2020 ANNUAL GROUNDWATER MONITORING REPORT

76 HURON STREET
RIPLEY, ONTARIO

Prepared for:
Township of Huron-Kinloss
21 Queen Street
Ripley, Ontario N0G 2R0

Prepared by:
Jeffrey Environmental Consultants Inc.
616 Bluenose Court
Waterloo, Ontario N2K 4C5

March 2021

Reference No. 1227(18)

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

1.1 PURPOSE OF REPORT

This 2020 Annual Groundwater Monitoring Report has been prepared by Jeffrey Environmental Consultants Inc. (JEC) for the Township of Huron-Kinloss. This 2020 Annual Groundwater Monitoring Report provides a summary of the groundwater monitoring activities that were conducted by JEC in 2020 to monitor the petroleum hydrocarbon contamination previously identified at and in the vicinity of the property located at 76 Huron Street in Ripley, Ontario (Site).

This 2020 Annual Groundwater Monitoring Report has been prepared in accordance with the Contaminant Management Plan dated September 2012 which was previously submitted to the Ontario Ministry of the Environment, Conservation and Parks (MECP), formerly the Ontario Ministry of the Environment and Climate Change (MOECC), under cover dated September 19, 2012 as well as in accordance with the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014. All groundwater monitoring activities were conducted in accordance with the procedures and protocols specified in Ontario Regulation 153 as well as the Technical Standards & Safety Authority (TSSA) Fuel Safety Division's document entitled "Environmental Management Protocol for Fuel Handling Sites in Ontario, TSSA EMP-2012, August 2012".

1.2 SITE SETTING

The Site is located in a mixed commercial, community and residential land use area on the east side of Huron Street in Ripley, Ontario. The Site was formerly operated as an automobile service station and repair garage. One 4,500 L underground storage tank (UST), one 10,000 L UST, one 15,000 L UST and an associated pump island were located north of the garage building at the Site and were formerly used to store gasoline and diesel fuel. The USTs and the garage building have been removed from the Site. Topography at the Site is generally flat and the ground surface is covered with grass and gravel. Groundwater in the vicinity of the Site is used as a potable water source and two municipal water supply wells are located immediately south of the Site.

1.3 BACKGROUND INFORMATION

The three USTs and the associated pump island were previously removed from the Site by Rathwell & Rathwell Ltd. of Brucefield, Ontario on August 26, 2008 in accordance with Ontario Regulation 217 and the Liquid Fuels Handling Code. It is noted that Rathwell & Rathwell Ltd. is a PM-2 contractor licensed by the Fuel Safety Division of the TSSA under Ontario Regulation 216.

Following removal of the three USTs and the associated pump island, confirmation soil and groundwater sampling was completed at the Site by JEC in accordance with the TSSA Fuel Safety Division protocols specified in the document entitled "Environmental Management Protocol for Fuel Handling Sites in Ontario, May 2007". Laboratory analytical results for the nine confirmation soil samples and one confirmation groundwater sample collected from the excavation indicated that concentrations of petroleum hydrocarbons in both soil and groundwater were above the applicable Ontario Regulation 153 Table 2 Standards for commercial land use, full depth remediation, medium/fine textured soil and potable groundwater conditions as specified in the document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act".

The UST Removal Report summarizing the UST removal and environmental assessment activities completed at the Site on August 26, 2008 was provided to TSSA under cover dated September 19, 2008 pursuant to the requirements of the Liquid Fuels Handling Code. A copy of the notification letter, without the UST Removal Report, was also provided to the MOECC and the Township of Huron-Kinloss pursuant to the requirements of the Liquid Fuels Handling Code. The UST Removal Report concluded that delineation of the petroleum hydrocarbon impacts to both soil and groundwater in the vicinity of the former USTs and associated former pump island at the Site should be completed in accordance with Ontario Regulation 217, the Liquid Fuels Handling Code and TSSA Fuel Safety Division protocols specified in the document entitled "Environmental Management Protocol for Fuel Handling Sites in Ontario, May 2007".

An Environmental Assessment to delineate the petroleum hydrocarbon impacts to soil and groundwater in the vicinity of the former USTs and the associated former pump island at the Site was completed by JEC between August 2, 2011 and August 24, 2011. The Environmental Assessment activities included the installation of a total of seven monitoring wells and three

boreholes as well as the collection of subsurface soil samples and groundwater samples for laboratory analysis of petroleum hydrocarbons.

Laboratory analytical results for the subsurface soil samples collected by JEC as part of the Environmental Assessment activities indicated that petroleum hydrocarbon soil contamination was detected at concentrations exceeding the applicable Ontario Regulation 153 Table 2 Soil Standards in the vicinity of the former USTs at the Site at depths ranging to approximately 4.6 m and also in the vicinity of the former pump island at the Site at depths ranging to approximately 2.3 m; however, the extent of off-Site petroleum hydrocarbon soil contamination exceeding the applicable Ontario Regulation 153 Table 2 Standards beneath Huron Street and Jesse Street had not been determined. The petroleum hydrocarbon soil contamination encountered at the Site was determined to be characteristically non-hazardous based on a comparison to the Ontario Regulation 558 Leachate Criteria and the soil was determined to be suitable for disposal as a non-hazardous solid industrial waste in accordance with Ontario Regulation 347.

Laboratory analytical results for the groundwater samples collected by JEC as part of the Environmental Assessment activities indicated that petroleum hydrocarbon groundwater contamination was detected at concentrations exceeding the applicable Ontario Regulation 153 Table 2 Groundwater Standards in the vicinity of the former USTs and associated former pump island at the Site. However, the extent of off-Site petroleum hydrocarbon groundwater contamination exceeding the applicable Ontario Regulation 153 Table 2 Standards beneath Huron Street and Jesse Street had not been determined.

The results of the Environmental Assessment activities were summarized in the Environmental Assessment Report prepared by JEC and dated August 2011. The Environmental Assessment Report concluded that the off-Site extent of the petroleum hydrocarbon soil and groundwater contamination detected in the vicinity of the former USTs and associated former pump island at the Site should be delineated beneath Huron Street and Jesse Street in accordance with the Environmental Protection Act, Ontario Regulation 217, the Liquid Fuels Handling Code and TSSA Fuel Safety Division protocols specified in the document entitled “Environmental Management Protocol for Fuel Handling Sites in Ontario, May 2007”. The Environmental Assessment Report also concluded that the Environmental Assessment Report should be provided to the MOECC in accordance with the notification requirements specified in the Environmental Protection Act.

The Environmental Assessment Report was subsequently provided to MOECC. In a letter to Heinisch Service Centre Limited dated September 23, 2011, MOECC requested a plan to delineate the off-Site extent of the petroleum hydrocarbon soil and groundwater contamination beneath Huron Street and Jesse Street.

On-Site soil remediation activities were completed at the Site between October 13, 2011 and October 19, 2011. The on-Site soil remediation activities included the excavation of a total of 139 trucks loads of petroleum impacted soil for off-Site transportation and disposal at the Township of Huron-Kinloss' Huron Landfill located near Ripley, Ontario in accordance with Ontario Regulation 347. In addition, a total of 5,967 L of petroleum impacted groundwater was transported from the Site by Canflow Environmental Services Corp. of Petrolia, Ontario for disposal at the Canflow Environmental Services Corp. facility located in Petrolia, Ontario in accordance with Ontario Regulation 347. Laboratory analytical results for the 32 confirmation soil samples collected from the base and sidewalls of the excavation at the Site indicated that the on-Site petroleum hydrocarbon soil contamination above the applicable Ontario Regulation 153 Table 2 Soil Standards had been remediated. However, the data also indicated remaining off-Site petroleum hydrocarbon soil contamination above the applicable Ontario Regulation 153 Table 2 Soil Standards beneath Huron Street and Jesse Street as well beneath the property south of the Site.

The results of the on-Site soil remediation activities were summarized in the On-Site Soil Remediation Report prepared by JEC and dated November 2011. The On-Site Soil Remediation Report concluded that on-Site soil remediation activities were complete as confirmation soil analytical results indicated that the on-Site petroleum hydrocarbon soil contamination above the applicable Ontario Regulation 153 Table 2 Soil Standards had been remediated; monitoring wells removed during the soil remediation activities should be re-installed at the Site and a minimum of two rounds of confirmation groundwater sampling and analysis should be completed to confirm that on-Site groundwater concentrations are below the applicable Ontario Regulation 153 Table 2 Groundwater Standards in accordance with Ontario Regulation 153; and the extent of off-Site petroleum hydrocarbon soil and groundwater contamination should be delineated beneath Huron Street and Jesse Street as well beyond the south property boundary of the Site in accordance with the Environmental Protection Act, Ontario Regulation 217, the Liquid Fuels Handling Code and TSSA Fuel Safety Division protocols specified in the document entitled “Environmental Management Protocol for Fuel

Handling Sites in Ontario, May 2007". A copy of the On-Site Soil Remediation Report was provided to the MOECC under cover dated November 21, 2011.

On-Site confirmation groundwater monitoring activities were subsequently completed at the Site by JEC between November 7, 2011 and November 8, 2011. A total of five additional monitoring wells were installed at the Site and confirmation groundwater samples were collected from each of the two existing monitoring wells and the five additional monitoring wells. Laboratory analytical results for the confirmation groundwater samples collected by JEC at the Site indicated that the on-Site petroleum hydrocarbon groundwater contamination previously detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standards had been remediated. However, the data also indicated remaining off-Site petroleum hydrocarbon groundwater contamination above the applicable Ontario Regulation 153 Table 2 Groundwater Standards beneath Huron Street and Jesse Street.

The results of the on-Site confirmation groundwater monitoring activities were summarized in the Confirmation Groundwater Report prepared by JEC and dated November 2011. The Confirmation Groundwater Report concluded that the on-Site petroleum hydrocarbon groundwater contamination previously detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standards has been remediated. The Confirmation Groundwater Monitoring Report also concluded that an additional round of confirmation groundwater sampling and analysis should be completed to confirm that on-Site groundwater concentrations are below the applicable Ontario Regulation 153 Table 2 Groundwater Standards in accordance with Ontario Regulation 153; and that the extent of off-Site petroleum hydrocarbon groundwater contamination should be delineated beneath Huron Street and Jesse Street in accordance with the Environmental Protection Act, Ontario Regulation 217, the Liquid Fuels Handling Code and TSSA Fuel Safety Division protocols specified in the document entitled "Environmental Management Protocol for Fuel Handling Sites in Ontario, May 2007".

A copy of the Confirmation Groundwater Report was provided to the MOECC under cover dated November 23, 2011. In a subsequent letter to Heinisch Service Centre Limited dated December 6, 2011, MOECC requested delineation the off-Site extent of the petroleum hydrocarbon soil and groundwater contamination beneath Huron Street and Jesse Street as well as notification of affected property owners. It is noted that ownership of the Site was transferred from Heinisch Service Centre Limited to the Township of Huron-Kinloss in late November 2011.

The Off-Site Contaminant Delineation Work Plan detailing the scope of work to delineate the off-Site extent of the petroleum hydrocarbon soil and groundwater contamination beneath Huron Street and Jesse Street was prepared by JEC and provided to the MOECC under cover dated January 19, 2012. The Off-Site Contaminant Delineation Work Plan activities were subsequently conducted at and in the vicinity of the Site between January 25, 2012 and February 1, 2012. A summary of the data collected during these activities was provided to the MOECC in correspondence dated February 24, 2012. The Off-Site Contaminant Delineation Work Plan data indicated that the extent of off-Site petroleum hydrocarbon soil and groundwater contamination had not been delineated.

