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-03-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-04-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-05-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	4 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-01-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-02-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-03-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-04-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-05-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-06-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-40-07-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-06-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-41-07-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP6-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP7-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) DUP8-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) FB4-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) TB4-07DEC22	E611D	07-Dec-2022	12-Dec-2022	----	----		12-Dec-2022	14 days	6 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	775201	2	5	40.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	775200	2	34	5.8	5.0	✓
Laboratory Control Samples (LCS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	775201	2	5	40.0	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	773549	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	775200	2	34	5.8	5.0	✓
Method Blanks (MB)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	775201	2	5	40.0	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	773549	1	19	5.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	775200	2	34	5.8	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	775201	2	5	40.0	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	775200	2	34	5.8	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
F1-BTEX	EC580 Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
SUM F1 to F4 where F2-F4 is SG treated	EC581SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fraction F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50), where F2-F4 have been treated with silica gel. F4G-sg is not used within this calculation due to overlap with other fractions.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Preparation for Headspace Analysis	EP581 Waterloo - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Waterloo - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

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QUALITY CONTROL REPORT

Work Order	: **WT2224609**	Page	: 1 of 14
Amendment	: **1**		
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 08-Dec-2022 07:35
PO	: ----	Date Analysis Commenced	: 12-Dec-2022
C-O-C number	: ----	Issue Date	: 15-Dec-2022 14:36
Sampler	: ---- 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 27		
No. of samples analysed	: 27		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 775200)											
WT2224609-001	MW21-13A-07DEC22	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 775200) - continued											
WT2224609-001	MW21-13A-07DEC22	tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 775709)											
WT2224468-001	Anonymous	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 775709) - continued											
WT2224468-001	Anonymous	ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 775201)											
WT2224609-001	MW21-13A-07DEC22	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 775710)											
WT2224468-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 775200)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 775200) - continued						
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Volatile Organic Compounds (QCLot: 775709)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 775709) - continued						
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 773549)						
F2 (C10-C16)	----	E601.SG	100	µg/L	<100	----
F3 (C16-C34)	----	E601.SG	250	µg/L	<250	----
F4 (C34-C50)	----	E601.SG	250	µg/L	<250	----
Hydrocarbons (QCLot: 775201)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Hydrocarbons (QCLot: 775710)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 775200)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	129	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	113	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	95.6	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	92.9	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	105	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	99.9	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	90.8	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	108	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	111	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	95.7	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	81.6	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	108	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	112	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	99.2	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 775200) - continued									
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	107	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	104	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	96.0	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	108	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	104	70.0	130	----
Volatile Organic Compounds (QCLot: 775709)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	101	70.0	130	----
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	88.4	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	96.7	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	83.3	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	95.2	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	94.5	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	88.8	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	88.5	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	95.0	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	95.9	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	96.7	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	85.1	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	88.4	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	90.7	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	82.3	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	80.4	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	83.5	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	84.6	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	80.8	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	87.3	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	91.2	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	95.5	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	89.1	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	80.5	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	90.6	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	108	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 775709) - continued									
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	93.0	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	92.6	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	91.6	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	91.9	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	96.5	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	91.1	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	92.6	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	80.2	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	92.9	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	72.2	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	97.0	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	96.4	70.0	130	----
Hydrocarbons (QCLot: 773549)									
F2 (C10-C16)	----	E601.SG	100	µg/L	4961.825 µg/L	88.8	70.0	130	----
F3 (C16-C34)	----	E601.SG	250	µg/L	7776.674 µg/L	80.3	70.0	130	----
F4 (C34-C50)	----	E601.SG	250	µg/L	4477.474 µg/L	92.1	70.0	130	----
Hydrocarbons (QCLot: 775201)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	103	80.0	120	----
Hydrocarbons (QCLot: 775710)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	112	80.0	120	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 775200)										
WT2224609-001	MW21-13A-07DEC22	Acetone	67-64-1	E611D	125 µg/L	100 µg/L	125	60.0	140	----
		benzene	71-43-2	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		bromodichloromethane	75-27-4	E611D	114 µg/L	100 µg/L	114	60.0	140	----
		bromoform	75-25-2	E611D	96.2 µg/L	100 µg/L	96.2	60.0	140	----
		bromomethane	74-83-9	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		chlorobenzene	108-90-7	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		chloroform	67-66-3	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		dibromochloromethane	124-48-1	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	83.7 µg/L	100 µg/L	83.7	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		dichloromethane	75-09-2	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	121 µg/L	100 µg/L	121	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	117 µg/L	100 µg/L	117	60.0	140	----
		ethylbenzene	100-41-4	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		hexane, n-	110-54-3	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	114 µg/L	100 µg/L	114	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		styrene	100-42-5	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	99.1 µg/L	100 µg/L	99.1	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	110 µg/L	100 µg/L	110	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 775200) - continued										
WT2224609-001	MW21-13A-07DEC22	tetrachloroethylene	127-18-4	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		toluene	108-88-3	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		trichloroethylene	79-01-6	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		vinyl chloride	75-01-4	E611D	93.1 µg/L	100 µg/L	93.1	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	219 µg/L	200 µg/L	109	60.0	140	----
		xylene, o-	95-47-6	E611D	105 µg/L	100 µg/L	105	60.0	140	----
Volatile Organic Compounds (QCLot: 775709)										
WT2224468-001	Anonymous	Acetone	67-64-1	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		benzene	71-43-2	E611D	87.2 µg/L	100 µg/L	87.2	60.0	140	----
		bromodichloromethane	75-27-4	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		bromoform	75-25-2	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		bromomethane	74-83-9	E611D	62.8 µg/L	100 µg/L	62.8	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	88.6 µg/L	100 µg/L	88.6	60.0	140	----
		chlorobenzene	108-90-7	E611D	94.2 µg/L	100 µg/L	94.2	60.0	140	----
		chloroform	67-66-3	E611D	89.0 µg/L	100 µg/L	89.0	60.0	140	----
		dibromochloromethane	124-48-1	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	93.6 µg/L	100 µg/L	93.6	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	91.2 µg/L	100 µg/L	91.2	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	22.5 µg/L	100 µg/L	22.5	60.0	140	RRQC
		dichloroethane, 1,1-	75-34-3	E611D	87.0 µg/L	100 µg/L	87.0	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	97.7 µg/L	100 µg/L	97.7	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	71.8 µg/L	100 µg/L	71.8	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	83.0 µg/L	100 µg/L	83.0	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	80.6 µg/L	100 µg/L	80.6	60.0	140	----
		dichloromethane	75-09-2	E611D	84.2 µg/L	100 µg/L	84.2	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	83.2 µg/L	100 µg/L	83.2	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	93.9 µg/L	100 µg/L	93.9	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	95.8 µg/L	100 µg/L	95.8	60.0	140	----
		ethylbenzene	100-41-4	E611D	90.7 µg/L	100 µg/L	90.7	60.0	140	----
		hexane, n-	110-54-3	E611D	75.2 µg/L	100 µg/L	75.2	60.0	140	----

Sub-Matrix: **Water**

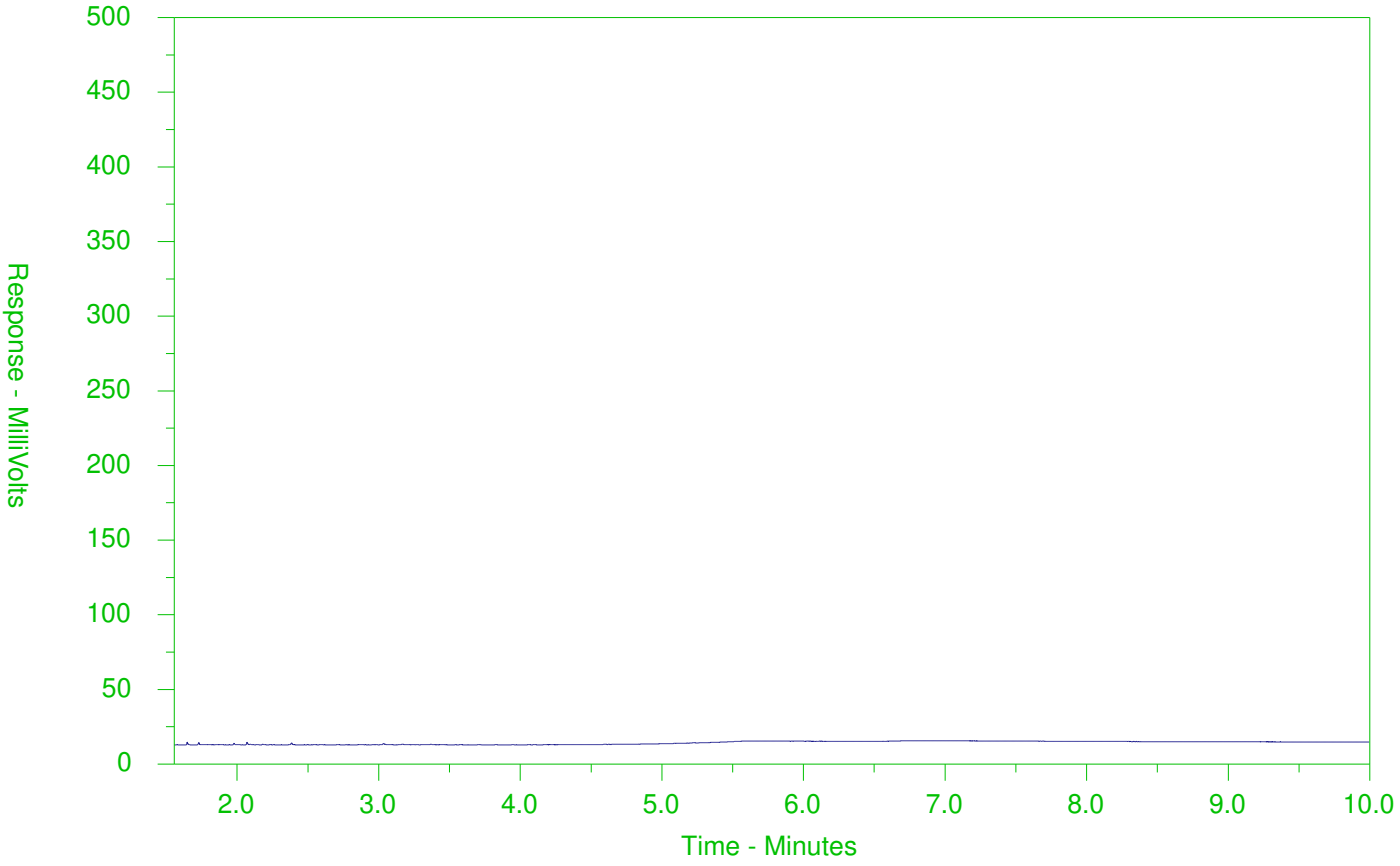
					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 775709) - continued										
WT2224468-001	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	91 µg/L	100 µg/L	90.6	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		styrene	100-42-5	E611D	92.2 µg/L	100 µg/L	92.2	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	89.2 µg/L	100 µg/L	89.2	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	83.2 µg/L	100 µg/L	83.2	60.0	140	----
		toluene	108-88-3	E611D	91.6 µg/L	100 µg/L	91.6	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	89.3 µg/L	100 µg/L	89.3	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	97.9 µg/L	100 µg/L	97.9	60.0	140	----
		trichloroethylene	79-01-6	E611D	76.8 µg/L	100 µg/L	76.8	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	77.4 µg/L	100 µg/L	77.4	60.0	140	----
		vinyl chloride	75-01-4	E611D	41.8 µg/L	100 µg/L	41.8	60.0	140	RRQC
		xylene, m+p-	179601-23-1	E611D	187 µg/L	200 µg/L	93.3	60.0	140	----
		xylene, o-	95-47-6	E611D	93.3 µg/L	100 µg/L	93.3	60.0	140	----
Hydrocarbons (QCLot: 775201)										
WT2224609-001	MW21-13A-07DEC22	F1 (C6-C10)	----	E581.F1-L	1780 µg/L	2000 µg/L	89.2	60.0	140	----
Hydrocarbons (QCLot: 775710)										
WT2224468-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	2050 µg/L	2000 µg/L	103	60.0	140	----

Qualifiers

Qualifier	Description
RRQC	*Refer to report comments for information regarding this QC result.*

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224609-001-E601.SG
Client Sample ID: MW21-13A