Based upon a review of the data collected as part of the Off-Site Contaminant Delineation Work Plan, MOECC in correspondence to the Township of Huron-Kinloss dated February 27, 2012, requested a plan to further delineate the extent of the off-Site petroleum hydrocarbon soil and groundwater contamination. As a result, an Off-Site Contaminant Delineation Work Plan – Addendum 1 detailing the scope of work to further delineate the off-Site extent of the petroleum hydrocarbon soil and groundwater contamination beneath Huron Street and Jesse Street was prepared by JEC and was provided to the MOECC under cover dated March 8, 2012. The Off-Site Contaminant Delineation Work Plan – Addendum 1 activities were subsequently conducted at and in the vicinity of the Site between March 20, 2012 and April 23, 2012.

The results of the Off-Site Contaminant Delineation Work Plan and Off-Site Contaminant Delineation Work Plan – Addendum 1 activities completed at and in the vicinity of the Site between January 25, 2012 and April 23, 2012 were summarized in the Off-Site Contaminant Delineation Report dated June 2012. Comments on the Off-Site Contaminant Delineation Report were subsequently provided by the MOECC in two letters to the Township of Huron-Kinloss dated July 27, 2012 and September 7, 2012. In the letters, MOECC acknowledged the review of the Off-Site Contaminant Delineation Report and requested the development of a conceptual site model as well as a proposed plan for the management and/or remediation of the petroleum hydrocarbon contamination detected in the vicinity of the Site. These requirements were also discussed in detail during a meeting with MOECC and the Township of Huron-Kinloss representatives on August 22, 2012.

A Contaminant Management Plan dated September 2012 was subsequently prepared by JEC on behalf of the Township of Huron-Kinloss and was submitted to MOECC under cover dated September 19, 2012. In a letter dated October 16, 2012, MOECC acknowledged review of and general concurrence with the proposed Contaminant Management Plan activities. MOECC recommended that the frequency of groundwater monitoring activities proposed in the Contaminant Management Plan be increased from annually to semi-annually until it is demonstrated that the petroleum hydrocarbon contamination in the vicinity of the Site has reached equilibrium conditions.

Baseline Groundwater Monitoring activities were conducted at the Site on October 24 and 25, 2012 in accordance with the Contaminant Management Plan. In addition, a liquid petroleum hydrocarbons (LPH) horizontal collection trench was installed downgradient and north of the Site on November 14, 2012 in accordance with the Contaminant Management Plan. The results of the Baseline Groundwater Monitoring activities were summarized in the Baseline Groundwater Monitoring Report dated December 2012 prepared by JEC on behalf of the Township of Huron-Kinloss and submitted to MOECC under cover dated December 17, 2012. In a letter to the Township of Huron-Kinloss dated January 31, 2013, MOECC acknowledged review of the Baseline Groundwater Monitoring Report and recommended that monitoring wells MW-1, MW-2, MW-22 and MW-29 could be removed from the monitoring program; monitoring wells MW-15, MW-20 and MW-21 should stay in the monitoring program for at least two more semi-annual monitoring events; and that monitoring wells MW-23, MW-27 and MW-30 should remain in the monitoring program.

The results of the first Semi-Annual Groundwater Monitoring activities including LPH collection and disposal conducted at the Site between December 5, 2012 and April 22, 2013 were summarized in the Semi-Annual Groundwater Monitoring Report dated June 2013 prepared by JEC on behalf of the Township of Huron-Kinloss. The Semi-Annual Groundwater Monitoring Report dated June 2013 was submitted to MOECC by the Township of Huron-Kinloss in June 2013.

The results of the second Semi-Annual Groundwater Monitoring activities conducted at the Site between June 4, 2013 and October 13, 2013 were summarized in the Semi-Annual Groundwater Monitoring Report dated November 2013 prepared by JEC on behalf of the Township of Huron-Kinloss. The Semi-Annual Groundwater Monitoring Report dated

November 2013 was submitted to MOECC by the Township of Huron-Kinloss in November 2013.

The data summarized in the Semi-Annual Groundwater Monitoring Report dated November 2013 as well as a focused groundwater monitoring well network for future groundwater monitoring activities was discussed with MOECC on January 31, 2014. As a result, a proposed focused monitoring well network along with a rationale for the selected network was provided to MOECC by JEC, on behalf of the Township of Huron-Kinloss, on February 18, 2014. The proposed monitoring well network included annual groundwater monitoring of 17 monitoring wells and abandonment of 15 monitoring wells (including 2 monitoring wells that were previously abandoned during previous on-Site soil remediation activities in October 2011) in accordance with Ontario Regulation 903.

Based on a review of the Semi-Annual Groundwater Monitoring Report dated November 2013 as well as the February 18, 2014 proposed focused monitoring well network/rationale, MOECC in a letter to the Township of Huron-Kinloss dated May 27, 2014 indicated that the proposed focused monitoring well network of 17 monitoring wells was acceptable subject to the continued monitoring of 2 additional monitoring wells (i.e., MW-4R and MW-5R). In subsequent correspondence dated May 28, 2014, MOECC indicated that the 19 monitoring wells should be sampled on a semi-annual basis with the results summarized and evaluated in an annual report.

Groundwater monitoring activities conducted at the Site in 2014 including semi-annual groundwater monitoring and monitoring well abandonments (i.e., well materials removed/borehole sealed with bentonite) were summarized by JEC, on behalf of the Township of Huron-Kinloss, in the 2014 Annual Groundwater Monitoring Report dated February 2015. The 2014 Annual Groundwater Monitoring Report concluded that Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MOECC by the Township of Huron-Kinloss in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

Groundwater monitoring activities conducted at the Site in 2015 including semi-annual groundwater monitoring were summarized by JEC, on behalf of the Township of Huron-Kinloss, in the 2015 Annual Groundwater Monitoring Report dated March 2016. The 2015 Annual Groundwater Monitoring Report concluded that Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MOECC by the Township of Huron-Kinloss in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

Groundwater monitoring activities conducted at the Site in 2016 including semi-annual groundwater monitoring were summarized by JEC, on behalf of the Township of Huron-Kinloss, in the 2016 Annual Groundwater Monitoring Report dated March 2017. The 2016 Annual Groundwater Monitoring Report concluded that Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MOECC by the Township of Huron-Kinloss in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

Groundwater monitoring activities conducted at the Site in 2017 including semi-annual groundwater monitoring were summarized by JEC, on behalf of the Township of Huron-Kinloss, in the 2017 Annual Groundwater Monitoring Report dated March 2018. The 2017 Annual Groundwater Monitoring Report concluded that Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MOECC by the Township of Huron-Kinloss in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

The 2017 Annual Groundwater Monitoring Report dated March 2018 was provided to MOECC by JEC on behalf of the Township of Huron-Kinloss on March 6, 2018. Subsequent comments were received from MECP in correspondence to the Township of Huron-Kinloss dated August 3, 2018 confirming the that Contaminant Management Plan activities should continue

to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MECP.

Groundwater monitoring activities conducted at the Site in 2018 including semi-annual groundwater monitoring were summarized by JEC, on behalf of the Township of Huron-Kinloss, in the 2018 Annual Groundwater Monitoring Report dated March 2019. The 2018 Annual Groundwater Monitoring Report concluded that Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MECP by the Township of Huron-Kinloss in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

The 2018 Annual Groundwater Monitoring Report dated March 2019 was provided to MECP by JEC on behalf of the Township of Huron-Kinloss on March 28, 2019.

Groundwater monitoring activities conducted at the Site in 2019 including semi-annual groundwater monitoring were summarized by JEC, on behalf of the Township of Huron-Kinloss, in the 2019 Annual Groundwater Monitoring Report dated March 2020. The 2019 Annual Groundwater Monitoring Report concluded that Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MECP by the Township of Huron-Kinloss in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

The 2019 Annual Groundwater Monitoring Report dated March 2020 was provided to MECP by JEC on behalf of the Township of Huron-Kinloss on March 26, 2020.

1.4 ORGANIZATION OF REPORT

This 2020 Annual Groundwater Monitoring Report is organized into the following major sections and supporting appendices:

- Section 1.0 presents the purpose, background information, previous environmental assessment activities, organization and limitations of the 2020 Annual Groundwater Monitoring Report;

- Section 2.0 presents a summary of the activities that were completed and the data that was collected as part of the groundwater monitoring activities at and in the vicinity of the Site in 2020;

- Section 3.0 presents an evaluation of the data that was collected as part of the groundwater monitoring activities completed at and in the vicinity of the Site in 2020;

- Section 4.0 presents a summary of Site conditions and conclusions based on an evaluation of the data that was collected as part of the groundwater monitoring activities completed at and in the vicinity of the Site in 2020; and

- Section 5.0 presents certification of the 2020 Annual Groundwater Monitoring Report.

1.5 LIMITATIONS

This 2020 Annual Groundwater Monitoring Report has been prepared by JEC for the Township of Huron-Kinloss. This 2020 Annual Groundwater Monitoring Report documents the groundwater monitoring activities that were completed and provides an evaluation of the analytical data that was collected at and in the vicinity of the Site by JEC in 2020.

This 2020 Annual Groundwater Monitoring Report provides the data that was collected at specific locations at and in the vicinity of the Site and these data may not represent conditions at other areas at and in the vicinity of the Site. JEC relied on all information obtained from all parties as being accurate unless contradicted by written documentation or field observations. Environmental liability associated with the Site is not transferred to JEC as a result of the groundwater monitoring activities. It is also noted that JEC does not have any material interest, direct or indirect, in the Site or with the Township of Huron-Kinloss.

2.0 SUMMARY OF MONITORING ACTIVITIES

2.1 SCOPE

The following scope of groundwater monitoring activities were completed by JEC at and in the vicinity of the Site in 2020:

March 26, 27 and 30, 2020

- Completion of headspace monitoring for volatile organic compounds (VOCs) and explosive gases (% LEL) in 19 monitoring wells and 1 gas probe located at and in the vicinity of the Site using a MiniRAE 2000 photoionization detector (PID) and a QRAE+ explosive gas meter;

- Collection of one round of static groundwater elevations and liquid petroleum hydrocarbons (LPH) monitoring in 19 monitoring wells located at and in the vicinity of the Site;

- Well purging and stabilization of 19 monitoring wells located at and in the vicinity of the Site using dedicated Waterra tubing and peristaltic pump purging techniques;

March 31, 2020

- Collection of water samples from the two municipal water supply wells located in the vicinity of the Site for laboratory analysis of PHC F1 through F4 and BTEX;

April 3, 2020

- Collection of groundwater samples from 19 monitoring wells located at and in the vicinity of the Site using dedicated Waterra tubing and peristaltic pump purging techniques for laboratory analysis of petroleum hydrocarbons (PHC F1 through F4) and benzene, toluene, ethylbenzene and xylenes (BTEX);

October 13 and 14, 2020

- Completion of headspace monitoring for VOCs and explosive gases (% LEL) in 19 monitoring wells and 1 gas probe located at and in the vicinity of the Site using a MiniRAE 2000 PID and a QRAE+ explosive gas meter;

- Collection of one round of static groundwater elevations and LPH monitoring in 19 monitoring wells located at and in the vicinity of the Site;

- Well purging and stabilization of 19 monitoring wells located at and in the vicinity of the Site using dedicated Waterra tubing and peristaltic pump purging techniques;

October 26, 2020

- Collection of groundwater samples from 19 monitoring wells located at and in the vicinity of the Site using dedicated Waterra tubing and peristaltic pump purging techniques for laboratory analysis of PHC F1 through F4 and BTEX; and

- Collection of water samples from the two municipal water supply wells located in the vicinity of the Site for laboratory analysis of PHC F1 through F4 and BTEX;

2.2 PROCEDURES AND PROTOCOLS

All groundwater monitoring activities were conducted by JEC and all groundwater and municipal water supply well samples collected at and in the vicinity of the Site were analyzed by ALS Laboratory Group of Waterloo, Ontario. All laboratory analyses were completed by ALS Laboratory Group in accordance with the procedures and protocols specified in Ontario Regulation 153.

2.3 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

A total of 19 monitoring wells located at and in the vicinity of the Site were purged and stabilized by JEC on March 27 and 30, 2020 and on October 13 and 14, 2020 using peristaltic pump and dedicated Waterra tubing purging techniques to facilitate the collection of groundwater samples at these locations. The locations of the monitoring wells (i.e., MW-3R, MW-4R, MW-5R, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, MW-19, MW-23, MW-25, MW-26, MW-27, MW-28, MW-30 and MW-32) are shown on Figure 2.1. It is noted that the monitoring well network was comprised of the 19 monitoring wells specified in MOECC's letter to the Township of Huron-Kinloss dated May 27, 2014. The field parameters of pH, temperature, conductivity, dissolved oxygen, total dissolved solids and ORP were measured with a Quanta Hydrolab water quality meter during purging to ensure that the well had stabilized so that a representative groundwater sample could be collected. It is noted that the Quanta Hydrolab water quality meter had been calibrated prior to use at the Site.

The monitoring well purging data are summarized on Table 2.1. It is noted that the monitoring well purging data previously collected at the 19 monitoring wells located at and in the vicinity of the Site is also provided in Table 2.1 for comparison.

Upon stabilization, groundwater samples were collected by JEC on April 3, 2020 and on October 26, 2020 from the 19 monitoring wells located at and in the vicinity of the Site using peristaltic pump and dedicated Waterra tubing sampling techniques for laboratory analyses of PHC F1 through F4 and BTEX. The filled sample jars (i.e., no headspace) were immediately placed on ice inside of a sample cooler. All groundwater samples were hand delivered and submitted under chain-of-custody procedures to ALS Laboratory Group for laboratory analysis. The analytical data reports provided by the laboratory and the completed chain-of-custody forms are provided in Appendix A. A summary of the groundwater analytical data is provided in Table 2.2. It is noted that the groundwater analytical data previously collected at and in the vicinity of the Site is also provided in Table 2.2 for comparison. A summary of the groundwater analytical data collected at and in the vicinity of the Site in April 2020 and October 2020 is also provided on Figures 2.2 and 2.3, respectively.

2.4 MUNICIPAL WATER SUPPLY WELL SAMPLE COLLECTION AND ANALYSIS

Municipal water supply well samples were collected by JEC on March 31, 2020 and October 26, 2020 from the two municipal water supply wells (i.e., PW-1 and PW-2) located in the vicinity of the Site to evaluate potential groundwater infiltration into the municipal water supply system. The samples were collected from the sampling ports located in the Township of Huron-Kinloss treatment building located immediately south of the Site. The locations of the two municipal water supply wells (i.e., PW-1 and PW-2) are shown on Figure 2.1.

Prior to sample collection, the water from the sampling ports was purged to ensure that a representative water sample was collected. The municipal water supply well samples were collected by JEC using a new pair of nitrile gloves. The municipal water supply well samples were collected directly into the laboratory supplied sample containers. The filled sample jars (i.e., no headspace) were immediately placed on ice inside of a sample cooler. The municipal water supply well samples were hand delivered and submitted under chain-of-custody procedures to ALS Laboratory Group for laboratory analyses of PHC F1 through F4 and BTEX. The analytical data reports provided by the laboratory and the completed chain-of-custody forms are provided in Appendix A. A summary of the municipal water supply well

analytical data is provided in Table 2.2. It is noted that the municipal water supply well analytical data previously collected in the vicinity of the Site is also provided in Table 2.2 for comparison.

2.5 GROUNDWATER ELEVATION/LPH MONITORING

Static groundwater elevation and LPH monitoring was completed in the 19 monitoring wells located at and in the vicinity of the Site on March 26, 2020 and October 13, 2020 to determine the horizontal hydraulic gradient and horizontal groundwater flow direction. Static groundwater elevations were obtained by measuring the distance from the top of the well riser to the top of the water column using a Heron Oil/Water Interface Probe. It is noted that the stainless-steel probe of the Heron Oil/Water Interface Probe was thoroughly rinsed with distilled water and detergent between use at each of the monitoring well locations.

A summary of the static groundwater elevation and LPH data collected at and in the vicinity of the Site is provided in Table 2.3. It is noted that the static groundwater elevation and LPH data previously collected at and in the vicinity of the Site is also provided in Table 2.3 for comparison. A summary of the static groundwater elevation data measured in March 2020 and October 2020 is also provided on Figures 2.4 and 2.5, respectively.

2.6 HEADSPACE MONITORING

Headspace monitoring for VOCs and % LEL was completed by JEC on March 26, 2020 and October 13, 2020 in the 19 monitoring wells and 1 gas probe located at and in the vicinity of the Site using a MiniRAE 2000 PID and a QRAE+ explosive gas meter. It is noted that the MiniRAE 2000 PID had been calibrated by JEC with 100 ppm isobutylene span gas and the QRAE+ explosive gas meter had been calibrated by JEC with a four-gas mixture prior to use at the Site. A summary of the headspace monitoring data collected at and in the vicinity of the Site is provided in Table 2.4. It is noted that the headspace monitoring data previously collected at and in the vicinity of the Site is also provided in Table 2.4 for comparison.

3.0 EVALUATION OF SITE CONDITIONS

3.1 REGULATORY CRITERIA

The applicable cleanup criteria used for site remediation in the Province of Ontario is found in the document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (Standards) dated April 15, 2011, published by the MECP. The Standards and the associated Ontario Regulation 153, as amended by Ontario Regulation 511, made under the Environmental Protection Act came into force on July 1, 2011.

The Standards provide generic soil and groundwater quality criteria for various contaminants for agricultural, residential/parkland and industrial/commercial properties for both potable groundwater conditions (i.e., Tables 2 and 4 of the Standards for full depth and stratified remediation, respectively) and non-potable groundwater conditions (i.e., Tables 3 and 5 of the Standards for full depth and stratified remediation, respectively); generic soil and groundwater quality criteria for sensitive properties in both potable groundwater conditions (i.e., Tables 6 and 8 of the Standards for shallow soil conditions and properties within 30 m of a water body, respectively) and non-potable groundwater conditions (i.e., Tables 7 and 9 of the Standards for shallow soil conditions and properties within 30 m of a water body, respectively); and generic background soil and groundwater quality criteria (i.e., Table 1 of the Standards) for various contaminants based on established Province wide background soil concentrations and Provincial Water Quality Objectives for agricultural land use and all other types of property uses. Furthermore, the Standards also provide generic soil criteria for various contaminants in each of the above Tables which are dependent on whether the soil is classified as course textured soil (i.e., > 50% of the soil particles are larger than 75 microns in diameter) or medium/fine textured soil (i.e., > 50% of the soil particles are smaller than 75 microns in diameter).

It is recognized that the Site was used for commercial purposes and that groundwater in the vicinity of the Site is used as a potable water source. It is also noted that the native soil encountered at and in the vicinity of the Site was described by JEC as silt and clay (i.e., ML/CL) in accordance with the USCS. In addition, grain size analytical data previously collected at the Site indicated that 90% of the soil particles are smaller than 75 microns in diameter. As a result, the Ontario Regulation 153 Table 2 Standards for commercial land use, full depth remediation, medium/fine textured soil and potable groundwater conditions have been used by JEC to evaluate the analytical data collected at and in the vicinity of the Site.

Ontario Regulation 169 specifies Ontario Drinking Water Quality Standards for use in the Province of Ontario. However; it is noted that that there are no Ontario Drinking Water Quality Standards for petroleum hydrocarbons (PHC F1 through F4). As a result, the Ontario Regulation 153 Table 2 Groundwater Standards for medium/fine textured soil and potable groundwater conditions, in addition to the Ontario Regulation 169 Ontario Drinking Water Quality Standards, have been used by JEC to evaluate the analytical data collected at the two municipal water supply wells (i.e., PW-1 and PW-2) located in the vicinity of the Site.

3.2 ANALYTICAL PARAMETERS OF CONCERN

PHC F1 (C6-C10), PHC F2 (C10-C16), PHC F3 (C16-C34) and PHC F4 (C34-C50) are the laboratory analytical parameters used to determine potential impacts resulting from petroleum hydrocarbons (i.e., gasoline, diesel fuel, heating oil, motor oil, etc.). Petroleum products are complex mixtures of hundreds of hydrocarbon compounds ranging from light, short-chained organic compounds to heavy, long-chained organic compounds. The exact composition of petroleum products (i.e., gasoline, diesel fuel, heating oil, motor oil, etc.) is dependent upon the source of the crude oil as well as the refining process used to produce the petroleum product.

PHC F1 (C6-C10) is an indicator of contamination associated with the lighter range of petroleum hydrocarbon compounds including gasoline (i.e., primarily a mixture of the C4-C12 range). PHC F2 (C10-C16) and PHC F3 (C16-C34) are indicators of contamination associated with the medium range of petroleum hydrocarbon compounds including diesel (i.e., primarily a mixture of the C10-C19 range) and heating oil (i.e., primarily a mixture of the C9-C16 range). PHC F4 (C34-C50) is an indicator of contamination associated with the heavier range of petroleum hydrocarbon compounds including motor oil (i.e., primarily a mixture of the C15-C50 range). In addition, the volatile organic compounds consisting of benzene, toluene, ethylbenzene and xylenes (BTEX) are also laboratory analytical parameters used to determine potential impacts resulting from primarily light end petroleum hydrocarbons (i.e., gasoline).

3.3 HYDROGEOLOGICAL CONDITIONS

Examination of the static groundwater elevations measured at and in the vicinity of the Site in March 2020, as summarized on Figure 2.4, indicates a general groundwater trough trending south to north along Huron Street. On the east side of Huron Street, the groundwater flow direction is to the west/northwest with a horizontal hydraulic gradient of approximately 0.03 m/m. On the west side of Huron Street, the groundwater flow direction is to the

east/northeast with a horizontal hydraulic gradient of approximately 0.01 m/m. The resulting groundwater trough observed along Huron Street is located in the vicinity of an abandoned water line and the active sanitary sewer line. As previously detailed in the Off-Site Contaminant Delineation Report dated June 2012, the invert elevation of the active sanitary sewer line ranges from 96.17 m ASD at manhole MH-1 to 94.14 m ASD at manhole MH-3 (i.e., approximately 2.0 m below the static groundwater elevation). These observations suggest that the bedding material of the abandoned water line or the bedding material of the active sanitary sewer line along Huron Street is likely acting as a preferential groundwater flow pathway in the vicinity of the Site. These observations are consistent with those previously observed at the Site.