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

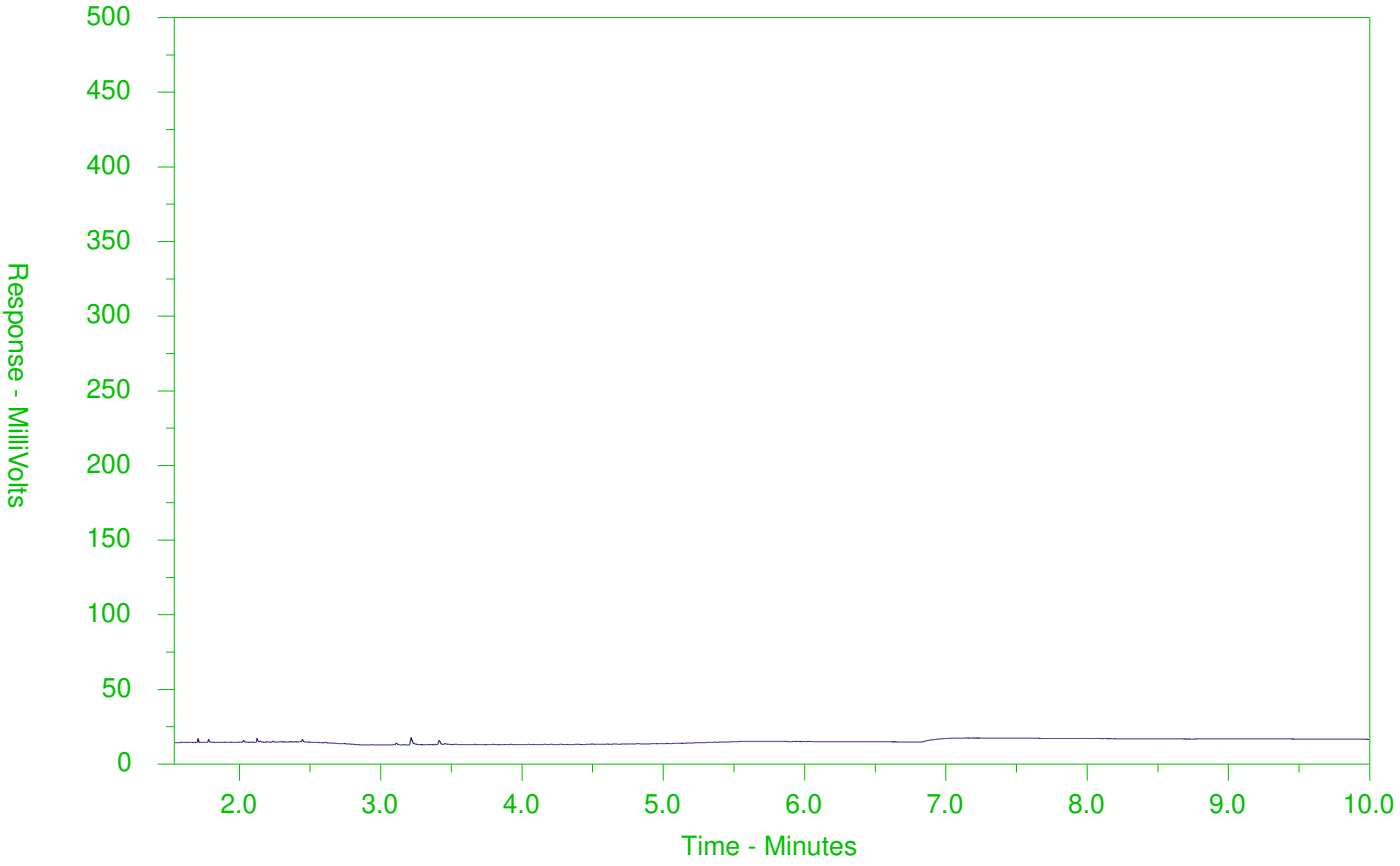
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224609-023-E601.SG
Client Sample ID: DUP6



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

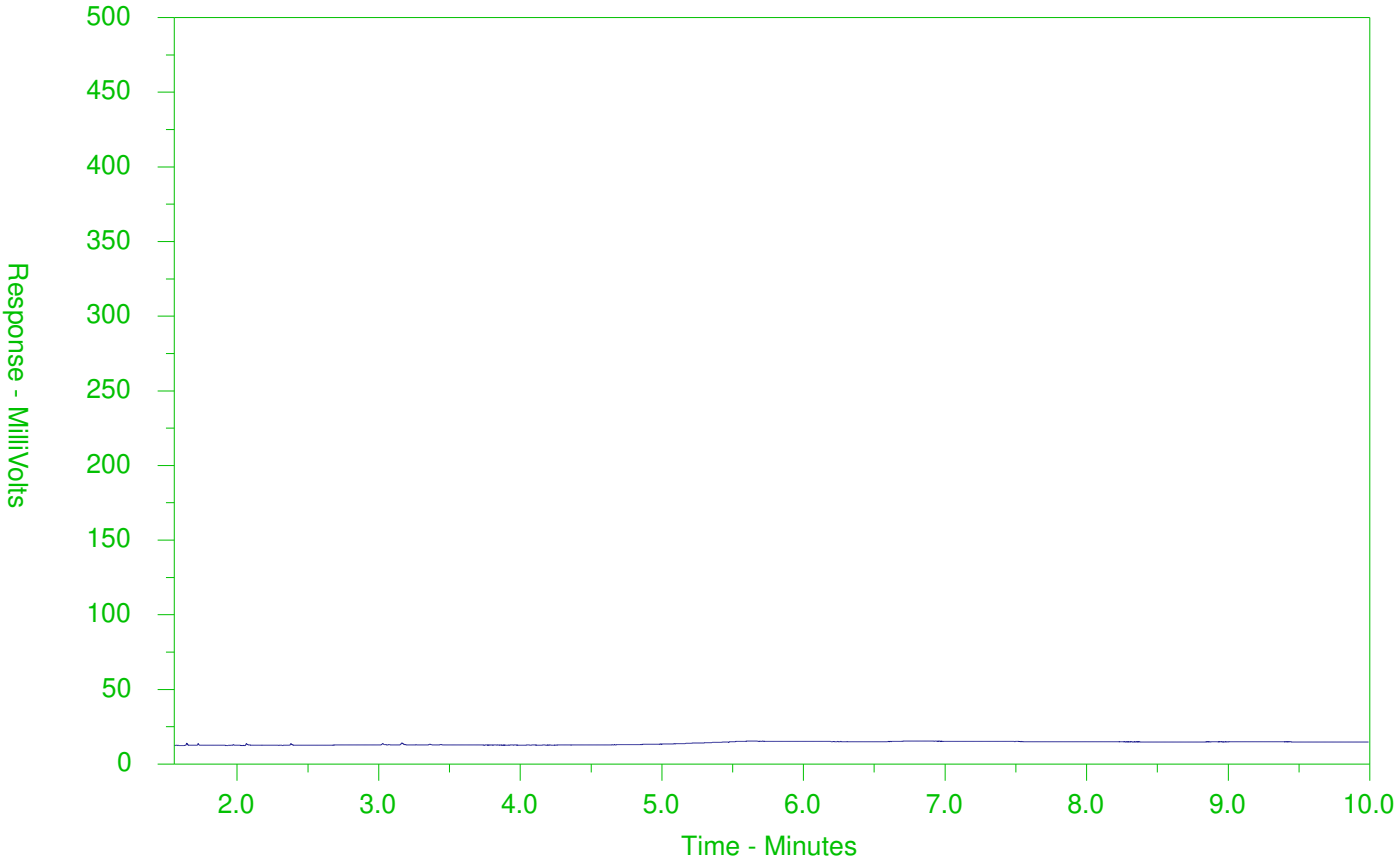
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2224609-026-E601.SG
Client Sample ID: TB4



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →	← Motor Oils/Lube Oils/Grease →		
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009810

Page 1 of 3

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Environmental Division
Waterloo
Work Order Reference
WT2224609

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni McCann Inc.
Contact:	Daniel Elliot
Phone:	613-857-4936
	Company address below will appear on the final report
Street:	200 - 1755 Woodward Dr.
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A
☒ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax Dan@omnimccann.com
Email 2 Kristina@omnimccann.com
Email 3 Antonia@omnimccann.com

Invoice Recipients

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax Invoicing@omnimccann.com
Email 2

Turnaround Time (TAT) Requested

☒ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge mi
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge m
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge m
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge mi
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge may apply to rush requests on weekends, statutory holidays and

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, pl

Project Information

ALS Account # / Quote #: Q90026
Job #: 0006-0103
PO / AFE:
LSD:
ALS Lab Work Order # (ALS use only):

Oil and Gas Required Fields (client use)

AFE/Cost Center: | PO#
Major/Minor Code: | Routing Code:
Requisitioner:
Location:
ALS Contact: Eric Dobbins | Sampler: D. Elliot

Analysis

Indicate Filtered (F), Preserved (P) or Filter

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P1&F1-F4	VOC	SAMPLES ON HOLD	EXTENDED STORAGE REQU	SUSPECTED HAZARD (see notes)
	MW21-13A-07DEC22	07-DEC-22	13:45	GW	4	X	X			
	MW21-13B-07DEC22		14:20		2		X			
	MW22-39-01-07DEC22		15:30		2		X			
	~~MW22-39-02-07DEC22~~									
	MW22-39-03-07DEC22		16:05		2		X			
	MW22-39-04-07DEC22		16:20		2		X			
	MW22-39-05-07DEC22		16:40		2		X			
	MW22-39-06-07DEC22		17:05		2		X			
	MW22-39-07-07DEC22		17:20		2		X			
	MW22-40-01-07DEC22		9:15		2		X			
	MW22-40-02-07DEC22		9:35		2		X			
	MW22-40-03-07DEC22		10:10		2		X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO
Are samples for human consumption/ use? ☐ YES ☒ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

O.Reg. 153/04 - Table 7
For RSC.

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☒ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED
Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO
Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
4.8				8.8			

SHIPMENT RELEASE (client use)

Released by: Daniel Elliot | Date: 7-Dec-22 | Time: 18:45

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: | Date: 7/DEC/22 | Time: 7:35

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: | Date: 9-Dec-22 | Time: 8:45

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

ALS 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

VW-170/171, OR-137

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009811

Page 2 of 3

ALS www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Report To	Contact and company name below will appear on the final report
Company:	Ouvic McCann Inc.
Contact:	
Phone:	
Company address below will appear on the final report	
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☐ PDF ☐ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☐ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Email 3

Invoice Recipients

Select Invoice Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Turnaround Time (TAT) Requested

☐ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] If received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm (or)

For all tests with rush TATs requested, please contact your AM to confirm availability.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P PHC F1-F4	P VOC	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MW22-40-04-07DEC22	07-DEC-22	10:30	GW	2		X			
	MW22-40-05-07DEC22		10:55		2		X			
	MW22-40-06-07DEC22		11:05		2		X			
	MW22-40-07-07DEC22		11:35		2		X			
	MW22-41-01-7DEC22		17:20		2		X			
	MW22-41-02-7DEC22		17:00		2		X			
	MW22-41-03-7DEC22		16:40		2		X			
	MW22-41-04-7DEC22		16:15		2		X			
	MW22-41-05-7DEC22		16:10		2		X			
	MW22-41-06-7DEC22		15:45		2		X			
	MW22-41-07-7DEC22		15:15		2		X			
	DUP6-07DEC22				4	X	X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?

☐ YES ☒ NO

Are samples for human consumption/ use?

☐ YES ☒ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☒ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C	FINAL COOLER TEMPERATURES °C
4.8	8.8

SHIPMENT RELEASE (client use)

Released by: Daniel Elliot Date: 7-Dec-22 Time: 19:45

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 12/08/22 Time: 735

FINAL SHIPMENT RECEPTION (ALS use only)

Received by: Date: 9-Dec-22 Time: 8:45

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

COC Number: 20 - 1009812

Page 3 of 3

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Omni McCana Inc.	Select Report Format: ☐ PDF ☐ EXCEL ☐ EDD (DIGITAL)	☐ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:		Merge QC/QCI Reports with COA ☐ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:		☐ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
	Company address below will appear on the final report	Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
Street:		Email 1 or Fax	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
City/Province:		Email 2	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests
Postal Code:		Email 3	
Invoice To	Same as Report To ☐ YES ☐ NO	Invoice Recipients	AFFIX ALS BARCODE LABEL HERE (ALS use only)
	Copy of Invoice with Report ☐ YES ☐ NO	Select Invoice Distribution: ☐ EMAIL ☐ MAIL ☐ FAX	Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm am/pm
Company:		Email 1 or Fax	For all tests with rush TATs requested, please contact your AM to confirm availability.
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#
Job #:		Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P PHC F1-F4	P VOC	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	DUP7 - 07DEC22	07-DEC-22		Water	2		X			
	DUP8 - 7DEC22	↓		↓	2		X			
	TB4 - 7DEC22				4	X	X			
	FB4 - 7DEC22				2		X			

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☑ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
4.8			8.8		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Daniel Elliot	Date: 7-Dec-22	Time: 19:45	Received by:	Date: 12/08/22	Time: 7:35	Received by:	Date: 9-Dec-22	Time: 8:45

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

ALS 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

ALS Canada Ltd.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2225424**	Page	: 1 of 10
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 15-Dec-2022 16:20
PO	: ----	Date Analysis Commenced	: 20-Dec-2022
C-O-C number	: ----	Issue Date	: 22-Dec-2022 17:44
Sampler	: DE		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
µg/L	micrograms per litre

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Workorder Comments

RRR: RL raised due to suspected laboratory contamination.