Examination of the static groundwater elevations measured at and in the vicinity of the Site in October 2020, as summarized on Figure 2.5, indicates a general groundwater trough trending south to north along Huron Street. On the east side of Huron Street, the groundwater flow direction is to the west/northwest with a horizontal hydraulic gradient of approximately 0.03 m/m. On the west side of Huron Street, the groundwater flow direction is to the east/northeast with a horizontal hydraulic gradient of approximately 0.01 m/m. The resulting groundwater trough observed along Huron Street is located in the vicinity of an abandoned water line and the active sanitary sewer line. As previously detailed in the Off-Site Contaminant Delineation Report dated June 2012, the invert elevation of the active sanitary sewer line ranges from 96.17 m ASD at manhole MH-1 to 94.14 m ASD at manhole MH-3 (i.e., approximately 2.0 m below the static groundwater elevation). These observations suggest that the bedding material of the abandoned water line or the bedding material of the active sanitary sewer line along Huron Street is likely acting as a preferential groundwater flow pathway in the vicinity of the Site. These observations are consistent with those previously observed at the Site.

3.4 GROUNDWATER CONDITIONS

3.4.1 PHC F1 (C6-C10)

A review of the groundwater analytical data summarized in Table 2.2 indicates that PHC F1 was detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standard of 750 µg/L in two of the monitoring wells sampled by JEC as part of the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020. Specifically, PHC F1 was detected above the applicable Ontario Regulation 153 Groundwater Standard to the north of the

Site along Jesse Street at monitoring well MW-16 (i.e., 8,750 µg/L in April 2020 and 5,240 µg/L in October 2020) and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28 (i.e., 2,530 µg/L in April 2020 and 2,450 µg/L in October 2020).

3.4.2 PHC F2 (C10-C16) and PHC F3 (C16-C34)

A review of the groundwater analytical data summarized in Table 2.2 indicates that PHC F2 was detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standard of 150 µg/L in two of the monitoring wells sampled by JEC as part of the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020. Specifically, PHC F2 was detected above the applicable Ontario Regulation 153 Groundwater Standard to the north of the Site along Jesse Street at monitoring well MW-16 (i.e., 900 µg/L in April 2020 and 760 µg/L in October 2020) and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28 (i.e., 370 µg/L in April 2020 and 310 µg/L in October 2020).

A review of the groundwater analytical data summarized in Table 2.2 indicates that PHC F3 was not detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standard of 500 µg/L in any of the monitoring wells sampled by JEC as part of the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020.

3.4.3 PHC F4 (C34-C50)

A review of the groundwater analytical data summarized in Table 2.2 indicates that PHC F4 was not detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standard of 500 µg/L in any of the monitoring wells sampled by JEC as part of the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020.

3.4.4 BTEX

A review of the groundwater analytical data summarized in Table 2.2 indicates that BTEX were detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standards of 5.0 µg/L, 24 µg/L, 2.4 µg/L, and 300 µg/L, respectively, in three of the monitoring wells sampled by JEC as part of the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020. Specifically, BTEX were detected above the applicable Ontario Regulation 153 Groundwater Standards to the north of the Site along Jesse Street at MW-16, to

the northwest of the Site along Huron Street at monitoring wells MW-17, and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28.

3.4.5 Summary of Groundwater Conditions

A summary of the petroleum hydrocarbon (i.e., PHC F1 to F4 and BTEX) groundwater analytical data collected as part of the groundwater monitoring activities at and in the vicinity of the Site in April 2020 and October 2020, based on a comparison to the applicable Ontario Regulation 153 Table 2 Groundwater Standards, is provided on Figures 2.2 and 2.3, respectively.

A review of the groundwater analytical data summarized on Figures 2.2 and 2.3 indicates that the extent of petroleum hydrocarbon groundwater contamination above the applicable Ontario Regulation 153 Table 2 Groundwater Standards continues to be delineated at and in the vicinity of the Site.

A review of the April 2020 and October 2020 groundwater analytical data summarized on Figures 2.2 and 2.3, respectively, and in Table 2.2 generally indicates light to mid-range petroleum hydrocarbon groundwater contamination (i.e., PHC F1, PHC F2 and/or BTEX) above the applicable Ontario Regulation 153 Groundwater Standards to the north of the Site along Jesse Street at MW-16, to the northwest of the Site along Huron Street at monitoring wells MW-17, and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28.

3.4.6 Groundwater Concentration Trends

A comparison of the extent of petroleum hydrocarbon groundwater contamination shown on Figures 2.2 and 2.3 (i.e., April 2020 and October 2020, respectively) to the extent of contamination previously presented in the 2019 Annual Groundwater Monitoring Report indicates that the areal extent of petroleum hydrocarbon groundwater contamination is generally consistent over time.

Furthermore, a comparison of the petroleum hydrocarbon groundwater concentrations detected at the Site in April 2020 and October 2020 to those previously detected at and in the vicinity of the Site as summarized in Table 2.2 indicates that the petroleum hydrocarbon groundwater concentrations are generally reducing over time.

A summary of the total petroleum hydrocarbon groundwater concentrations (i.e., sum of the detected PHC F1, PHC F2, PHC F3 and PHC F4 concentrations) at monitoring wells MW-16, MW-17 and MW-28 (i.e., the three monitoring wells where petroleum hydrocarbon groundwater contamination was detected in April 2020 and/or October 2020) are shown in blue and linear trend lines are shown in red in Appendix B.

A review of the linear trend lines indicates that total petroleum hydrocarbon concentrations are reducing significantly over time to the north of the Site along Jesse Street in monitoring well MW-16, to the northwest of the Site along Huron Street in monitoring well MW-17, and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28.

These results confirm that the on-Site soil remediation activities conducted at the Site in October 2011 as well as the LPH recovery activities conducted at the Site in December 2012 and January 2013 were effective in reducing petroleum hydrocarbon groundwater concentrations previously detected at and in the vicinity of the Site. These reduction trends in petroleum hydrocarbon groundwater concentrations are expected to continue over time.

3.5 MUNICIPAL WATER SUPPLY WELL CONDITIONS

3.5.1 PHC F1 (C6-C10)

A review of the municipal water supply well analytical data summarized in Table 2.2 indicates that PHC F1 was not detected at a laboratory detection limit of 25 µg/L in the municipal water supply well samples collected by JEC as part of the groundwater monitoring activities conducted in 2020. It is noted that the applicable Ontario Regulation 153 Table 2 Groundwater Standard for PHC F1 is 750 µg/L and that there is no Ontario Drinking Water Quality Standard for PHC F1.

3.5.2 PHC F2 (C10-C16) and PHC F3 (C16-C34)

A review of the municipal water supply well analytical data summarized in Table 2.2 indicates that PHC F2 was not detected above the laboratory detection limit of 100 µg/L in the municipal water supply well samples collected by JEC as part of the groundwater monitoring activities conducted in 2020. It is noted that the applicable Ontario Regulation 153 Table 2 Groundwater Standard for PHC F2 is 150 µg/L and that there is no Ontario Drinking Water Quality Standard for PHC F2.

A review of the municipal water supply well analytical data summarized in Table 2.2 indicates that PHC F3 was not detected above the laboratory detection limit of 250 µg/L in the municipal water supply well samples collected by JEC as part of the groundwater monitoring activities conducted in 2020. It is noted that the applicable Ontario Regulation 153 Table 2 Groundwater Standard for PHC F3 is 500 µg/L and that there is no Ontario Drinking Water Quality Standard for PHC F3.

3.5.3 PHC F4 (C34-C50)

A review of the municipal water supply well analytical data summarized in Table 2.2 indicates that PHC F4 was not detected at a laboratory detection limit of 250 µg/L in the municipal water supply well samples collected by JEC as part of the groundwater monitoring activities conducted in 2020. It is noted that the applicable Ontario Regulation 153 Table 2 Groundwater Standard for PHC F4 is 500 µg/L and that there is no Ontario Drinking Water Quality Standard for PHC F4.

3.5.4 BTEX

A review of the municipal water supply well analytical data summarized in Table 2.2 indicates that BTEX were not detected at laboratory detection limits of 0.50 µg/L, 0.50 µg/L, 0.50 µg/L, and 0.5 µg/L, respectively, in the municipal water supply well samples collected by JEC as part of the groundwater monitoring activities conducted in 2020. It is noted that the applicable Ontario Regulation 153 Table 2 Groundwater Standards for BTEX are 5.0 µg/L, 24 µg/L, 2.4 µg/L, and 300 µg/L, respectively and that the Ontario Drinking Water Quality Standards for for BTEX are 1.0 µg/L, 60 µg/L, 140 µg/L, and 90 µg/L, respectively.

3.5.5 Summary

A review of the municipal water supply well analytical data summarized Table 2.2 indicates that petroleum hydrocarbons (i.e., PHC F1 through F4 and BTEX) were not detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standards or the Ontario Regulation 169 Ontario Drinking Water Quality Standards in the municipal water supply wells located south of the Site during the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020. These data do not indicate infiltration of petroleum hydrocarbon groundwater contamination from the Site into the two municipal water supply wells located south of the Site.

3.6 HEADSPACE CONDITIONS

A review of the of the headspace monitoring data summarized in Table 2.4 indicates VOC headspace concentrations ranging to 14.9 ppm and LEL headspace concentrations of 0% LEL were detected in the 19 monitoring wells during the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020. These data indicate a general decrease in VOC and LEL headspace concentrations compared to the headspace monitoring data previously collected at and in the vicinity of the Site.

3.7 LPH CONDITIONS

A review of the LPH monitoring data measured in the 19 monitoring wells located at and in the vicinity of the Site as summarized in Table 2.3 indicates that LPH was not observed in any of the monitoring wells during the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020. These results confirm that the LPH recovery activities conducted at the Site in December 2012 and January 2013 were effective in reducing the LPH previously observed at and in the vicinity of the Site.