Qualifiers

Qualifier	*Description*
RRR	*Refer to report comments for issues regarding this analysis.*

Analytical Results

Sub-Matrix: **Groundwater**
(Matrix: **Water**)

	Client sample ID	MW22-33-15DEC22								
	Sampling date/time	15-Dec-2022 10:50								
Analyte	*Method*	*LOR*	*Unit*	WT2225424-001	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	0.84	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2225424-001 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	84.2	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	130	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Groundwater**
(Matrix: **Water**)

	Client sample ID	MW22-36-15DEC22								
	Sampling date/time	15-Dec-2022 11:20								
Analyte	*Method*	*LOR*	*Unit*	WT2225424-002	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	2.40	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2225424-002 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	93.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	101	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
MW22-36-15DEC22	Water	chloroform		ON153/04	T7-NPGW-C-All	2.40 µg/L	2 µg/L
	Water	chloroform		ON153/04	T7-NPGW-F-All	2.40 µg/L	2 µg/L

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Groundwater**
(Matrix: **Water**)

	Client sample ID	FB5-15DEC22								
	Sampling date/time	15-Dec-2022 00:00								
Analyte	*Method*	*LOR*	*Unit*	WT2225424-003	**ON153/04 T7-NPGW-C-All**	**ON153/04 T7-NPGW-F-All**				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.0	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2225424-003 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	84.3	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	130	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

Analytical Results

Sub-Matrix: **Groundwater**
(Matrix: **Water**)

Analyte	Method	LOR	Unit	Client sample ID: TB5-15DEC22 Sampling date/time: 15-Dec-2022 00:00 WT2225424-004	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds										
Acetone	E611D	20	µg/L	<20	100000 µg/L	100000 µg/L	--	--	--	--
benzene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
bromodichloromethane	E611D	0.50	µg/L	<0.50	67000 µg/L	67000 µg/L	--	--	--	--
bromoform	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
bromomethane	E611D	0.50	µg/L	<0.50	0.89 µg/L	0.89 µg/L	--	--	--	--
carbon tetrachloride	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
chlorobenzene	E611D	0.50	µg/L	<0.50	140 µg/L	140 µg/L	--	--	--	--
chloroform	E611D	0.50	µg/L	<0.50	2 µg/L	2 µg/L	--	--	--	--
dibromochloromethane	E611D	0.50	µg/L	<0.50	65000 µg/L	65000 µg/L	--	--	--	--
dibromoethane, 1,2-	E611D	0.20	µg/L	<0.20	0.2 µg/L	0.2 µg/L	--	--	--	--
dichlorobenzene, 1,2-	E611D	0.50	µg/L	<0.50	150 µg/L	150 µg/L	--	--	--	--
dichlorobenzene, 1,3-	E611D	0.50	µg/L	<0.50	7600 µg/L	7600 µg/L	--	--	--	--
dichlorobenzene, 1,4-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichlorodifluoromethane	E611D	0.50	µg/L	<0.50	3500 µg/L	3500 µg/L	--	--	--	--
dichloroethane, 1,1-	E611D	0.50	µg/L	<0.50	11 µg/L	11 µg/L	--	--	--	--
dichloroethane, 1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, 1,1-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloroethylene, cis-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloroethylene, trans-1,2-	E611D	0.50	µg/L	<0.50	1.6 µg/L	1.6 µg/L	--	--	--	--
dichloromethane	E611D	1.0	µg/L	<1.7 RRR	26 µg/L	26 µg/L	--	--	--	--
dichloropropane, 1,2-	E611D	0.50	µg/L	<0.50	0.58 µg/L	0.58 µg/L	--	--	--	--
dichloropropylene, cis+trans-1,3-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
dichloropropylene, cis-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
dichloropropylene, trans-1,3-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
ethylbenzene	E611D	0.50	µg/L	<0.50	54 µg/L	54 µg/L	--	--	--	--
hexane, n-	E611D	0.50	µg/L	<0.50	5 µg/L	5 µg/L	--	--	--	--
methyl ethyl ketone [MEK]	E611D	20	µg/L	<20	21000 µg/L	21000 µg/L	--	--	--	--
methyl isobutyl ketone [MIBK]	E611D	20	µg/L	<20	5200 µg/L	5200 µg/L	--	--	--	--
methyl-tert-butyl ether [MTBE]	E611D	0.50	µg/L	<0.50	15 µg/L	15 µg/L	--	--	--	--
styrene	E611D	0.50	µg/L	<0.50	43 µg/L	43 µg/L	--	--	--	--

Analyte	Method	LOR	Unit	WT2225424-004 (Continued)	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All				
Volatile Organic Compounds - Continued										
tetrachloroethane, 1,1,1,2-	E611D	0.50	µg/L	<0.50	1.1 µg/L	1.1 µg/L	--	--	--	--
tetrachloroethane, 1,1,2,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
tetrachloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
toluene	E611D	0.50	µg/L	<0.50	320 µg/L	320 µg/L	--	--	--	--
trichloroethane, 1,1,1-	E611D	0.50	µg/L	<0.50	23 µg/L	23 µg/L	--	--	--	--
trichloroethane, 1,1,2-	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichloroethylene	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
trichlorofluoromethane	E611D	0.50	µg/L	<0.50	2000 µg/L	2000 µg/L	--	--	--	--
vinyl chloride	E611D	0.50	µg/L	<0.50	0.5 µg/L	0.5 µg/L	--	--	--	--
xylene, m+p-	E611D	0.40	µg/L	<0.40	--	--	--	--	--	--
xylene, o-	E611D	0.30	µg/L	<0.30	--	--	--	--	--	--
xylenes, total	E611D	0.50	µg/L	<0.50	72 µg/L	72 µg/L	--	--	--	--
BTEX, total	E611D	1.0	µg/L	<1.0	--	--	--	--	--	--
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	E611D	1.0	%	82.0	--	--	--	--	--	--
difluorobenzene, 1,4-	E611D	1.0	%	130	--	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ON153/04	Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)
T7-NPGW-C-All	153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse
T7-NPGW-F-All	153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2225424**	Page	: 1 of 6
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 15-Dec-2022 16:20
PO	: ----	Issue Date	: 22-Dec-2022 17:43
C-O-C number	: ----		
Sampler	: DE		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-785016-002	----	Acetone	67-64-1	E611D	132 % MES	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-785016-002	----	dichloroethane, 1,2-	107-06-2	E611D	132 % MES	70.0-130%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	Acetone	67-64-1	E611D	145 % MES	60.0-140%	Recovery greater than upper data quality objective

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-33-15DEC22	E611D	15-Dec-2022	20-Dec-2022	----	----		20-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) MW22-36-15DEC22	E611D	15-Dec-2022	20-Dec-2022	----	----		20-Dec-2022	14 days	5 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) FB5-15DEC22	E611D	15-Dec-2022	20-Dec-2022	----	----		20-Dec-2022	14 days	6 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) TB5-15DEC22	E611D	15-Dec-2022	20-Dec-2022	----	----		20-Dec-2022	14 days	6 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	785016	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	785016	1	20	5.0	5.0	✓
Method Blanks (MB)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	785016	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	785016	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Preparation for Headspace Analysis	EP581 Waterloo - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.

QUALITY CONTROL REPORT

Work Order	: **WT2225424**	Page	: 1 of 10
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 15-Dec-2022 16:20
PO	: ----	Date Analysis Commenced	: 20-Dec-2022
C-O-C number	: ----	Issue Date	: 22-Dec-2022 17:42
Sampler	: DE 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 785016)											
WP2205862-001	Anonymous	Acetone	67-64-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 785016) - continued											
WP2205862-001	Anonymous	tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 785016)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 785016) - continued						
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 785016)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	# 132	70.0	130	MES
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	118	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	86.2	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	119	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	109	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	91.6	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	99.5	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	108	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	95.8	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	96.7	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	98.1	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	111	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	126	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	# 132	70.0	130	MES
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	115	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	122	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	126	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	110	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	119	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	98.5	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	87.7	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	112	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	116	70.0	130	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	124	70.0	130	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	106	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	84.0	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	92.7	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	89.1	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	88.9	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 785016) - continued									
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	100	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	113	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	99.7	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	90.4	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	87.8	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 785016)										
WP2205862-001	Anonymous	Acetone	67-64-1	E611D	145 µg/L	100 µg/L	145	60.0	140	MES
		benzene	71-43-2	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		bromodichloromethane	75-27-4	E611D	120 µg/L	100 µg/L	120	60.0	140	----
		bromoform	75-25-2	E611D	92.4 µg/L	100 µg/L	92.4	60.0	140	----
		bromomethane	74-83-9	E611D	117 µg/L	100 µg/L	117	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		chlorobenzene	108-90-7	E611D	91.0 µg/L	100 µg/L	91.0	60.0	140	----
		chloroform	67-66-3	E611D	114 µg/L	100 µg/L	114	60.0	140	----
		dibromochloromethane	124-48-1	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	94.5 µg/L	100 µg/L	94.5	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	90.9 µg/L	100 µg/L	90.9	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	93.3 µg/L	100 µg/L	93.3	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	125 µg/L	100 µg/L	125	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	137 µg/L	100 µg/L	137	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	116 µg/L	100 µg/L	116	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	119 µg/L	100 µg/L	119	60.0	140	----
		dichloromethane	75-09-2	E611D	127 µg/L	100 µg/L	127	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	119 µg/L	100 µg/L	119	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	97.1 µg/L	100 µg/L	97.1	60.0	140	----
		ethylbenzene	100-41-4	E611D	85.8 µg/L	100 µg/L	85.8	60.0	140	----
		hexane, n-	110-54-3	E611D	109 µg/L	100 µg/L	109	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	125 µg/L	100 µg/L	125	60.0	140	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	139 µg/L	100 µg/L	139	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	105 µg/L	100 µg/L	105	60.0	140	----
		styrene	100-42-5	E611D	83.5 µg/L	100 µg/L	83.5	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	93.1 µg/L	100 µg/L	93.1	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	116 µg/L	100 µg/L	116	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 785016) - continued										
WP2205862-001	Anonymous	tetrachloroethylene	127-18-4	E611D	85.5 µg/L	100 µg/L	85.5	60.0	140	----
		toluene	108-88-3	E611D	86.9 µg/L	100 µg/L	86.9	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	113 µg/L	100 µg/L	113	60.0	140	----
		trichloroethane, 1,1,2-	79-00-5	E611D	103 µg/L	100 µg/L	103	60.0	140	----
		trichloroethylene	79-01-6	E611D	101 µg/L	100 µg/L	101	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		vinyl chloride	75-01-4	E611D	96.5 µg/L	100 µg/L	96.5	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	176 µg/L	200 µg/L	88.0	60.0	140	----
		xylene, o-	95-47-6	E611D	86.7 µg/L	100 µg/L	86.7	60.0	140	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 Page

Environmental Division Waterloo

Work Order Reference WT2225424

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Omni McCann Inc.
Contact:	Daniel Elliot
Phone:	(613-857-4936
	Company address below will appear on the final report
Street:	200 - 1755 Woodward Dr.
City/Province:	Ottawa, ON
Postal Code:	K2C 0P9
Invoice To	Same as Report To ☒ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Report Format / Distribution

Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)

Quality Control (QC) Report with Report ☒ YES ☐ NO

☒ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax Dan@Omnimccann.com

Email 2 Kristina@Omnimccann.com

Email 3 Antonia@Omnimccann.com

Invoice Distribution

Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax Invoicing@Omnimccann.com

Email 2

Select Service Level Below - Contact your AM to cor

Regular [R] ☒ Standard TAT if received by 3 pm - b

PRIORITY (Business Days): 4 day [P4-20%] ☐ | 3 day [P3-25%] ☐ | 2 day [P2-50%] ☐

EMERGENCY: 1 Business da | Same Day, We | (Laboratory op

Date and Time Required for all E&P TATs:

For tests that can not be performed according to the service level selected

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q90026	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	

ALS Lab Work Order # (lab use only): WT2225417 JD

ALS Contact: E. Dobbins

Sampler: D. Elliot

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P VOC	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	MW22-33-15DEC22	15-Dec-22	10:50	GW	2	X		
	MW22-36-15DEC22	15-Dec-22	11:20		2	X		
	FB5-15DEC22	15-Dec-22	—		2	X		
	TB5-15DEC22	15-Dec-22	—	↓	2	X		

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☒ NO

Are samples for human consumption/ use? ☐ YES ☒ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

O.Reg. 153/04 - Table 7
For RSC

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ | SIF Observations Yes ☐ No ☐

Ice Packs ☒ Ice Cubes ☐ | Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
12.3				4.1			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: Daniel Elliot	Date: 15-Dec-22	Time: 15:45	Received by:	Date: 12/15/22	Time: 1720	Received by:	Date: 12/17/22	Time: 1045 AM

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NOV 2018 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

VW - 201

APPENDIX D

Residue Management

ALS Canada Ltd.

right solutions. right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2223671**	Page	: 1 of 6
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 29-Nov-2022 16:40
PO	: ----	Date Analysis Commenced	: 02-Dec-2022
C-O-C number	: 20-1009803	Issue Date	: 08-Dec-2022 15:59
Sampler	: AC		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Inorganics, Waterloo, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Inorganics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Metals, Waterloo, Ontario
Niral Patel		Centralized Prep, Waterloo, Ontario
Robert Braun	Soils Team Supervisor	Inorganics, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Organics, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
°C	degrees celsius
µg/L	micrograms per litre
m/sec	metres per second
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
mm/sec	millimetres per second
none	none
pH units	pH units
sec	seconds

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit .

Analytical Results

Sub-Matrix: **Soil**
(Matrix: **Soil/Solid**)

				Client sample ID	MARCH TCLP					
				Sampling date/time	29-Nov-2022 00:00					
Analyte	*Method*	*LOR*	*Unit*	WT2223671-001	**ONWCR Sch. 4**					
Physical Tests										
ignitability	E209		none	Negative	--	--	--	--	--	--
moisture	E144	0.25	%	17.6	--	--	--	--	--	--
sample comment	E209		none	BROWN CLAY LOAM	--	--	--	--	--	--
time to ignition	E209	1	sec	Not Determined	--	--	--	--	--	--
burning rate	E209	0.01	mm/sec	Not Determined	--	--	--	--	--	--
temperature of test material	E209	1.0	°C	20.0	--	--	--	--	--	--
air velocity of fume hood	E209	0.10	m/sec	0.44	--	--	--	--	--	--
TCLP Anions & Nutrients										
nitrate + nitrite (as N), TCLP	EC240.N+N	7.50	mg/L	<7.50	1000 mg/L	--	--	--	--	--
TCLP Extractables										
acenaphthene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
acenaphthylene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
acridine, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
anthracene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
Aroclor 1016, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1221, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1232, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1242, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1248, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1254, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1260, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1262, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
Aroclor 1268, TCLP	E688A	0.00020	mg/L	<0.00020	--	--	--	--	--	--
benz(a)anthracene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
benzo(a)pyrene, TCLP	E644	0.00050	mg/L	<0.00050	0.001 mg/L	--	--	--	--	--
benzo(b+j)fluoranthene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
benzo(g,h,i)perylene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
benzo(k)fluoranthene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
chrysene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
cyanide, weak acid dissociable, TCLP	E337A	0.10	mg/L	<0.10	--	--	--	--	--	--
dibenz(a,h)anthracene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2223671-001 (Continued)	ONWCR Sch. 4					
TCLP Extractables - Continued										
fluoranthene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
fluorene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
fluoride, TCLP	E240.F	10	mg/L	<10	150 mg/L	--	--	--	--	--
indeno(1,2,3-c,d)pyrene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
naphthalene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
nitrate (as N), TCLP	E240.NO3	5.0	mg/L	<5.0	--	--	--	--	--	--
nitrite (as N), TCLP	E240.NO2	5.0	mg/L	<5.0	--	--	--	--	--	--
phenanthrene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
pyrene, TCLP	E644	0.0050	mg/L	<0.0050	--	--	--	--	--	--
decachlorobiphenyl, TCLP	E688A	0.1	%	76.2	--	--	--	--	--	--
tetrachloro-m-xylene, TCLP	E688A	0.1	%	79.7	--	--	--	--	--	--
TCLP Extractables Surrogates										
chrysene-d12, TCLP	E644	5.0	%	95.8	--	--	--	--	--	--
naphthalene-d8, TCLP	E644	5.0	%	88.4	--	--	--	--	--	--
phenanthrene-d10, TCLP	E644	5.0	%	102	--	--	--	--	--	--
TCLP Metals										
arsenic, TCLP	E444	1.0	mg/L	<1.0	2.5 mg/L	--	--	--	--	--
barium, TCLP	E444	2.5	mg/L	<2.5	100 mg/L	--	--	--	--	--
boron, TCLP	E444	0.50	mg/L	<0.50	500 mg/L	--	--	--	--	--
cadmium, TCLP	E444	0.050	mg/L	<0.050	0.5 mg/L	--	--	--	--	--
chromium, TCLP	E444	0.25	mg/L	<0.25	5 mg/L	--	--	--	--	--
lead, TCLP	E444	0.25	mg/L	<0.25	5 mg/L	--	--	--	--	--
mercury, TCLP	E512	0.0010	mg/L	<0.0010	0.1 mg/L	--	--	--	--	--
pH, TCLP 1st preliminary	EPP444	0.010	pH units	9.99	--	--	--	--	--	--
pH, TCLP 2nd preliminary	EPP444	0.010	pH units	5.57	--	--	--	--	--	--
pH, TCLP extraction fluid initial	EPP444	0.010	pH units	2.86	--	--	--	--	--	--
pH, TCLP final	EPP444	0.010	pH units	5.70	--	--	--	--	--	--
selenium, TCLP	E444	0.10	mg/L	<0.10	1 mg/L	--	--	--	--	--
silver, TCLP	E444	0.050	mg/L	<0.050	5 mg/L	--	--	--	--	--
uranium, TCLP	E444	0.20	mg/L	<0.20	10 mg/L	--	--	--	--	--
TCLP VOCs										
benzene, TCLP	E615B	0.0050	mg/L	<0.0050	0.5 mg/L	--	--	--	--	--
bromodichloromethane, TCLP	E615B	0.10	mg/L	<0.10	--	--	--	--	--	--
bromoform, TCLP	E615B	0.10	mg/L	<0.10	--	--	--	--	--	--
carbon tetrachloride, TCLP	E615B	0.025	mg/L	<0.025	0.5 mg/L	--	--	--	--	--
chlorobenzene, TCLP	E615B	0.025	mg/L	<0.025	8 mg/L	--	--	--	--	--

Analyte	Method	LOR	Unit	WT2223671-001 (Continued)	ONWCR Sch. 4					
TCLP VOCs - Continued										
chloroform, TCLP	E615B	0.10	mg/L	<0.10	10 mg/L	--	--	--	--	--
dibromochloromethane, TCLP	E615B	0.10	mg/L	<0.10	--	--	--	--	--	--
dichlorobenzene, 1,2-, TCLP	E615B	0.025	mg/L	<0.025	20 mg/L	--	--	--	--	--
dichlorobenzene, 1,4-, TCLP	E615B	0.025	mg/L	<0.025	0.5 mg/L	--	--	--	--	--
dichloroethane, 1,2-, TCLP	E615B	0.025	mg/L	<0.025	0.5 mg/L	--	--	--	--	--
dichloroethylene, 1,1-, TCLP	E615B	0.025	mg/L	<0.025	1.4 mg/L	--	--	--	--	--
dichloromethane, TCLP	E615B	0.10	mg/L	<0.10	5 mg/L	--	--	--	--	--
ethylbenzene, TCLP	E615B	0.0050	mg/L	<0.0050	--	--	--	--	--	--
methyl ethyl ketone [MEK], TCLP	E615B	0.10	mg/L	<0.10	200 mg/L	--	--	--	--	--
tetrachloroethylene, TCLP	E615B	0.025	mg/L	<0.025	3 mg/L	--	--	--	--	--
toluene, TCLP	E615B	0.0050	mg/L	<0.0050	2.4 mg/L	--	--	--	--	--
trichloroethylene, TCLP	E615B	0.025	mg/L	<0.025	5 mg/L	--	--	--	--	--
vinyl chloride, TCLP	E615B	0.050	mg/L	<0.050	0.2 mg/L	--	--	--	--	--
xylene, m+p-, TCLP	E615B	0.0050	mg/L	<0.0050	--	--	--	--	--	--
xylene, o-, TCLP	E615B	0.0050	mg/L	<0.0050	--	--	--	--	--	--
xylenes, total, TCLP	E615B	0.0075	mg/L	<0.0075	--	--	--	--	--	--
BTEX, total, TCLP	E615B	0.012	mg/L	<0.012	--	--	--	--	--	--
trihalomethanes [THMs], total, TCLP	E615B	0.20	mg/L	<0.20	--	--	--	--	--	--
bromofluorobenzene, 4-, TCLP	E615B	1.0	%	103	--	--	--	--	--	--
difluorobenzene, 1,4-, TCLP	E615B	1.0	%	102	--	--	--	--	--	--
Hydrocarbons										
F1 (C6-C10)	E581.F1	5.0	mg/kg	<5.0	--	--	--	--	--	--
F2 (C10-C16)	E601.SG-L	10	mg/kg	<10	--	--	--	--	--	--
F3 (C16-C34)	E601.SG-L	50	mg/kg	60	--	--	--	--	--	--
F4 (C34-C50)	E601.SG-L	50	mg/kg	60	--	--	--	--	--	--
F4G-sg	E601.F4G-L	250	mg/kg	620	--	--	--	--	--	--
hydrocarbons, total (C6-C50)	EC581	80	mg/kg	120	--	--	--	--	--	--
chromatogram to baseline at nC50	E601.SG-L		-	NO	--	--	--	--	--	--
bromobenzotrifluoride, 2- (F2-F4 surr)	E601.SG-L	1.0	%	97.4	--	--	--	--	--	--
dichlorotoluene, 3,4-	E581.F1	1.0	%	97.1	--	--	--	--	--	--
Polychlorinated Biphenyls										
polychlorinated biphenyls [PCBs], total, TCLP	E688A	0.00060	mg/L	<0.00060	0.3 mg/L	--	--	--	--	--

Please refer to the General Comments section for an explanation of any qualifiers detected.

No Breaches Found

Key:

ONWCR	Ontario MECP, General Waste Control Regulation No. 347/90
Sch. 4	Schedule 4 Leachate Quality Criteria

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2223671**	Page	: 1 of 10
Client	: **Omni-McCann Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 705 243 5828	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 29-Nov-2022 16:40
PO	: ----	Issue Date	: 08-Dec-2022 16:01
C-O-C number	: 20-1009803		
Sampler	: AC		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] MARCH TCLP	E581.F1	29-Nov-2022	07-Dec-2022	14 days	9 days	✓	07-Dec-2022	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F4G by Gravimetry (Low Level)										
Glass soil jar/Teflon lined cap MARCH TCLP	E601.F4G-L	29-Nov-2022	06-Dec-2022	14 days	8 days	✓	06-Dec-2022	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap MARCH TCLP	E601.SG-L	29-Nov-2022	02-Dec-2022	14 days	4 days	✓	06-Dec-2022	40 days	4 days	✓
Physical Tests : Ignitability (O. Reg. 347/558)										
Glass soil jar/Teflon lined cap MARCH TCLP	E209	29-Nov-2022	----	----	----		03-Dec-2022	30 days	5 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap MARCH TCLP	E144	29-Nov-2022	----	----	----		02-Dec-2022	----	----	
Polychlorinated Biphenyls : PCB Aroclors by GC-MS (TCLP)										
Amber glass/Teflon lined cap MARCH TCLP	E688A	05-Dec-2022	06-Dec-2022	----	----		07-Dec-2022	----	----	
TCLP Extractables : Fluoride by IC (TCLP)										
HDPE [ON MECP] MARCH TCLP	E240.F	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	7 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
TCLP Extractables : Nitrate by IC (TCLP)										
HDPE [ON MECP] MARCH TCLP	E240.NO3	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	7 days	7 days	✓
TCLP Extractables : Nitrite by IC (TCLP)										
HDPE [ON MECP] MARCH TCLP	E240.NO2	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	7 days	7 days	✓
TCLP Extractables : PAHs by GC-MS (TCLP)										
Amber glass/Teflon lined cap (sodium bisulfate) MARCH TCLP	E644	05-Dec-2022	06-Dec-2022	20 days	8 days	✓	07-Dec-2022	40 days	1 days	✓
TCLP Extractables : PCB Aroclors by GC-MS (TCLP)										
Amber glass/Teflon lined cap MARCH TCLP	E688A	05-Dec-2022	06-Dec-2022	20 days	8 days	✓	07-Dec-2022	40 days	1 days	✓
TCLP Extractables : WAD Cyanide (TCLP)										
UV-inhibited HDPE - total (lab preserved) MARCH TCLP	E337A	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	8 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) MARCH TCLP	E512	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	28 days	7 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) MARCH TCLP	E444	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	180 days	7 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 14 day HT (e.g. CN, SVOC, NOx) MARCH TCLP	EPP444	29-Nov-2022	05-Dec-2022	----	----		----	----	----	
TCLP VOCs : VOCs by Headspace GC-MS (TCLP)										
Glass vial (sodium bisulfate) MARCH TCLP	E615B	05-Dec-2022	06-Dec-2022	----	----		06-Dec-2022	14 days	7 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
CCME PHC - F1 by Headspace GC-FID	E581.F1	770811	1	18	5.5	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	768937	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	766036	1	9	11.1	5.0	✓
Fluoride by IC (TCLP)	E240.F	768498	1	5	20.0	5.0	✓
Mercury by CVAAS (TCLP)	E512	768515	1	6	16.6	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	768501	1	6	16.6	5.0	✓
Moisture Content by Gravimetry	E144	765612	1	20	5.0	5.0	✓
Nitrate by IC (TCLP)	E240.NO3	768499	1	5	20.0	5.0	✓
Nitrite by IC (TCLP)	E240.NO2	768500	1	5	20.0	5.0	✓
PAHs by GC-MS (TCLP)	E644	769048	1	3	33.3	5.0	✓
PCB Aroclors by GC-MS (TCLP)	E688A	769058	1	3	33.3	5.0	✓
VOCs by Headspace GC-MS (TCLP)	E615B	768511	1	4	25.0	5.0	✓
WAD Cyanide (TCLP)	E337A	769101	1	6	16.6	5.0	✓
Laboratory Control Samples (LCS)							
CCME PHC - F1 by Headspace GC-FID	E581.F1	770811	1	18	5.5	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	768937	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	766036	1	9	11.1	5.0	✓
Fluoride by IC (TCLP)	E240.F	768498	1	5	20.0	5.0	✓
Mercury by CVAAS (TCLP)	E512	768515	1	6	16.6	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	768501	1	6	16.6	5.0	✓
Moisture Content by Gravimetry	E144	765612	1	20	5.0	5.0	✓
Nitrate by IC (TCLP)	E240.NO3	768499	1	5	20.0	5.0	✓
Nitrite by IC (TCLP)	E240.NO2	768500	1	5	20.0	5.0	✓
PAHs by GC-MS (TCLP)	E644	769048	1	3	33.3	5.0	✓
PCB Aroclors by GC-MS (TCLP)	E688A	769058	1	3	33.3	5.0	✓
VOCs by Headspace GC-MS (TCLP)	E615B	768511	1	4	25.0	5.0	✓
WAD Cyanide (TCLP)	E337A	769101	1	6	16.6	5.0	✓
Method Blanks (MB)							
CCME PHC - F1 by Headspace GC-FID	E581.F1	770811	1	18	5.5	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	768937	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	766036	1	9	11.1	5.0	✓
Fluoride by IC (TCLP)	E240.F	768498	1	5	20.0	5.0	✓
Mercury by CVAAS (TCLP)	E512	768515	1	6	16.6	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	768501	1	6	16.6	5.0	✓
Moisture Content by Gravimetry	E144	765612	1	20	5.0	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Method Blanks (MB) - Continued							
Nitrate by IC (TCLP)	E240.NO3	768499	1	5	20.0	5.0	✓
Nitrite by IC (TCLP)	E240.NO2	768500	1	5	20.0	5.0	✓
PAHs by GC-MS (TCLP)	E644	769048	1	3	33.3	5.0	✓
PCB Aroclors by GC-MS (TCLP)	E688A	769058	1	3	33.3	5.0	✓
VOCs by Headspace GC-MS (TCLP)	E615B	768511	1	4	25.0	5.0	✓
WAD Cyanide (TCLP)	E337A	769101	1	6	16.6	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID	E581.F1	770811	1	18	5.5	5.0	✓
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L	768937	1	6	16.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	766036	1	9	11.1	5.0	✓
Fluoride by IC (TCLP)	E240.F	768498	1	5	20.0	5.0	✓
Mercury by CVAAS (TCLP)	E512	768515	1	6	16.6	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	768501	1	6	16.6	5.0	✓
Nitrate by IC (TCLP)	E240.NO3	768499	1	5	20.0	5.0	✓
Nitrite by IC (TCLP)	E240.NO2	768500	1	5	20.0	5.0	✓
PAHs by GC-MS (TCLP)	E644	769048	1	3	33.3	5.0	✓
PCB Aroclors by GC-MS (TCLP)	E688A	769058	1	3	33.3	5.0	✓
VOCs by Headspace GC-MS (TCLP)	E615B	768511	1	4	25.0	5.0	✓
WAD Cyanide (TCLP)	E337A	769101	1	6	16.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Moisture Content by Gravimetry	E144 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Ignitability (O. Reg. 347/558)	E209 Waterloo - Environmental	Soil/Solid	EPA 1030 (mod)	Ignitability is determined by placing a sample on a ceramic tile and formed into a test strip. One end of the strip is then heated with a torch. Any burn rate for non-metallic samples that exceeds 2.2 mm/sec is considered to have a positive result. For metals, a burn rate of more than 0.17 mm/sec is considered to have a positive result.
Fluoride by IC (TCLP)	E240.F Waterloo - Environmental	Soil/Solid	EPA 1311/EPA 300.1 (mod)	Inorganic anions are analyzed by obtaining an extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311, which is then analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite by IC (TCLP)	E240.NO2 Waterloo - Environmental	Soil/Solid	EPA 1311/EPA 300.1 (mod)	Inorganic anions are analyzed by obtaining an extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311, which is then analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (TCLP)	E240.NO3 Waterloo - Environmental	Soil/Solid	EPA 1311/EPA 300.1 (mod)	Inorganic anions are analyzed by obtaining an extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311, which is then analyzed by Ion Chromatography with conductivity and/or UV detection.
WAD Cyanide (TCLP)	E337A Waterloo - Environmental	Soil/Solid	APHA 4500-CN I (mod)	Weak Acid Dissociable (WAD) cyanide is determined after extraction by Continuous Flow Analyzer (CFA) with in-line distillation followed by colourmetric analysis.
Metals by CRC ICPMS (TCLP)	E444 Waterloo - Environmental	Soil/Solid	EPA 1311/6020B (mod)	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by Collision/Reaction Cell ICPMS.
Mercury by CVAAS (TCLP)	E512 Waterloo - Environmental	Soil/Solid	SW 846 -1311/245.1 CVAA ON TCLP LEACHATE	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by CVAAS.
CCME PHC - F1 by Headspace GC-FID	E581.F1 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
CCME PHCs - F4G by Gravimetry (Low Level)	E601.F4G-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	A portion of the silica gel treated sample extract is filtered and dried at 105°C and the mass of the residual gravimetric heavy hydrocarbons (F4G) is determined gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs by Headspace GC-MS (TCLP)	E615B Waterloo - Environmental	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs by GC-MS (TCLP)	E644 Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by GC-MS.
PCB Aroclors by GC-MS (TCLP)	E688A Waterloo - Environmental	Soil/Solid	EPA 8270E (mod)	PCB Aroclors are analyzed by GC-MS
Nitrate and Nitrite (as N), (TCLP) (Calculation)	EC240.N+N Waterloo - Environmental	Soil/Solid	EPA 300.0	Nitrate and Nitrite (as N) is a calculated parameter. Nitrate and Nitrite (as N) = Nitrite (as N) + Nitrate (as N).
Sum F1 to F4 (C6-C50)	EC581 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Methanol Extraction for Headspace Analysis	EP581 Waterloo - Environmental	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
VOCs Preparation for Headspace Analysis (TCLP)	EP582 Waterloo - Environmental	Soil/Solid	EPA 5021A (mod)	Liquid obtained after the TCLP process is prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 Waterloo - Environmental	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.
PHCs and PAHs Extraction (TCLP)	EP602 Waterloo - Environmental	Soil/Solid	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Pesticides, PCB, and Neutral Extractable Chlorinated Hydrocarbons Extraction (TCLP)	EP661 Waterloo - Environmental	Soil/Solid	EPA 3511 (mod)	Samples are extracted from aqueous sample using an organic solvent liquid-liquid extraction.
TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)	EPP444 Waterloo - Environmental	Soil/Solid	EPA 1311	Preparation of a Toxicity Characteristic Leaching Procedure (TCLP) solid sample involves particle size reduction, homogenization, then determination of appropriate extraction fluid. A measured portion of fresh subsample is placed in an extraction bottle with the appropriate extraction fluid then tumbled in a rotary extractor for 18+/- 2 hours at 23 +/- 2 C. The liquid leachate is filtered to separate from solids then bottled and prepared for analytical tests.
TCLP Leachate Preparation (VOCs)	EPP582 Waterloo - Environmental	Soil/Solid	EPA 1311	An extract produced by the Toxicity Characteristic Leaching Procedure (TCLP) as per EPA 1311.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	: **WT2223671**	Page	: 1 of 14
Client	: Omni-McCann Inc.	Laboratory	: Waterloo - Environmental
Contact	: Daniel Elliot	Account Manager	: Emily Smith
Address	: 1755 Woodward Dr. Suite 200 Ottawa ON Canada K2C 0P9	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	:	Telephone	: +1 519 886 6910
Project	: 0006-0103	Date Samples Received	: 29-Nov-2022 16:40
PO	: ----	Date Analysis Commenced	: 02-Dec-2022
C-O-C number	: 20-1009803	Issue Date	: 08-Dec-2022 16:01
Sampler	: AC 705 243 5828		
Site	: ----		
Quote number	: Project 0006-0103		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Greg Pokocky	Supervisor - Inorganic	Waterloo Inorganics, Waterloo, Ontario
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Waterloo Organics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Jon Fisher	Department Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Niral Patel		Waterloo Centralized Prep, Waterloo, Ontario
Robert Braun	Soils Team Supervisor	Waterloo Inorganics, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 765612)											
WT2223850-018	Anonymous	moisture	----	E144	0.25	%	9.21	9.23	0.212%	20%	----
TCLP Extractables (QC Lot: 768498)											
WT2223671-001	MARCH TCLP	fluoride, TCLP	16984-48-8	E240.F	10	mg/L	<10	<10	0	Diff <2x LOR	----
TCLP Extractables (QC Lot: 768499)											
WT2223671-001	MARCH TCLP	nitrate (as N), TCLP	14797-55-8	E240.NO3	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
TCLP Extractables (QC Lot: 768500)											
WT2223671-001	MARCH TCLP	nitrite (as N), TCLP	14797-65-0	E240.NO2	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
TCLP Extractables (QC Lot: 769048)											
WT2223671-001	MARCH TCLP	acenaphthene, TCLP	83-32-9	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		acenaphthylene, TCLP	208-96-8	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		acridine, TCLP	260-94-6	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		anthracene, TCLP	120-12-7	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		benz(a)anthracene, TCLP	56-55-3	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		benzo(a)pyrene, TCLP	50-32-8	E644	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	----
		benzo(b+j)fluoranthene, TCLP	----	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		benzo(g,h,i)perylene, TCLP	191-24-2	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		benzo(k)fluoranthene, TCLP	207-08-9	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		chrysene, TCLP	218-01-9	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		dibenz(a,h)anthracene, TCLP	53-70-3	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		fluoranthene, TCLP	206-44-0	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		fluorene, TCLP	86-73-7	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		indeno(1,2,3-c,d)pyrene, TCLP	193-39-5	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		naphthalene, TCLP	91-20-3	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		phenanthrene, TCLP	85-01-8	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
		pyrene, TCLP	129-00-0	E644	5.0	µg/L	<0.0050 mg/L	<5.0	0	Diff <2x LOR	----
TCLP Extractables (QC Lot: 769058)											
WT2223671-001	MARCH TCLP	Aroclor 1016, TCLP	12674-11-2	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1221, TCLP	11104-28-2	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
TCLP Extractables (QC Lot: 769058) - continued											
WT2223671-001	MARCH TCLP	Aroclor 1232, TCLP	11141-16-5	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1242, TCLP	53469-21-9	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1248, TCLP	12672-29-6	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1254, TCLP	11097-69-1	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1260, TCLP	11096-82-5	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1262, TCLP	37324-23-5	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
		Aroclor 1268, TCLP	11100-14-4	E688A	0.20	µg/L	<0.00020 mg/L	<0.20	0	Diff <2x LOR	----
TCLP Extractables (QC Lot: 769101)											
WT2223671-001	MARCH TCLP	cyanide, weak acid dissociable, TCLP	----	E337A	0.10	mg/L	<0.10	<0.10	0	Diff <2x LOR	----
TCLP Metals (QC Lot: 768501)											
WT2223833-001	Anonymous	arsenic, TCLP	7440-38-2	E444	1.0	mg/L	<1.0	<1.0	0	Diff <2x LOR	----
		barium, TCLP	7440-39-3	E444	2.5	mg/L	<2.5	<2.5	0	Diff <2x LOR	----
		boron, TCLP	7440-42-8	E444	0.50	mg/L	<0.50	<0.50	0	Diff <2x LOR	----
		cadmium, TCLP	7440-43-9	E444	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		chromium, TCLP	7440-47-3	E444	0.25	mg/L	<0.25	<0.25	0	Diff <2x LOR	----
		lead, TCLP	7439-92-1	E444	0.25	mg/L	<0.25	<0.25	0	Diff <2x LOR	----
		selenium, TCLP	7782-49-2	E444	0.10	mg/L	<0.10	<0.10	0	Diff <2x LOR	----
		silver, TCLP	7440-22-4	E444	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		uranium, TCLP	7440-61-1	E444	0.20	mg/L	<0.20	<0.20	0	Diff <2x LOR	----
TCLP Metals (QC Lot: 768515)											
WT2223833-001	Anonymous	mercury, TCLP	7439-97-6	E512	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
TCLP VOCs (QC Lot: 768511)											
TY2204664-001	Anonymous	benzene, TCLP	71-43-2	E615B	5.0	µg/L	0.0137 mg/L	13.0	0.7	Diff <2x LOR	----
		bromodichloromethane, TCLP	75-27-4	E615B	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----
		bromoform, TCLP	75-25-2	E615B	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----
		carbon tetrachloride, TCLP	56-23-5	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		chlorobenzene, TCLP	108-90-7	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		chloroform, TCLP	67-66-3	E615B	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----