4.0 SUMMARY AND CONCLUSIONS

The following provides a summary of conditions and conclusions based on an evaluation of the analytical data collected as part of the groundwater monitoring activities that were completed by JEC at and in the vicinity of the Site in 2020:

Hydrogeological Conditions

- Static groundwater elevations measured at and in the vicinity of the Site in March 2020 and October 2020, as summarized on Figures 2.4 and 2.5, respectively, indicates a general groundwater trough trending south to north along Huron Street. On the east side of Huron Street, the groundwater flow direction is to the west/northwest with a horizontal hydraulic gradient of approximately 0.03 m/m. On the west side of Huron Street, the groundwater flow direction is to the east/northeast with a horizontal hydraulic gradient of approximately 0.01 m/m. The resulting groundwater trough observed along Huron Street is located in the vicinity of an abandoned water line and the active sanitary sewer line. As previously detailed in the Off-Site Contaminant Delineation Report dated June 2012, the invert elevation of the active sanitary sewer line ranges from 96.17 m ASD at manhole MH-1 to 94.14 m ASD at manhole MH-3 (i.e., approximately 2.0 m below the static groundwater elevation). These observations suggest that the bedding material of the abandoned water line or the bedding material of the active sanitary sewer line along Huron Street is likely acting as a preferential groundwater flow pathway in the vicinity of the Site. These observations are consistent with those previously observed at the Site;

Groundwater Conditions

- A summary of the petroleum hydrocarbon (i.e., PHC F1 to F4 and BTEX) groundwater analytical data collected as part of the groundwater monitoring activities at and in the vicinity of the Site in April 2020 and October 2020, based on a comparison to the applicable Ontario Regulation 153 Table 2 Groundwater Standards, is provided on Figures 2.2 and 2.3, respectively;

- A review of the groundwater analytical data summarized on Figures 2.2 and 2.3 indicates that the extent of petroleum hydrocarbon groundwater contamination above the applicable

Ontario Regulation 153 Table 2 Groundwater Standards continues to be delineated at and in the vicinity of the Site;

- A review of the April 2020 and October 2020 groundwater analytical data summarized on Figures 2.2 and 2.3, respectively, and in Table 2.2 generally indicates light to mid-range petroleum hydrocarbon groundwater contamination (i.e., PHC F1, PHC F2 and/or BTEX) above the applicable Ontario Regulation 153 Groundwater Standards to the north of the Site along Jesse Street at MW-16, to the northwest of the Site along Huron Street at monitoring wells MW-17, and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28;

Groundwater Concentration Trends

- A comparison of the extent of petroleum hydrocarbon groundwater contamination shown on Figures 2.2 and 2.3 (i.e., April 2020 and October 2020, respectively) to the extent of contamination previously presented in the 2019 Annual Groundwater Monitoring Report indicates that the areal extent of petroleum hydrocarbon groundwater contamination is generally consistent over time;

- A comparison of the petroleum hydrocarbon groundwater concentrations detected at the Site in April 2020 and October 2020 to those previously detected at and in the vicinity of the Site as summarized in Table 2.2 indicates that the petroleum hydrocarbon groundwater concentrations are generally reducing over time;

- A summary of the total petroleum hydrocarbon groundwater concentrations (i.e., sum of the detected PHC F1, PHC F2, PHC F3 and PHC F4 concentrations) at monitoring wells MW-16, MW-17 and MW-28 (i.e., the three monitoring wells where petroleum hydrocarbon groundwater contamination was detected in April 2020 and/or October 2020) are shown in blue and linear trend lines are shown in red in Appendix B;

- A review of the linear trend lines indicates that total petroleum hydrocarbon concentrations are reducing significantly over time to the north of the Site along Jesse Street in monitoring well MW-16, to the northwest of the Site along Huron Street in monitoring well MW-17, and at the residential property located north of the Site at 80 Huron Street at monitoring well MW-28;

- These results confirm that the on-Site soil remediation activities conducted at the Site in October 2011 as well as the LPH recovery activities conducted at the Site in December 2012 and January 2013 were effective in reducing petroleum hydrocarbon groundwater concentrations previously detected at and in the vicinity of the Site;

- These reduction trends in petroleum hydrocarbon groundwater concentrations are expected to continue over time;

Municipal Water Supply Well Conditions

- A review of the municipal water supply well analytical data summarized Table 2.2 indicates that petroleum hydrocarbons (i.e., PHC F1 through F4 and BTEX) were not detected above the applicable Ontario Regulation 153 Table 2 Groundwater Standards or the Ontario Regulation 169 Ontario Drinking Water Quality Standards in the municipal water supply wells located south of the Site during the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020;

- These data do not indicate infiltration of petroleum hydrocarbon groundwater contamination from the Site into the two municipal water supply wells located south of the Site;

Headspace Conditions

- A review of the of the headspace monitoring data summarized in Table 2.4 indicates VOC headspace concentrations ranging to 14.6 ppm and LEL headspace concentrations of 0% LEL were detected in the 19 monitoring wells during the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020;

- These data indicate a general decrease in VOC and LEL headspace concentrations compared to the headspace monitoring data previously collected at and in the vicinity of the Site;

LPH Conditions

- A review of the LPH monitoring data measured in the 19 monitoring wells located at and in the vicinity of the Site as summarized in Table 2.3 indicates that LPH was not observed in any of the monitoring wells during the groundwater monitoring activities conducted at and in the vicinity of the Site in 2020;

- These results confirm that the LPH recovery activities conducted at the Site in December 2012 and January 2013 were effective in reducing the LPH previously observed at and in the vicinity of the Site; and

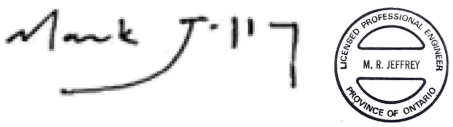
Conclusions

- Based on the observed reduction trends, Contaminant Management Plan activities should continue to be implemented at and in the vicinity of the Site on a semi-annual basis and an annual report should be submitted to the MECP in accordance with the procedures and protocols specified in the Contaminant Management Plan dated September 2012 as modified in the MOECC's letters to the Township of Huron-Kinloss dated January 31, 2013 and May 27, 2014.

5.0 CERTIFICATION

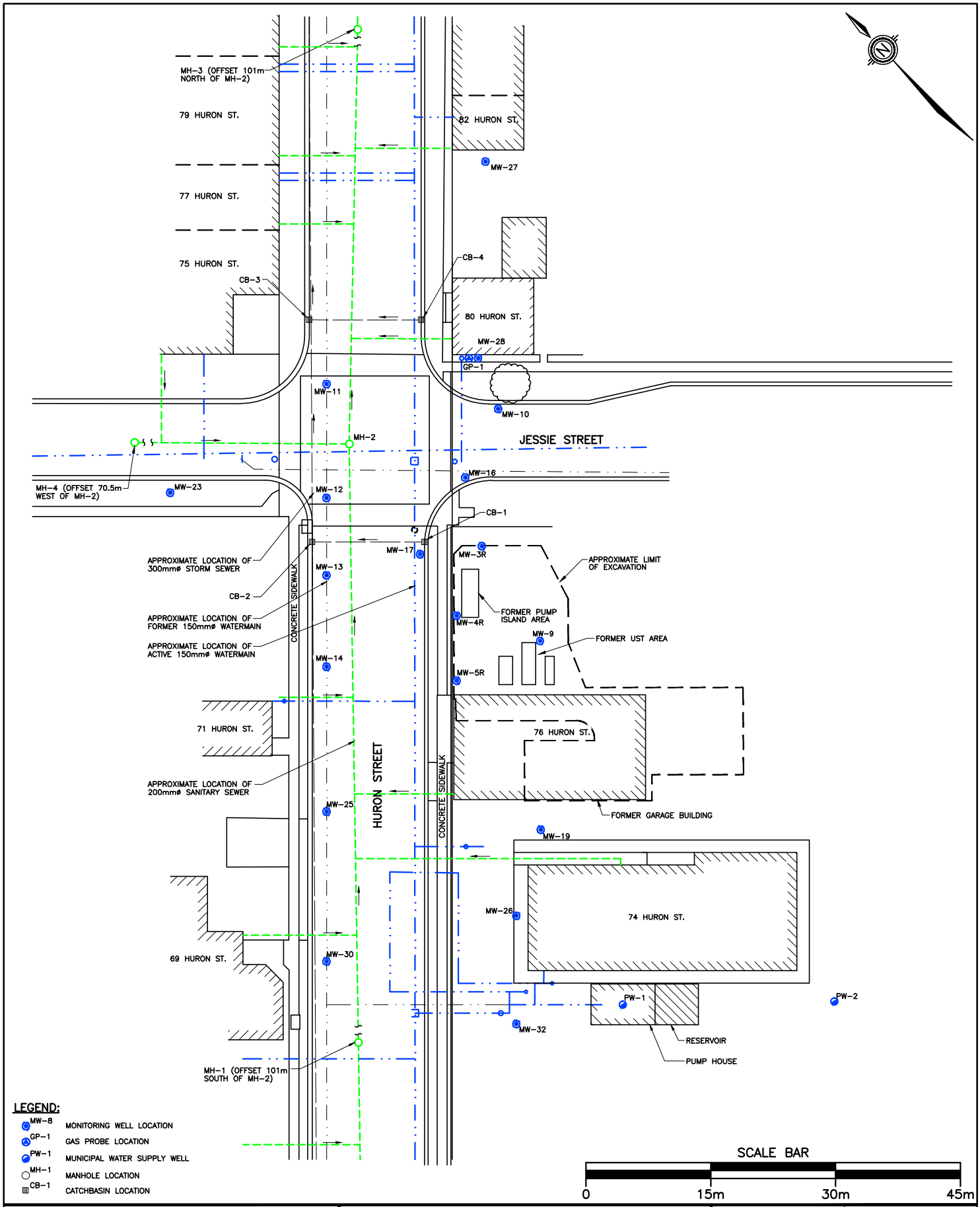
All of Which is Respectively Submitted,

JEFFREY ENVIRONMENTAL CONSULTANTS INC.

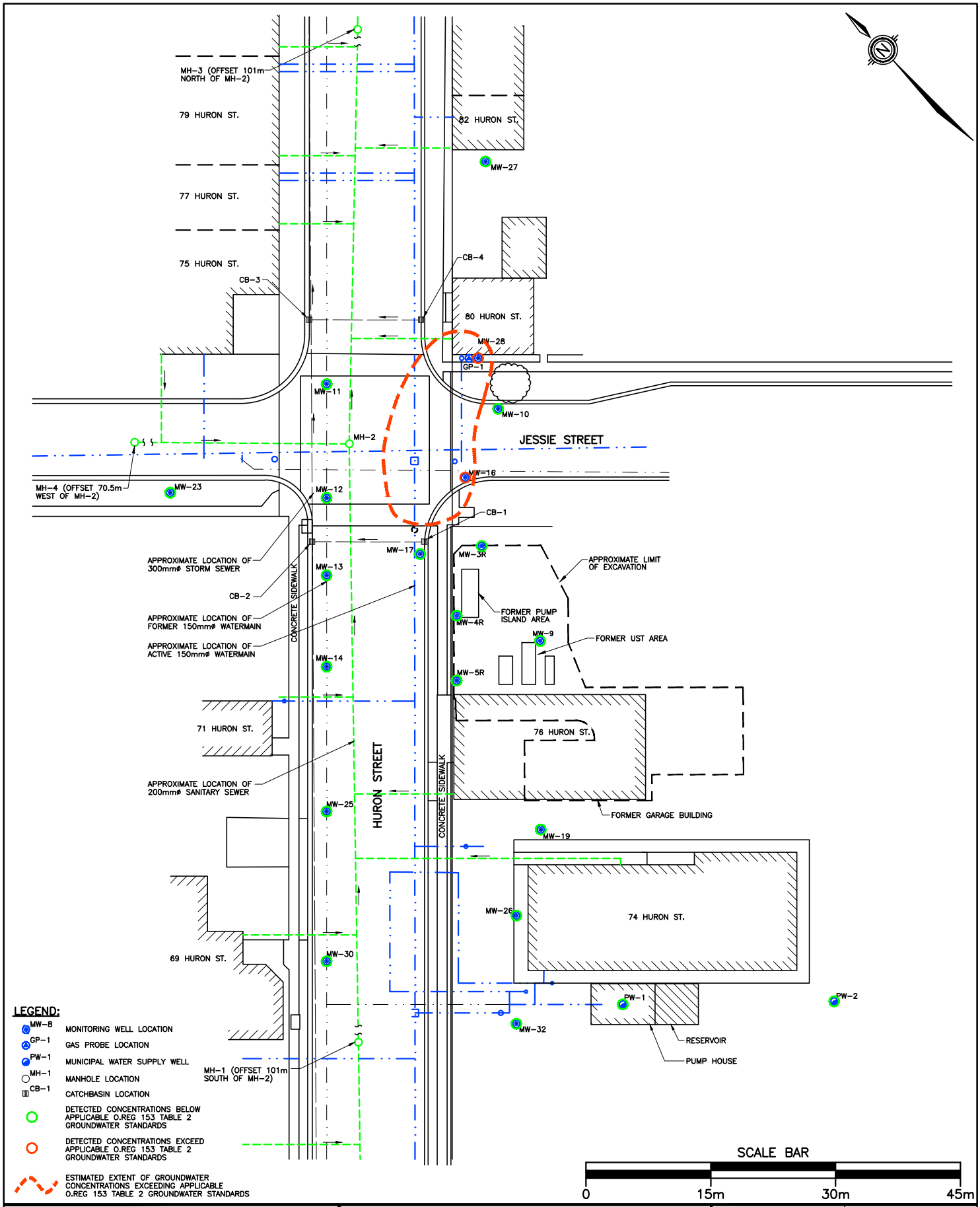


Mark R. Jeffrey, P. Eng.