		dibromochloromethane, TCLP	124-48-1	E615B	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-, TCLP	95-50-1	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-, TCLP	106-46-7	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
TCLP VOCs (QC Lot: 768511) - continued											
TY2204664-001	Anonymous	dichloroethane, 1,2-, TCLP	107-06-2	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		dichloroethylene, 1,1-, TCLP	75-35-4	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		dichloromethane, TCLP	75-09-2	E615B	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----
		ethylbenzene, TCLP	100-41-4	E615B	5.0	µg/L	0.0680 mg/L	64.2	5.74%	50%	----
		methyl ethyl ketone [MEK], TCLP	78-93-3	E615B	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----
		tetrachloroethylene, TCLP	127-18-4	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		toluene, TCLP	108-88-3	E615B	5.0	µg/L	0.221 mg/L	210	5.35%	50%	----
		trichloroethylene, TCLP	79-01-6	E615B	25	µg/L	<0.025 mg/L	<25	0	Diff <2x LOR	----
		vinyl chloride, TCLP	75-01-4	E615B	50	µg/L	<0.050 mg/L	<50	0	Diff <2x LOR	----
		xylene, m+p-, TCLP	179601-23-1	E615B	5.0	µg/L	0.291 mg/L	276	5.33%	50%	----
		xylene, o-, TCLP	95-47-6	E615B	5.0	µg/L	0.167 mg/L	159	4.85%	50%	----
Hydrocarbons (QC Lot: 766036)											
WT2223868-001	Anonymous	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	13	17	4	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	219	220	2	Diff <2x LOR	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	400	457	13.4%	40%	----
Hydrocarbons (QC Lot: 768937)											
WT2223868-001	Anonymous	F4G-sg	----	E601.F4G-L	250	mg/kg	1400	1840	27.2%	40%	----
Hydrocarbons (QC Lot: 770811)											
WT2224339-001	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0 µg/g	<5.0	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 765612)						
moisture	----	E144	0.25	%	<0.25	----
TCLP Extractables (QCLot: 768498)						
fluoride, TCLP	16984-48-8	E240.F	10	mg/L	<10	----
TCLP Extractables (QCLot: 768499)						
nitrate (as N), TCLP	14797-55-8	E240.NO3	5	mg/L	<5.0	----
TCLP Extractables (QCLot: 768500)						
nitrite (as N), TCLP	14797-65-0	E240.NO2	5	mg/L	<5.0	----
TCLP Extractables (QCLot: 769048)						
acenaphthene, TCLP	83-32-9	E644	5	µg/L	<5.0	----
acenaphthylene, TCLP	208-96-8	E644	5	µg/L	<5.0	----
acridine, TCLP	260-94-6	E644	5	µg/L	<5.0	----
anthracene, TCLP	120-12-7	E644	5	µg/L	<5.0	----
benz(a)anthracene, TCLP	56-55-3	E644	5	µg/L	<5.0	----
benzo(a)pyrene, TCLP	50-32-8	E644	0.5	µg/L	<0.50	----
benzo(b+j)fluoranthene, TCLP	----	E644	5	µg/L	<5.0	----
benzo(g,h,i)perylene, TCLP	191-24-2	E644	5	µg/L	<5.0	----
benzo(k)fluoranthene, TCLP	207-08-9	E644	5	µg/L	<5.0	----
chrysene, TCLP	218-01-9	E644	5	µg/L	<5.0	----
dibenz(a,h)anthracene, TCLP	53-70-3	E644	5	µg/L	<5.0	----
fluoranthene, TCLP	206-44-0	E644	5	µg/L	<5.0	----
fluorene, TCLP	86-73-7	E644	5	µg/L	<5.0	----
indeno(1,2,3-c,d)pyrene, TCLP	193-39-5	E644	5	µg/L	<5.0	----
naphthalene, TCLP	91-20-3	E644	5	µg/L	<5.0	----
phenanthrene, TCLP	85-01-8	E644	5	µg/L	<5.0	----
pyrene, TCLP	129-00-0	E644	5	µg/L	<5.0	----
TCLP Extractables (QCLot: 769058)						
Aroclor 1016, TCLP	12674-11-2	E688A	0.2	µg/L	<0.20	----
Aroclor 1221, TCLP	11104-28-2	E688A	0.2	µg/L	<0.20	----
Aroclor 1232, TCLP	11141-16-5	E688A	0.2	µg/L	<0.20	----
Aroclor 1242, TCLP	53469-21-9	E688A	0.2	µg/L	<0.20	----
Aroclor 1248, TCLP	12672-29-6	E688A	0.2	µg/L	<0.20	----
Aroclor 1254, TCLP	11097-69-1	E688A	0.2	µg/L	<0.20	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
TCLP Extractables (QCLot: 769058) - continued						
Aroclor 1260, TCLP	11096-82-5	E688A	0.2	µg/L	<0.20	----
Aroclor 1262, TCLP	37324-23-5	E688A	0.2	µg/L	<0.20	----
Aroclor 1268, TCLP	11100-14-4	E688A	0.2	µg/L	<0.20	----
TCLP Extractables (QCLot: 769101)						
cyanide, weak acid dissociable, TCLP	----	E337A	0.1	mg/L	<0.10	----
TCLP Metals (QCLot: 768501)						
arsenic, TCLP	7440-38-2	E444	1	mg/L	<1.0	----
barium, TCLP	7440-39-3	E444	2.5	mg/L	<2.5	----
boron, TCLP	7440-42-8	E444	0.5	mg/L	<0.50	----
cadmium, TCLP	7440-43-9	E444	0.05	mg/L	<0.050	----
chromium, TCLP	7440-47-3	E444	0.25	mg/L	<0.25	----
lead, TCLP	7439-92-1	E444	0.25	mg/L	<0.25	----
selenium, TCLP	7782-49-2	E444	0.1	mg/L	<0.10	----
silver, TCLP	7440-22-4	E444	0.05	mg/L	<0.050	----
uranium, TCLP	7440-61-1	E444	0.2	mg/L	<0.20	----
TCLP Metals (QCLot: 768515)						
mercury, TCLP	7439-97-6	E512	0.001	mg/L	<0.0010	----
TCLP VOCs (QCLot: 768511)						
benzene, TCLP	71-43-2	E615B	5	µg/L	<5.0	----
bromodichloromethane, TCLP	75-27-4	E615B	100	µg/L	<100	----
bromoform, TCLP	75-25-2	E615B	100	µg/L	<100	----
carbon tetrachloride, TCLP	56-23-5	E615B	25	µg/L	<25	----
chlorobenzene, TCLP	108-90-7	E615B	25	µg/L	<25	----
chloroform, TCLP	67-66-3	E615B	100	µg/L	<100	----
dibromochloromethane, TCLP	124-48-1	E615B	100	µg/L	<100	----
dichlorobenzene, 1,2-, TCLP	95-50-1	E615B	25	µg/L	<25	----
dichlorobenzene, 1,4-, TCLP	106-46-7	E615B	25	µg/L	<25	----
dichloroethane, 1,2-, TCLP	107-06-2	E615B	25	µg/L	<25	----
dichloroethylene, 1,1-, TCLP	75-35-4	E615B	25	µg/L	<25	----
dichloromethane, TCLP	75-09-2	E615B	100	µg/L	<100	----
ethylbenzene, TCLP	100-41-4	E615B	5	µg/L	<5.0	----
methyl ethyl ketone [MEK], TCLP	78-93-3	E615B	100	µg/L	<100	----
tetrachloroethylene, TCLP	127-18-4	E615B	25	µg/L	<25	----
toluene, TCLP	108-88-3	E615B	5	µg/L	<5.0	----
trichloroethylene, TCLP	79-01-6	E615B	25	µg/L	<25	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
TCLP VOCs (QCLot: 768511) - continued						
vinyl chloride, TCLP	75-01-4	E615B	50	µg/L	<50	----
xylene, m+p-, TCLP	179601-23-1	E615B	5	µg/L	<5.0	----
xylene, o-, TCLP	95-47-6	E615B	5	µg/L	<5.0	----
Hydrocarbons (QCLot: 766036)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Hydrocarbons (QCLot: 768937)						
F4G-sg	----	E601.F4G-L	250	mg/kg	<250	----
Hydrocarbons (QCLot: 770811)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 765612)									
moisture	----	E144	0.25	%	50 %	100	90.0	110	----
TCLP Extractables (QCLot: 768498)									
fluoride, TCLP	16984-48-8	E240.F	10	mg/L	1 mg/L	90.9	70.0	130	----
TCLP Extractables (QCLot: 768499)									
nitrate (as N), TCLP	14797-55-8	E240.NO3	5	mg/L	2.5 mg/L	92.9	70.0	130	----
TCLP Extractables (QCLot: 768500)									
nitrite (as N), TCLP	14797-65-0	E240.NO2	5	mg/L	0.5 mg/L	102	70.0	130	----
TCLP Extractables (QCLot: 769048)									
acenaphthene, TCLP	83-32-9	E644	5	µg/L	0.5263 µg/L	99.7	50.0	130	----
acenaphthylene, TCLP	208-96-8	E644	5	µg/L	0.5263 µg/L	101	50.0	130	----
acridine, TCLP	260-94-6	E644	5	µg/L	0.5263 µg/L	126	50.0	140	----
anthracene, TCLP	120-12-7	E644	5	µg/L	0.5263 µg/L	108	50.0	130	----
benz(a)anthracene, TCLP	56-55-3	E644	5	µg/L	0.5263 µg/L	130	50.0	140	----
benzo(a)pyrene, TCLP	50-32-8	E644	0.5	µg/L	0.5263 µg/L	101	60.0	140	----
benzo(b+j)fluoranthene, TCLP	----	E644	5	µg/L	0.5263 µg/L	101	50.0	130	----
benzo(g,h,i)perylene, TCLP	191-24-2	E644	5	µg/L	0.5263 µg/L	129	50.0	140	----
benzo(k)fluoranthene, TCLP	207-08-9	E644	5	µg/L	0.5263 µg/L	103	50.0	150	----
chrysene, TCLP	218-01-9	E644	5	µg/L	0.5263 µg/L	125	50.0	140	----
dibenz(a,h)anthracene, TCLP	53-70-3	E644	5	µg/L	0.5263 µg/L	120	50.0	140	----
fluoranthene, TCLP	206-44-0	E644	5	µg/L	0.5263 µg/L	128	50.0	130	----
fluorene, TCLP	86-73-7	E644	5	µg/L	0.5263 µg/L	112	50.0	130	----
indeno(1,2,3-c,d)pyrene, TCLP	193-39-5	E644	5	µg/L	0.5263 µg/L	138	50.0	140	----
naphthalene, TCLP	91-20-3	E644	5	µg/L	0.5263 µg/L	86.2	50.0	130	----
phenanthrene, TCLP	85-01-8	E644	5	µg/L	0.5263 µg/L	117	50.0	130	----
pyrene, TCLP	129-00-0	E644	5	µg/L	0.5263 µg/L	128	50.0	140	----
TCLP Extractables (QCLot: 769058)									
Aroclor 1016, TCLP	12674-11-2	E688A	0.2	µg/L	0.2 µg/L	105	65.0	130	----
Aroclor 1221, TCLP	11104-28-2	E688A	0.2	µg/L	0.2 µg/L	105	65.0	130	----
Aroclor 1232, TCLP	11141-16-5	E688A	0.2	µg/L	0.2 µg/L	105	65.0	130	----
Aroclor 1242, TCLP	53469-21-9	E688A	0.2	µg/L	0.2 µg/L	105	65.0	130	----
Aroclor 1248, TCLP	12672-29-6	E688A	0.2	µg/L	0.2 µg/L	78.6	65.0	130	----
Aroclor 1254, TCLP	11097-69-1	E688A	0.2	µg/L	0.2 µg/L	108	65.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
TCLP Extractables (QCLot: 769058) - continued									
Aroclor 1260, TCLP	11096-82-5	E688A	0.2	µg/L	0.2 µg/L	96.6	65.0	130	----
Aroclor 1262, TCLP	37324-23-5	E688A	0.2	µg/L	0.2 µg/L	96.6	65.0	130	----
Aroclor 1268, TCLP	11100-14-4	E688A	0.2	µg/L	0.2 µg/L	96.6	65.0	130	----
TCLP Extractables (QCLot: 769101)									
cyanide, weak acid dissociable, TCLP	----	E337A	0.1	mg/L	6.25 mg/L	111	70.0	130	----
TCLP Metals (QCLot: 768501)									
arsenic, TCLP	7440-38-2	E444	1	mg/L	0.05 mg/L	104	70.0	130	----
barium, TCLP	7440-39-3	E444	2.5	mg/L	0.0125 mg/L	102	70.0	130	----
boron, TCLP	7440-42-8	E444	0.5	mg/L	0.05 mg/L	99.3	70.0	130	----
cadmium, TCLP	7440-43-9	E444	0.05	mg/L	0.005 mg/L	98.8	70.0	130	----
chromium, TCLP	7440-47-3	E444	0.25	mg/L	0.0125 mg/L	100	70.0	130	----
lead, TCLP	7439-92-1	E444	0.25	mg/L	0.025 mg/L	102	70.0	130	----
selenium, TCLP	7782-49-2	E444	0.1	mg/L	0.05 mg/L	101	70.0	130	----
silver, TCLP	7440-22-4	E444	0.05	mg/L	0.005 mg/L	97.2	70.0	130	----
uranium, TCLP	7440-61-1	E444	0.2	mg/L	0.00025 mg/L	105	70.0	130	----
TCLP Metals (QCLot: 768515)									
mercury, TCLP	7439-97-6	E512	0.001	mg/L	0.0001 mg/L	93.1	70.0	130	----
TCLP VOCs (QCLot: 768511)									
benzene, TCLP	71-43-2	E615B	5	µg/L	250 µg/L	101	70.0	130	----
bromodichloromethane, TCLP	75-27-4	E615B	100	µg/L	250 µg/L	104	70.0	130	----
bromoform, TCLP	75-25-2	E615B	100	µg/L	250 µg/L	94.6	70.0	130	----
carbon tetrachloride, TCLP	56-23-5	E615B	25	µg/L	250 µg/L	108	60.0	140	----
chlorobenzene, TCLP	108-90-7	E615B	25	µg/L	250 µg/L	100	70.0	130	----
chloroform, TCLP	67-66-3	E615B	100	µg/L	250 µg/L	101	70.0	130	----
dibromochloromethane, TCLP	124-48-1	E615B	100	µg/L	250 µg/L	98.5	70.0	130	----
dichlorobenzene, 1,2-, TCLP	95-50-1	E615B	25	µg/L	250 µg/L	102	70.0	130	----
dichlorobenzene, 1,4-, TCLP	106-46-7	E615B	25	µg/L	250 µg/L	105	70.0	130	----
dichloroethane, 1,2-, TCLP	107-06-2	E615B	25	µg/L	250 µg/L	92.8	70.0	130	----
dichloroethylene, 1,1-, TCLP	75-35-4	E615B	25	µg/L	250 µg/L	93.8	70.0	130	----
dichloromethane, TCLP	75-09-2	E615B	100	µg/L	250 µg/L	97.3	70.0	130	----
ethylbenzene, TCLP	100-41-4	E615B	5	µg/L	250 µg/L	102	70.0	130	----
methyl ethyl ketone [MEK], TCLP	78-93-3	E615B	100	µg/L	250 µg/L	97.1	50.0	150	----
tetrachloroethylene, TCLP	127-18-4	E615B	25	µg/L	250 µg/L	108	70.0	130	----
toluene, TCLP	108-88-3	E615B	5	µg/L	250 µg/L	102	70.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
TCLP VOCs (QCLot: 768511) - continued									
trichloroethylene, TCLP	79-01-6	E615B	25	µg/L	250 µg/L	106	70.0	130	----
vinyl chloride, TCLP	75-01-4	E615B	50	µg/L	250 µg/L	78.3	60.0	130	----
xylene, m+p-, TCLP	179601-23-1	E615B	5	µg/L	500 µg/L	102	70.0	130	----
xylene, o-, TCLP	95-47-6	E615B	5	µg/L	250 µg/L	99.8	70.0	130	----
Hydrocarbons (QCLot: 766036)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	883.825 mg/kg	77.3	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1385.22 mg/kg	71.0	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	797.55 mg/kg	80.0	70.0	130	----
Hydrocarbons (QCLot: 768937)									
F4G-sg	----	E601.F4G-L	250	mg/kg	1298.6 mg/kg	70.6	70.0	130	----
Hydrocarbons (QCLot: 770811)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.1875 mg/kg	120	80.0	120	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
TCLP Extractables (QCLot: 768498)										
WT2223671-001	MARCH TCLP	fluoride, TCLP	16984-48-8	E240.F	17 mg/L	20 mg/L	86.3	50.0	150	----
TCLP Extractables (QCLot: 768499)										
WT2223671-001	MARCH TCLP	nitrate (as N), TCLP	14797-55-8	E240.NO3	48.5 mg/L	50 mg/L	96.9	50.0	150	----
TCLP Extractables (QCLot: 768500)										
WT2223671-001	MARCH TCLP	nitrite (as N), TCLP	14797-65-0	E240.NO2	9.6 mg/L	10 mg/L	96.2	50.0	150	----
TCLP Extractables (QCLot: 769048)										
WT2223671-001	MARCH TCLP	acenaphthene, TCLP	83-32-9	E644	0.5 µg/L	0.5263 µg/L	102	50.0	140	----
		acenaphthylene, TCLP	208-96-8	E644	0.5 µg/L	0.5263 µg/L	104	50.0	140	----
		acridine, TCLP	260-94-6	E644	0.6 µg/L	0.5263 µg/L	123	50.0	140	----
		anthracene, TCLP	120-12-7	E644	0.6 µg/L	0.5263 µg/L	108	50.0	140	----
		benz(a)anthracene, TCLP	56-55-3	E644	0.7 µg/L	0.5263 µg/L	132	50.0	140	----
		benzo(a)pyrene, TCLP	50-32-8	E644	0.56 µg/L	0.5263 µg/L	106	50.0	140	----
		benzo(b+j)fluoranthene, TCLP	----	E644	0.6 µg/L	0.5263 µg/L	105	50.0	140	----
		benzo(g,h,i)perylene, TCLP	191-24-2	E644	0.7 µg/L	0.5263 µg/L	138	50.0	140	----
		benzo(k)fluoranthene, TCLP	207-08-9	E644	0.6 µg/L	0.5263 µg/L	106	50.0	140	----
		chrysene, TCLP	218-01-9	E644	0.6 µg/L	0.5263 µg/L	120	50.0	140	----
		dibenz(a,h)anthracene, TCLP	53-70-3	E644	0.5 µg/L	0.5263 µg/L	101	50.0	140	----
		fluoranthene, TCLP	206-44-0	E644	0.7 µg/L	0.5263 µg/L	129	50.0	140	----
		fluorene, TCLP	86-73-7	E644	0.6 µg/L	0.5263 µg/L	115	50.0	140	----
		indeno(1,2,3-c,d)pyrene, TCLP	193-39-5	E644	0.7 µg/L	0.5263 µg/L	139	50.0	140	----
		naphthalene, TCLP	91-20-3	E644	0.5 µg/L	0.5263 µg/L	91.2	50.0	140	----
		phenanthrene, TCLP	85-01-8	E644	0.6 µg/L	0.5263 µg/L	119	50.0	140	----
		pyrene, TCLP	129-00-0	E644	0.7 µg/L	0.5263 µg/L	127	50.0	140	----
TCLP Extractables (QCLot: 769058)										
WT2223671-001	MARCH TCLP	Aroclor 1016, TCLP	12674-11-2	E688A	0.22 µg/L	0.2 µg/L	109	50.0	150	----
		Aroclor 1221, TCLP	11104-28-2	E688A	0.22 µg/L	0.2 µg/L	109	50.0	150	----
		Aroclor 1232, TCLP	11141-16-5	E688A	0.22 µg/L	0.2 µg/L	109	50.0	150	----
		Aroclor 1242, TCLP	53469-21-9	E688A	0.22 µg/L	0.2 µg/L	108	50.0	150	----
		Aroclor 1248, TCLP	12672-29-6	E688A	0.22 µg/L	0.2 µg/L	109	50.0	150	----
		Aroclor 1254, TCLP	11097-69-1	E688A	0.19 µg/L	0.2 µg/L	93.1	50.0	150	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
TCLP Extractables (QCLot: 769058) - continued										
WT2223671-001	MARCH TCLP	Aroclor 1260, TCLP	11096-82-5	E688A	0.15 µg/L	0.2 µg/L	73.7	50.0	150	----
		Aroclor 1262, TCLP	37324-23-5	E688A	0.15 µg/L	0.2 µg/L	74.9	50.0	150	----
		Aroclor 1268, TCLP	11100-14-4	E688A	0.15 µg/L	0.2 µg/L	74.9	50.0	150	----
TCLP Extractables (QCLot: 769101)										
WT2223671-001	MARCH TCLP	cyanide, weak acid dissociable, TCLP	----	E337A	6.71 mg/L	6.25 mg/L	107	50.0	140	----
TCLP Metals (QCLot: 768501)										
WT2223833-001	Anonymous	arsenic, TCLP	7440-38-2	E444	9.5 mg/L	10 mg/L	94.8	50.0	140	----
		barium, TCLP	7440-39-3	E444	12.8 mg/L	12.5 mg/L	102	50.0	140	----
		boron, TCLP	7440-42-8	E444	9.75 mg/L	10 mg/L	97.5	50.0	140	----
		cadmium, TCLP	7440-43-9	E444	9.97 mg/L	10 mg/L	99.7	50.0	140	----
		chromium, TCLP	7440-47-3	E444	10.3 mg/L	10 mg/L	103	50.0	140	----
		lead, TCLP	7439-92-1	E444	10.2 mg/L	10 mg/L	102	50.0	140	----
		selenium, TCLP	7782-49-2	E444	10.3 mg/L	10 mg/L	103	50.0	140	----
		silver, TCLP	7440-22-4	E444	0.060 mg/L	0.1 mg/L	60.1	50.0	140	----
		uranium, TCLP	7440-61-1	E444	10.3 mg/L	10 mg/L	103	50.0	140	----
TCLP Metals (QCLot: 768515)										
WT2223833-001	Anonymous	mercury, TCLP	7439-97-6	E512	0.0027 mg/L	0.003 mg/L	90.0	50.0	140	----
TCLP VOCs (QCLot: 768511)										
TY2204664-001	Anonymous	benzene, TCLP	71-43-2	E615B	264 µg/L	250 µg/L	106	50.0	140	----
		bromodichloromethane, TCLP	75-27-4	E615B	290 µg/L	250 µg/L	117	50.0	140	----
		bromoform, TCLP	75-25-2	E615B	280 µg/L	250 µg/L	114	50.0	140	----
		carbon tetrachloride, TCLP	56-23-5	E615B	268 µg/L	250 µg/L	107	50.0	140	----
		chlorobenzene, TCLP	108-90-7	E615B	258 µg/L	250 µg/L	103	50.0	140	----
		chloroform, TCLP	67-66-3	E615B	270 µg/L	250 µg/L	107	50.0	140	----
		dibromochloromethane, TCLP	124-48-1	E615B	280 µg/L	250 µg/L	112	50.0	140	----
		dichlorobenzene, 1,2-, TCLP	95-50-1	E615B	255 µg/L	250 µg/L	102	50.0	140	----
		dichlorobenzene, 1,4-, TCLP	106-46-7	E615B	256 µg/L	250 µg/L	102	50.0	140	----
		dichloroethane, 1,2-, TCLP	107-06-2	E615B	273 µg/L	250 µg/L	109	50.0	140	----
		dichloroethylene, 1,1-, TCLP	75-35-4	E615B	230 µg/L	250 µg/L	92.2	50.0	140	----
		dichloromethane, TCLP	75-09-2	E615B	270 µg/L	250 µg/L	108	50.0	140	----
		ethylbenzene, TCLP	100-41-4	E615B	245 µg/L	250 µg/L	97.8	50.0	140	----
		methyl ethyl ketone [MEK], TCLP	78-93-3	E615B	310 µg/L	250 µg/L	124	50.0	140	----
		tetrachloroethylene, TCLP	127-18-4	E615B	260 µg/L	250 µg/L	104	50.0	140	----
		toluene, TCLP	108-88-3	E615B	243 µg/L	250 µg/L	97.2	50.0	140	----

Sub-Matrix: **Soil/Solid**

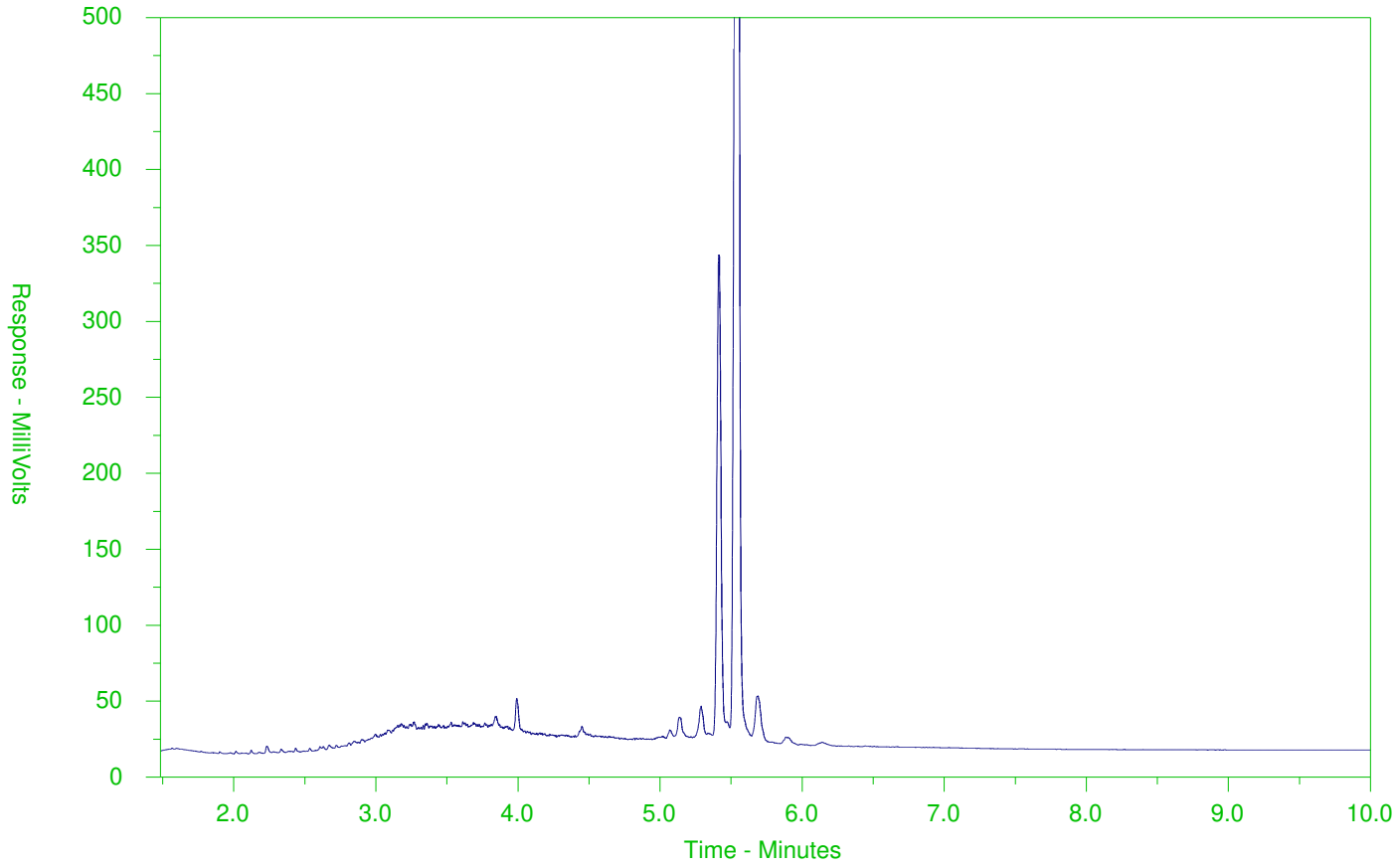
					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
TCLP VOCs (QCLot: 768511) - continued										
TY2204664-001	Anonymous	trichloroethylene, TCLP	79-01-6	E615B	271 µg/L	250 µg/L	108	50.0	140	----
		vinyl chloride, TCLP	75-01-4	E615B	193 µg/L	250 µg/L	77.1	50.0	140	----
		xylene, m+p-, TCLP	179601-23-1	E615B	488 µg/L	500 µg/L	97.6	50.0	140	----
		xylene, o-, TCLP	95-47-6	E615B	249 µg/L	250 µg/L	99.5	50.0	140	----
Hydrocarbons (QCLot: 766036)										
WT2223868-001	Anonymous	F2 (C10-C16)	----	E601.SG-L	593 mg/kg	1040.925 mg/kg	74.3	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	921 mg/kg	1783.035 mg/kg	67.4	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	686 mg/kg	802.11 mg/kg	112	60.0	140	----
Hydrocarbons (QCLot: 768937)										
WT2223868-001	Anonymous	F4G-sg	----	E601.F4G-L	ND mg/kg	1298.6 mg/kg	ND	60.0	140	E
Hydrocarbons (QCLot: 770811)										
WT2224339-001	Anonymous	F1 (C6-C10)	----	E581.F1	55.9 mg/kg	62.5 mg/kg	106	60.0	140	----