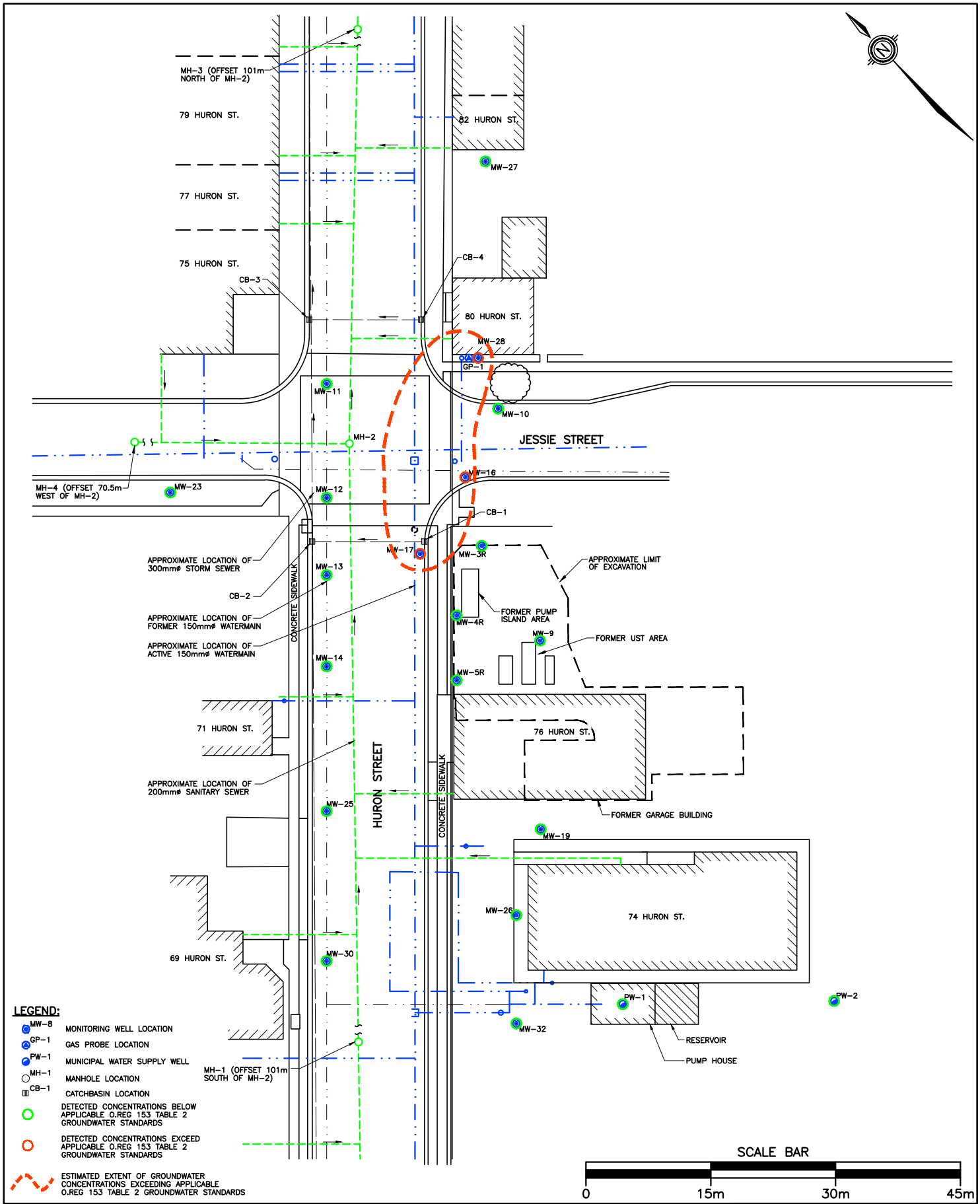
FIGURES



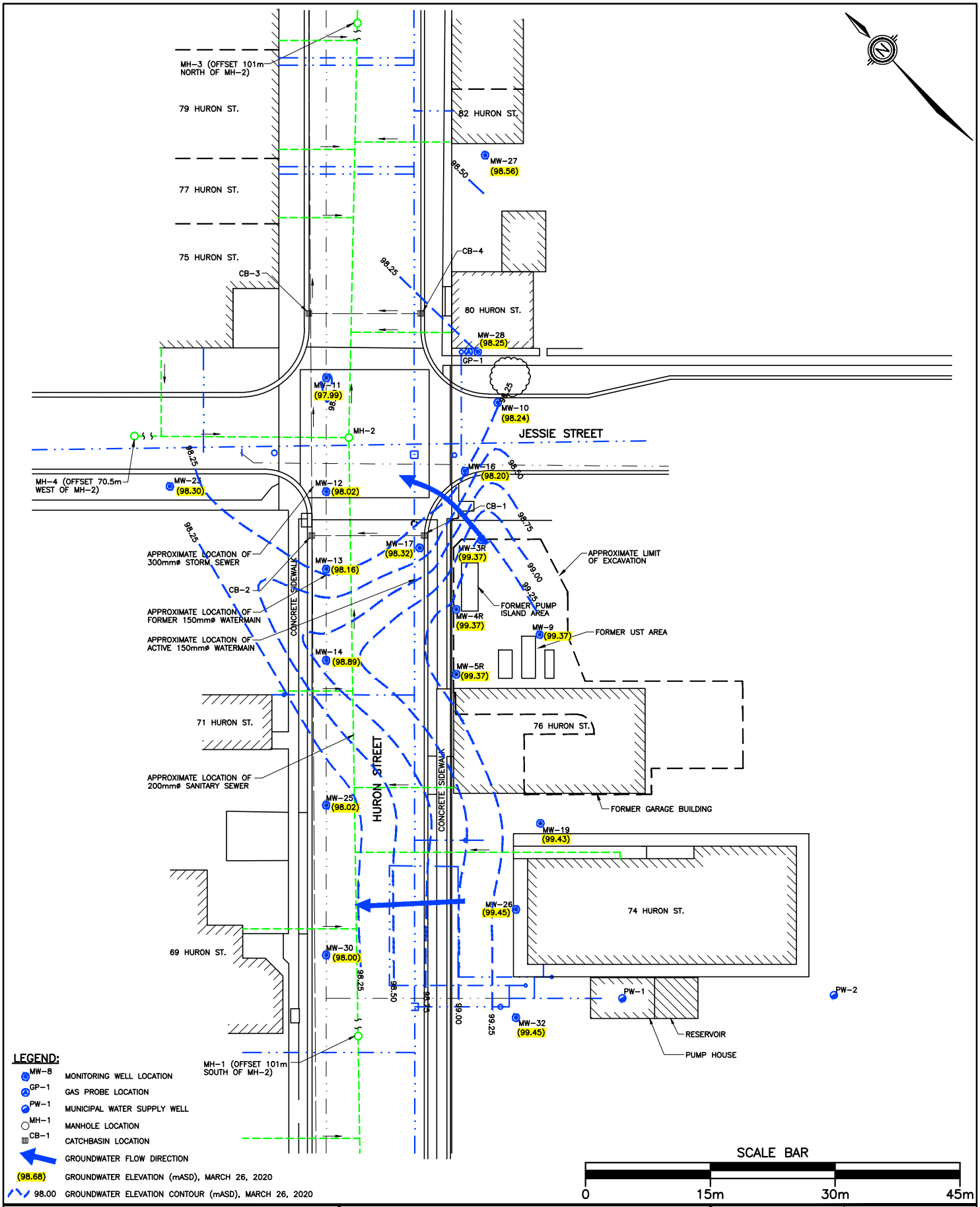
JEFFREY ENVIRONMENTAL CONSULTANTS INC. 616 Bluenose Court, Waterloo, Ontario N2K 4C5	FIGURE 2.1 INVESTIGATION LOCATIONS 2020 ANNUAL GROUNDWATER MONITORING REPORT 76 HURON STREET RIPLEY, ONTARIO	DATE MARCH 2021 FILE NO. 1227(18)	PROJ. NO. 1227 DWG. NO. F-2.1



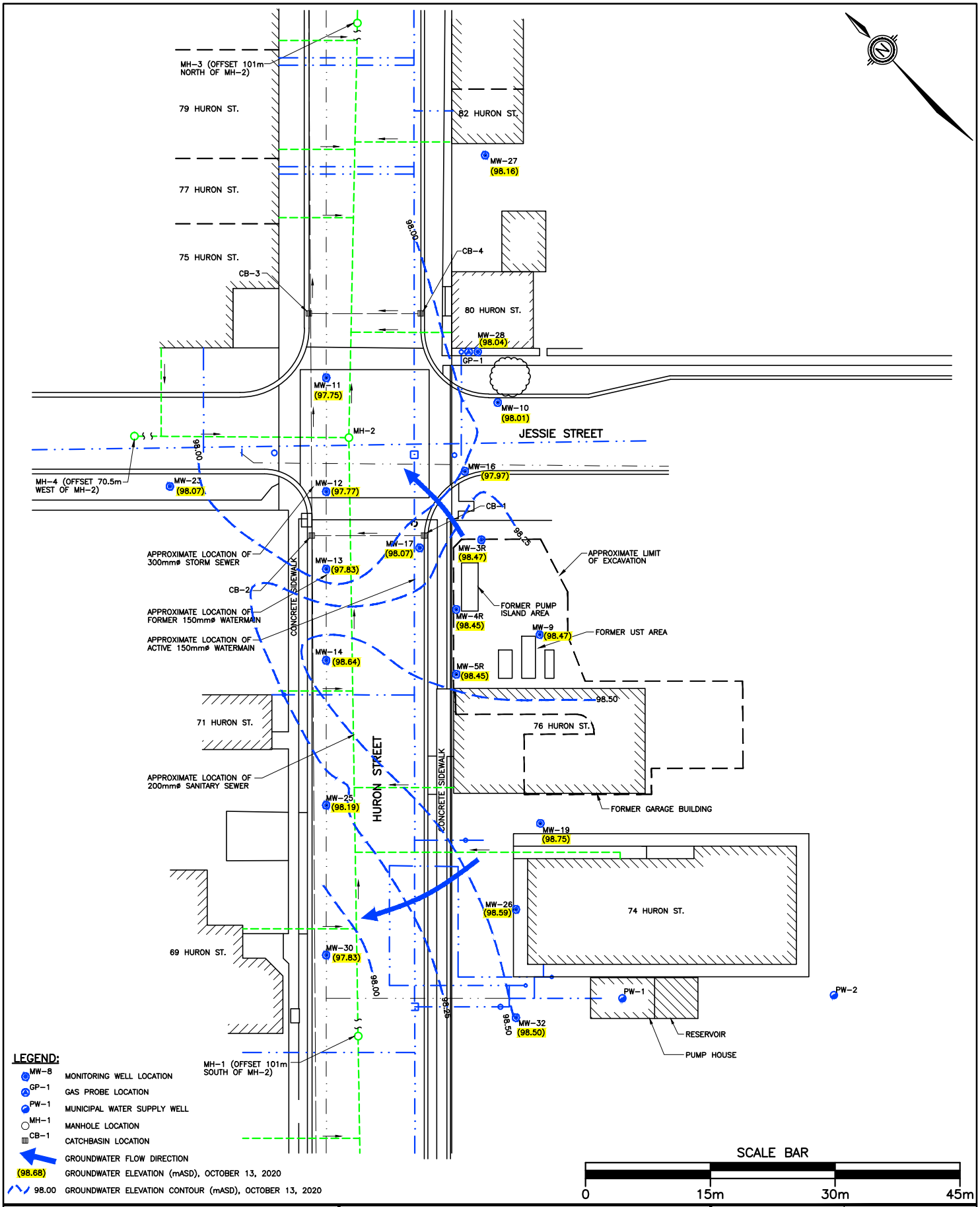
JEFFREY ENVIRONMENTAL CONSULTANTS INC. 616 Bluenose Court, Waterloo, Ontario N2K 4C5	FIGURE 2.2 GROUNDWATER CONCENTRATIONS SUMMARY–APRIL 2020 2020 ANNUAL GROUNDWATER MONITORING REPORT 76 HURON STREET RIPLEY, ONTARIO	DATE MARCH 2021 FILE NO. 1227(18)	PROJ. NO. 1227 DWG. NO. F-2.2



JEFFREY ENVIRONMENTAL CONSULTANTS INC. 616 Bluenose Court, Waterloo, Ontario N2K 4C5	FIGURE 2.3 GROUNDWATER CONCENTRATIONS SUMMARY–OCT 2020 2020 ANNUAL GROUNDWATER MONITORING REPORT 76 HURON STREET RIPLEY, ONTARIO	DATE MARCH 2021 FILE NO. 1227(18)	PROJ. NO. 1227 DWG. NO. F-2.3



JEFFREY ENVIRONMENTAL CONSULTANTS INC. 616 Bluenose Court, Waterloo, Ontario N2K 4C5	FIGURE 2.4 GROUNDWATER ELEVATION SUMMARY–MARCH 2020 2020 ANNUAL GROUNDWATER MONITORING REPORT 76 HURON STREET RIPLEY, ONTARIO	DATE MARCH 2021 FILE NO. 1227(18)	PROJ. NO. 1227 DWG. NO. F-2.4



JEFFREY ENVIRONMENTAL CONSULTANTS INC. 616 Bluenose Court, Waterloo, Ontario N2K 4C5	FIGURE 2.5 GROUNDWATER ELEVATION SUMMARY–OCT 2020 2020 ANNUAL GROUNDWATER MONITORING REPORT 76 HURON STREET RIPLEY, ONTARIO	DATE MARCH 2021 FILE NO. 1227(18)	PROJ. NO. 1227 DWG. NO. F-2.5