Qualifiers

Qualifier	Description
E	*Matrix Spike recovery outside ALS DQO due to heterogeneous analyte background in sample.*

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2223671-001-E601.SG-L
Client Sample ID: MARCH TCLP



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
← Diesel/Jet Fuels →			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009803

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Page 1

Environmental Division Waterloo

Work Order Reference WT2223671

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Omni-McCann Inc.	Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Daniel Elliot	Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:	613-857-6943	☒ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
	Company address below will appear on the final report	Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
Street:	1755 Woodward Drive, unit 200	Email 1 or Fax dan@omnimccann.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
City/Province:	Ottawa/ON	Email 2 antonia@omnimccann.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additi may apply to rush requests on weekends, statutory holidays and non-rou
Postal Code:	K2C 0P9	Email 3 kristina@omnimccann.com	Date and Time Required for all E&P TATs:
Invoice To	Same as Report To ☒ YES ☐ NO	Invoice Recipients	For all tests with rush TATs requested, please c
	Copy of Invoice with Report ☐ YES ☒ NO	Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	
Company:		Email 1 or Fax invoicing@omnimccann.com	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	90026	AFE/Cost Center:	PO#
Job #:	000G0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):	WT2223671	ALS Contact:	Sampler: Antonia Cuss

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	TCLP metals	TCLP inorganics	TCLP PAH	TCLP PCB	TCLP VOC	Flashpoint	TPH (total petroleum hydrocarbons)	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	MARCH TCLP	29-Nov-22		soil	3	X	X	X	X	X	X	X			

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	Reg. 558
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☑ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
9.3				5.2			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Antonia Cuss	Date: 29-NOV-22	Time: 16:40	Received by:	Date: 11/29/22	Time: 1654	Received by:	Date: 1-Dec 22	Time: 10:08

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

T-233

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1009809

Canada Toll Free: 1 800 668 9878

Page 1 of 1

www.alsglobal.com

Environmental Division Waterloo

Work Order Reference WT2223671

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Omni - McCann Inc.	Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Daniel Elliot	Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:	613-857-4936	☒ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
	Company address below will appear on the final report	Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
Street:	1755 Woodward Dr. - Unit 200	Email 1 or Fax Dan@omnimccann.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
City/Province:	Ottawa, ON	Email 2 Kristina@omnimccann.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional may apply to rush requests on weekends, statutory holidays and non-routine
Postal Code:	K2C 0B9	Email 3 Antonia@omnimccann.com	Date and Time Required for all E&P TATs:
Invoice To	Same as Report To ☒ YES ☐ NO	Invoice Recipients	For all tests with rush TATs requested, please conta
	Copy of Invoice with Report ☐ YES ☒ NO	Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	Analysis Requ
Company:		Email 1 or Fax Invoicing@omnimccann.com	Indicate Filtered (F), Preserved (P) or Filtered and P
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q90026	AFE/Cost Center:	PO#
Job #:	0006-0103	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):	WT2223671	ALS Contact: Eric Dobbins	Sampler: DE

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	P	TPH F1	SAMPLES ON HOLD	EXTENDED STORAGE REQU	SUSPECTED HAZARD (see n
	MARCH TCLP	05-DEC-22	-	Soil	2		X			
	PLEASE ADD TO: WT22-3671									

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	Reg. 558
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☒ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments Identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C					FINAL COOLER TEMPERATURES °C				
14.2					6.4				

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: Daniel Elliot	Date: 5-Dec-22	Time: 16:42	Received by: Gaston P.	Date: 12/5/22	Time: 16:45	Received by: AP	Date: 7 Dec 22	Time: 09:15

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

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1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

VS199

MANIFEST

Movement Document

DO NOT SIGN OR MAIL THIS DOCUMENT TO ONTARIO'S MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS.

This document is a paper copy of information submitted to Ontario's Hazardous Waste Program Registry. All parties on the manifest are required to submit information to the Registry as required by R.R.O. 1990, Reg. 347.

Manifest Number
MN-000008070

A Generator/Consignor

Registration Number: **ON5431332**

Company Name: **March and Main Developments Inc.**

Mailing Address: **109 Atlantic Ave., Unit 308B, Toronto, Ontario M6K1X4 Canada**

Email: **dan@omnimccann.com**

Generating Site Address: **603 March Rd, Ottawa, Ontario K2K2M5 Canada**

Phone: **6138574936 ext.**

Generator Signature: **SIGNED**
Jan 09, 2023 11:28 AM

Name: **Daniel Elliot**

Phone: **(613)857-4936**

B Carrier

Registration Number: **A860302**

Company Name: **DRAIN-ALL LTD.**

Mailing Address: **1611 LIVERPOOL CRT., GLOUCESTER, Ontario, K1B4L1**

Email: **delsie@gflenv.com**

Phone: **6137391070 ext. 301**

Vehicle Information (Trailer / Rail Car)

(1) Registration Number: **PA11398**

Province/State: **Ontario**

(2) Registration Number:

Province/State:

Carrier Signature: **SIGNED**
Jan 09, 2023 11:27 AM

Name: **Stephan Morin**

Phone: **(613)739-1070**

C Receiver/Consignee

FINAL

Registration Number: **A460722**

Company Name: **DRAIN-ALL LTD.**

Mailing Address: **2705 Stevenage Drive, Ottawa, Ontario, K1G 3N2**

Email: **delsie@gflenv.com**

Receiving Site Address: **2705 STEVENAGE DRIVE OTTAWA, Ontario K1G3N2 Canada**

Phone: **6137391070 ext. 301**

Receiver Signature: **SIGNED**
Jan 11, 2023 09:31 AM

Name: **Michael Shuker**

Phone: **(613)739-1070 ext. 314**

Shipment Details

Shipment Date: **Jan 09 2023 (Anticipated)**

Scheduled Arrival Date: **Jan 09 2023**

24-HOUR NUMBER: **ext**

Special Handling

Additional TDG Information

Additional information

Waste Information

Waste Number	DG	UN Number	Shipping Name	Class (Sub. Class)	Packing Group	Toxic by Inhalation	Quantity Shipped	Number of Packages	Packaging Code	Physical State	Quantity Received	Comments	Handling Code	Accepted/ Refused
(1) 241 L		NA	PURGE WATER	NA	NA		2200.000 L	3	07 - Other	Liquid	2100.000 L		01 - Storage	ACCEPTED

I certify that the information contained in Part A is correct and complete. I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Daniel Elliot
Shipper's name (Print)

Manifest Status
Completed

APPENDIX E

Survey of Phase Two Property

TOPOGRAPHICAL PLAN OF SURVEY OF
BLOCK 1
REGISTERED PLAN 4M-1104
AND PART OF LOT 9
CONCESSION 3
Geographic Township of March
OTTAWA

Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

Scale 1 : 500

20 15 10 5 0 10 20 Metres

Metric

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

Surveyor's Certificate

I CERTIFY THAT:

1. This survey and plan are correct and in accordance with the Surveys Act and the Surveyors Act and the regulations made under them.
2. The survey was completed on the 30th day of June, 2022.

July 13, 2022
Date

J. E. Anderson
Ontario Land Surveyor

Notes & Legend

	Denotes	
—□—	-	Survey Monument Planted
—■—	-	Survey Monument Found
SIB	-	Standard Iron Bar
SSIB	-	Short Standard Iron Bar
IB	-	Iron Bar
CC	-	Cut Cross
CP	-	Concrete Pin
IBø	-	Round Iron Bar
S&W	-	Spike & Washer
SSIB*	-	Short Standard Iron Bar
IB*	-	Iron Bar
(WIT)	-	Witness
Meas.	-	Meas.ured
(AOG)	-	Annis, O'Sullivan, Vollebekk Ltd.
(PI)	-	Registered Plan 4M-1104
(P2)	-	Plan 4R-12735
(P3)	-	Plan by (AOG) dated March 23, 2009
(P4)	-	Plan 4R-24509
(P5)	-	Plan 5R-9546
(P6)	-	Plan by (AOG) dated June 6, 1989
(P7)	-	Plan 5R-11923
(P8)	-	Plan SR-12441
(P9)	-	Plan by (AOG) dated July 9, 1998
(P10)	-	Plan 5R-11714
(P11)	-	Plan SR-4309
(P12)	-	Plan 5R-10165
(P13)	-	Plan 5R-10522
(P14)	-	Plan 4R-12588
(P15)	-	(AOG) Plan dated July 6, 1999
	-	Deciduous Tree
	-	Coniferous Tree
FH	-	Fire Hydrant
WV	-	Water Valve
SP	-	Water Stand Post
MH-S	-	Maintenance Hole (Sanitary)
MH-B	-	Maintenance Hole (Bell Telephone)
MH-T	-	Maintenance Hole (Traffic)
MH-H	-	Maintenance Hole (Hydro)
MH	-	Maintenance Hole (Unidentified)
VC	-	Valve Chamber (Watermain)
CB	-	Catch Basin
CSP	-	Corrugated Steel Pipe
CPP	-	Corrugated Plastic Pipe
GM	-	Gas Meter
HH	-	Handhole
TB-B	-	Bell Terminal Box
TB-C	-	Cable Terminal Box
TB-T	-	Traffic Terminal Box
TB	-	Unidentified Terminal Box
TSP	-	Traffic Signal Post
B	-	Bollard
M-W	-	Monitoring Well
S	-	Sign
CLF	-	Chain Link Fence
BF	-	Board Fence
IF	-	Iron Fence
	-	Gate
PO-M	-	Metal Pole
TSL	-	Traffic Light
LS	-	Light Standard
FP	-	Flag Pole
Ø	-	Diameter
+65.00	-	Location of Elevations
+65.00	-	Top of Concrete Curb Elevation
C/L	-	Centreline

Distances shown on this plan are ground distances and can be converted to grid distances by multiplying by the combined scale factor of 0.999912.

Bearings are grid, derived from Can-Net 2016 Real Time Network GPS observations referenced to Specified Control Points 01919680037 and 01919791051, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

For bearing comparisons, a rotation of 0°23'00" counter-clockwise was applied to bearings on plans P1 and P4, a rotation of 0°25'10" counter-clockwise was applied to bearings on plan P8 and a rotation of 0°24'40" counter-clockwise was applied to bearings on plan P11.

SITE AREA = 55524 m²

UTILITY NOTES

1. This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
2. Only visible surface utilities were located.
3. A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

ELEVATION NOTES

1. Elevations shown are geodetic and are referred to the CGVD28 geodetic datum and are related to the Ministry of Natural Resources monument number 0011968U001 having an elevation of 78.945.
2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
V-27756

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29 (3).

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@aovltd.com

Ontario Land Surveyors

Job No. 22967-29 Lib Cad/MRM RPMM-1104 T F JP

APPENDIX F

City of Ottawa Response to Use of Non-Potable Groundwater Standards

Dan Elliot

From: Dan Elliot
Sent: March 29, 2023 12:04 PM
To: michel.kearney@ottawa.ca
Subject: Request for Non-Potable Status 555 to 603 March Road
Attachments: March Road Properties - Plan of Survey.pdf

Hello Michel,

We are preparing a Phase Two ESA for a City re-zoning application and eventual RSC filing for municipal addresses 555, 591, 595, and 603 March Road in Kanata, see the attached survey plan. We would like to apply non-potable groundwater conditions to the site and require acknowledgement that the City of Ottawa does not have an objection under O.Reg. 153/04. Can you provide a written response on the City's behalf?

Thank you,

Daniel Elliot, P.Geo. (ON)
Regional Director, ON/Arctic
T: 343.809.3368 | **M**: 613.857.4936

Omni-McCann
Geoscience | Engineering | Environment