TABLES

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-3/3R	9-Aug-11	1.2	0.5	8.41	17.05	1,069	4.19	39.2	0.7	41	Clear
			1.0	8.33	17.58	1,053	2.15	27.7	0.7	40	Clear
			1.5	8.30	18.75	1,074	1.25	12.9	0.7	6	Clear
			2.0	8.31	19.10	1,090	0.76	8.1	0.7	-26	Clear
			2.5	8.33	18.94	1,095	0.58	6.1	0.7	-39	Clear
			3.0	8.35	18.22	1,099	0.48	5.1	0.7	-41	Clear
			3.5	8.36	17.97	1,071	0.66	7.6	0.7	-37	Clear
			4.0	8.32	17.26	1,036	1.26	12.2	0.7	-29	Clear
			5.0	8.27	16.62	1,016	1.90	20.2	0.7	-16	Clear
			6.0	8.21	16.13	1,017	2.58	26.5	0.7	-8	Clear
	8-Nov-11	1.5	1.5	8.97	12.20	586	1.81	16.1	0.4	-143	Clear
			3.0	9.03	12.18	566	0.84	8.6	0.4	-169	Clear
			4.5	9.05	12.17	560	0.65	6.1	0.4	-190	Clear
	30-Jan-12	1.5	1.0	9.08	6.08	547	2.23	16.3	0.4	-220	Clear; Petroleum Odour
			2.0	9.01	6.17	544	1.39	12.3	0.4	-228	Clear
			3.0	8.95	6.13	542	1.06	8.4	0.4	-238	Clear
			4.0	9.01	6.26	540	0.69	5.8	0.4	-244	Clear
			5.0	9.00	6.28	540	0.63	5.0	0.4	-246	Clear
	24-Oct-12	1.5	0.5	8.41	15.66	1,003	4.36	27.6	0.7	-86	Clear
			1.0	8.24	15.58	1,051	1.15	16.8	0.7	-89	Clear
			1.5	8.19	15.59	1,059	0.78	7.4	0.7	-98	Clear
			2.0	8.15	15.60	1,062	0.56	6.6	0.7	-99	Clear
			2.5	8.14	15.61	1,062	0.49	4.7	0.7	-104	Clear
			3.0	8.13	15.61	1,063	0.40	4.0	0.7	-106	Clear
			4.0	8.15	15.62	1,064	0.32	3.6	0.7	-107	Clear
			6.0	8.14	15.63	1,066	0.23	2.4	0.7	-113	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-3/3R	12-Apr-13	1.8	0.5	8.31	5.74	1,800	7.41	91.1	1.1	-124	Clear
			1.0	8.32	5.68	1,830	5.01	37.4	1.2	-134	Clear
			2.0	8.31	5.59	1,850	3.52	29.8	1.2	-134	Clear
			7.0	8.30	5.59	1,860	2.93	22.2	1.2	-136	Clear
			10.0	8.29	5.59	1,860	2.41	19.4	1.2	-136	Clear
	17-Sep-13	1.3	0.5	8.26	14.26	1,210	5.04	36.8	0.9	-104	Clear
			1.0	8.17	14.27	1,206	3.44	28.8	0.9	-111	Clear
			2.0	8.10	14.00	1,201	1.39	12.4	0.9	-120	Clear
			3.0	8.07	14.42	1,208	1.32	11.9	0.8	-122	Clear
			4.5	8.01	14.40	1,214	1.26	11.6	0.8	-124	Clear
	2-Jun-14	1.4	0.5	7.23	9.85	2,130	5.15	45.1	1.4	-180	Clear
			1.0	7.22	9.05	2,140	3.48	30.4	1.4	-182	Clear
			2.0	7.21	9.01	2,150	2.87	24.2	1.4	-184	Clear
			3.0	7.20	8.97	2,170	2.19	18.7	1.4	-189	Clear
			4.0	7.20	8.95	2,180	1.63	13.8	1.4	-191	Clear
			5.0	7.21	8.93	2,190	1.47	12.9	1.4	-193	Clear
	2-Oct-14	1.4	1.0	8.86	15.59	2,470	2.99	29.2	1.6	-266	Clear
			2.0	8.86	15.56	2,440	1.95	19.8	1.6	-269	Clear
			3.0	8.87	15.65	2,440	0.95	9.5	1.6	-276	Clear
			4.0	8.87	15.66	2,440	0.90	9.1	1.6	-277	Clear
			5.0	8.88	15.66	2,440	0.92	9.2	1.6	-276	Clear
	28-Apr-15	1.4	1.0	8.15	5.58	3,130	5.12	40.7	2.0	-169	Clear
			2.0	8.13	5.59	3,130	4.86	39.2	2.0	-171	Clear
			3.0	8.12	5.54	3,130	4.70	37.8	2.0	-168	Clear
			4.5	8.12	5.44	3,140	4.59	36.7	2.0	-172	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-3/3R	19-Oct-15	1.4	1.0	7.99	14.47	2,670	4.48	46.0	1.8	-244	Clear
			2.0	7.97	14.50	2,660	3.97	40.0	1.8	-250	Clear
			3.0	7.96	14.55	2,660	4.10	41.7	1.8	-252	Clear
			4.5	7.97	14.49	2,670	3.44	35.5	1.8	-255	Clear
	8-Apr-16	1.4	1.0	8.02	6.22	2,870	3.66	38.0	1.7	-221	Clear
			2.0	8.04	6.07	2,890	2.75	30.1	1.7	-228	Clear
			4.0	8.05	5.86	2,840	2.47	25.6	1.6	-231	Clear
	6-Oct-16	1.4	1.0	7.21	19.66	2,210	5.26	54.0	1.6	-167	Clear
			2.0	7.24	19.45	2,240	3.33	35.6	1.6	-170	Clear
			4.0	7.23	19.32	2,240	2.88	29.2	1.6	-171	Clear
	5-Apr-17	1.8	1.0	7.46	7.22	3,360	1.00	9.1	2.2	-197	Clear
			2.0	7.47	6.80	3,340	0.81	6.8	2.1	-197	Clear
			3.0	7.48	6.61	3,330	0.71	5.9	2.1	-197	Clear
			4.0	7.49	6.56	3,330	0.66	5.5	2.1	-199	Clear
			5.0	7.48	6.54	3,330	0.61	5.0	2.1	-199	Clear
	12-Oct-17	1.4	1.0	9.13	16.81	3,100	5.81	63.1	2.0	-264	Clear
			2.0	9.19	16.86	3,040	2.97	28.5	1.9	-269	Clear
			4.0	9.18	17.00	3,010	1.34	13.3	1.9	-268	Clear
	24-May-18	1.4	1.0	6.86	10.27	4,240	0.59	5.8	2.7	-159	Clear
			2.0	6.85	9.45	4,310	0.82	7.1	2.8	-151	Clear
			3.0	6.88	9.24	4,320	0.77	6.3	2.8	-141	Clear
			4.0	6.86	9.24	4,310	0.64	5.6	2.8	-135	Clear
	15-Oct-18	1.4	1.0	6.62	13.84	3,870	2.26	21.9	2.3	-186	Clear
			2.0	6.64	15.10	3,890	2.08	19.2	2.3	-191	Clear
			3.0	6.66	14.98	3,840	1.74	16.0	2.4	-192	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-3/3R	2-Apr-19	1.4	1.0	7.45	5.63	4,640	3.48	29.3	3.0	-137	Clear
			2.0	7.43	4.72	4,850	2.09	16.6	3.1	-121	Clear
			4.0	7.44	4.50	4,860	1.55	12.1	3.1	-112	Clear
	11-Sep-19	1.4	1.0	7.69	17.38	4,680	15.96	158.0	3.0	-152	Clear
			2.0	7.72	17.07	4,650	7.67	76.6	3.0	-150	Clear
			3.0 PD	7.81	17.59	4,620	2.96	31.0	3.0	-147	Clear; Dry
	27-Mar-20	1.4	1.0	7.82	7.39	4,450	4.97	48.0	3.5	-166	Clear
			2.0	7.84	6.69	4,490	2.13	20.8	3.0	-173	Clear
			4.0	7.80	6.21	4,520	1.56	14.7	2.7	-178	Clear
	13-Oct-20	1.4	1.0	7.27	15.76	5,470	4.64	46.4	3.5	404	Clear
			2.0	7.30	15.93	5,470	3.34	33.6	3.5	403	Clear
			3.0	7.31	16.09	5,480	2.48	25.7	3.5	399	Clear
			4.0	7.29	16.17	5,460	1.74	17.8	3.5	395	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-4/4R	9-Aug-11	1.2	0.5	8.35	16.61	1,349	2.24	21.6	0.9	-22	Clear
			1.0	8.20	16.68	1,351	1.36	16.9	0.9	-28	Clear
			1.5	8.14	17.31	1,346	1.01	10.3	0.9	-60	Clear
			2.0	8.09	18.51	1,325	0.59	7.0	0.9	-94	Clear
			3.0	8.10	18.91	1,330	0.35	3.7	0.9	-124	Clear
			4.0	8.13	18.00	1,330	0.24	2.6	0.9	-122	Clear
			5.0	8.11	16.94	1,325	0.21	2.2	0.9	-109	Clear
			6.0	8.09	16.34	1,307	0.19	2.0	0.8	-99	Clear
	8-Nov-11	1.4	1.5	9.12	11.68	606	1.92	17.3	0.4	-281	Clear
			3.0	9.08	11.70	603	1.50	13.8	0.4	-284	Clear
			4.5	9.05	11.71	598	1.24	15.8	0.4	-287	Clear
	30-Jan-12	1.5	1.0	9.16	6.26	667	3.07	39.5	0.5	-207	Clear; Petroleum Odour
			2.0	9.03	6.08	556	1.64	12.5	0.4	-228	Clear; Petroleum Odour
			3.0	8.99	6.19	559	1.07	9.1	0.4	-235	Clear
			4.0	9.00	6.14	557	0.90	7.2	0.4	-240	Clear
			5.0	9.00	6.22	556	0.75	6.3	0.4	-241	Clear
			6.0	9.03	6.22	556	0.69	5.5	0.4	-244	Clear
	25-Oct-12	1.5	0.5	8.72	15.32	967	2.56	21.1	0.6	-123	Clear
			1.0	8.51	15.39	999	1.36	12.5	0.6	-125	Clear
			2.0	8.39	15.42	1,005	0.88	10.1	0.6	-126	Clear
			3.0	8.37	15.43	1,003	0.76	7.4	0.6	-131	Clear
			4.0	8.33	15.43	1,001	0.65	6.3	0.6	-133	Clear
			6.0	8.30	15.47	1,001	0.58	6.1	0.6	-134	Clear
	12-Apr-13	2.0	1.0	8.22	6.09	1,238	4.75	38.1	0.9	-124	Clear
			2.0	8.23	5.49	1,580	3.97	35.8	0.9	-125	Clear
			4.0	8.20	5.35	1,570	3.73	27.3	0.9	-127	Clear
			8.0	8.21	5.34	1,670	2.99	24.4	1.0	-130	Clear
			12.0	8.19	5.28	1,550	2.92	25.0	1.1	-129	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-4/4R	17-Sep-13	1.5	0.5	8.37	14.77	1,006	4.55	36.6	0.8	-175	Clear
			1.0	8.28	14.80	1,104	3.88	28.3	0.8	-131	Clear
			2.0	8.22	14.49	1,240	2.78	25.2	0.8	-133	Clear
			3.0	8.19	14.30	1,256	2.90	25.0	1.0	-133	Clear
			4.5	8.18	14.54	1,270	2.56	21.2	0.9	-140	Clear
	2-Jun-14	1.5	0.5	7.14	10.76	2,110	4.52	40.0	1.4	-183	Clear
			1.0	7.18	9.17	2,050	3.97	34.8	1.3	-189	Clear
			2.0	7.19	9.07	2,090	3.43	29.8	1.4	-194	Clear
			3.0	7.17	9.25	2,190	0.51	4.3	1.4	-202	Clear
			4.0	7.17	9.99	2,210	0.39	3.5	1.4	-197	Clear
			5.0	7.18	10.11	2,200	0.35	3.2	1.4	-197	Clear
	2-Oct-14	1.5	1.0	8.77	15.35	2,540	1.33	13.2	1.6	-276	Clear
			2.0	8.79	15.44	2,500	1.02	10.0	1.6	-279	Clear
			3.0	8.81	15.70	2,580	0.49	4.6	1.7	-291	Clear
			4.0	8.81	15.63	2,590	0.36	3.7	1.7	-293	Clear
			5.0	8.80	15.65	2,580	0.37	3.7	1.7	-294	Clear
	28-Apr-15	1.5	1.0	8.18	6.08	2,980	5.77	46.4	1.9	-189	Clear
			2.0	8.16	5.85	2,990	5.32	43.0	1.9	-190	Clear
			3.0	8.14	5.99	2,970	5.17	41.8	1.9	-189	Clear
			4.5	8.11	5.95	2,990	4.93	39.7	1.9	-190	Clear
	19-Oct-15	1.5	1.0	8.44	15.01	2,590	3.56	36.6	1.9	-266	Clear
			2.0	8.47	14.97	2,610	2.88	30.1	1.9	-270	Clear
			3.0	8.42	15.10	2,600	2.46	25.9	1.8	-271	Clear
			4.5	8.39	15.11	2,590	1.90	20.1	1.8	-277	Clear
	8-Apr-16	1.5	1.0	8.26	6.66	2,370	5.48	57.1	1.8	-208	Clear
			2.0	8.24	5.97	2,310	4.66	48.4	1.8	-214	Clear
			4.0	8.19	5.89	2,330	3.94	41.3	1.7	-217	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-4/4R	6-Oct-16	1.5	1.0	7.88	19.99	1,980	5.88	61.1	1.7	-190	Clear
			2.0	7.91	20.14	1,970	3.14	33.0	1.7	-192	Clear
			4.0	7.77	20.02	1,970	2.66	27.8	1.6	-195	Clear
	5-Apr-17	1.8	1.0	7.19	7.68	3,670	2.22	19.4	2.3	-193	Clear
			2.0	7.27	7.11	3,440	1.61	14.0	2.2	-196	Clear
			3.0	7.29	6.81	3,480	1.04	8.6	2.2	-201	Clear
			4.0	7.35	6.76	3,520	0.82	6.8	2.3	-205	Clear
			5.0	7.37	6.75	3,530	0.77	6.4	2.3	-207	Clear
	12-Oct-17	1.5	1.0	9.16	17.03	2,820	7.40	75.6	2.0	-252	Clear
			2.0	9.17	16.57	3,130	3.33	33.1	2.0	-256	Clear
			4.0	9.17	16.65	3,140	1.49	14.5	2.0	-261	Clear
	24-May-18	1.5	1.0	6.72	10.57	3,980	0.63	6.0	2.7	-152	Clear
			2.0	6.68	9.47	4,340	0.84	7.3	2.8	-153	Clear
			3.0	6.69	9.09	4,440	0.70	6.1	2.8	-153	Clear
			4.0	6.74	9.06	4,440	0.62	5.5	2.8	-154	Clear
	15-Oct-18	1.5	1.0	6.51	14.11	3,660	3.34	32.6	2.5	-177	Clear
			2.0	6.55	14.41	3,700	2.78	26.6	2.5	-178	Clear
			3.0	6.54	14.52	3,710	2.59	24.8	2.5	-181	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-4/4R	2-Apr-19	1.5	1.0	7.90	5.54	4,820	2.46	19.9	3.1	14	Clear
			2.0	7.84	5.59	4,710	2.14	17.3	3.0	-42	Clear
			4.0	7.81	5.18	4,820	1.79	15.5	3.1	-85	Clear
	11-Sep-19	1.5	1.0	7.90	18.08	4,660	6.54	64.7	3.0	-146	Clear
			2.0	7.79	16.97	4,650	3.37	34.0	3.0	-142	Clear
			4.0	7.70	17.29	4,610	1.81	19.0	3.0	-150	Clear
	27-Mar-20	1.5	1.0	8.33	7.16	3,990	4.46	42.0	3.3	-176	Clear
			2.0	8.21	6.69	4,200	2.59	23.9	3.2	-181	Clear
			4.0	8.09	6.59	4,310	1.99	18.8	3.0	-181	Clear
	13-Oct-20	1.5	1.0	7.36	15.88	4,320	5.28	50.0	3.1	297	Clear
			3.0	7.39	16.01	4,410	4.17	39.6	3.1	288	Clear
			5.0	7.32	16.07	4,440	2.17	20.8	3.0	280	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-5/5R	9-Aug-11	1.1	0.5	8.57	16.55	867	1.71	14.8	0.6	55	Clear
			1.1	8.52	17.97	747	0.69	9.3	0.5	-61	Clear
			2.2	8.50	18.31	676	0.39	4.0	0.4	-80	Clear
			3.3	8.46	18.03	694	0.31	3.3	0.4	-81	Clear
			4.4	8.45	17.46	704	0.35	3.7	0.5	-86	Clear
			5.5	8.42	16.49	676	1.14	11.1	0.4	-75	Clear
	8-Nov-11	1.4	1.5	8.95	11.78	669	1.79	18.5	0.4	-251	Clear
			3.0	8.93	11.78	647	1.21	11.0	0.4	-259	Clear
			4.5	8.93	11.78	633	0.87	8.7	0.4	-260	Clear
	30-Jan-12	1.5	1.0	9.18	5.49	531	2.14	20.4	0.4	-190	Clear
			2.0	9.16	5.25	501	1.49	11.3	0.3	-201	Clear
			3.0	9.21	5.41	485	0.90	7.4	0.3	-211	Clear
			4.0	9.24	5.45	483	0.77	6.0	0.3	-217	Clear
			5.0	9.29	5.46	480	0.58	4.8	0.3	-220	Clear
	24-Oct-12	1.5	0.5	8.50	14.81	855	5.36	87.4	0.6	-88	Clear
			1.0	8.45	15.12	788	1.94	17.1	0.5	-103	Clear
			1.5	8.36	15.16	755	0.85	10.7	0.5	-103	Clear
			2.0	8.29	15.16	749	0.62	6.0	0.5	-108	Clear
			3.0	8.27	15.15	748	0.49	5.4	0.5	-109	Clear
			4.0	8.24	15.16	748	0.46	4.4	0.5	-112	Clear
			6.0	8.20	15.17	747	0.38	4.0	0.5	-114	Clear
	12-Apr-13	1.9	0.5	8.31	5.98	1,356	3.66	33.0	0.8	-112	Clear
			1.0	8.29	5.70	1,385	2.35	15.8	0.9	-117	Clear
			4.0	8.20	5.46	1,400	0.55	4.5	0.9	-125	Clear
			8.0	8.17	5.45	1,405	0.43	7.4	0.9	-130	Clear
			12.0	8.16	5.45	1,409	0.41	3.2	0.9	-133	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-5/5R	17-Sep-13	1.4	0.5	8.20	14.88	1,136	3.40	31.0	0.9	-108	Clear
			1.0	8.17	14.92	1,142	1.40	11.4	0.9	-112	Clear
			2.0	8.10	14.70	1,150	0.62	6.1	0.9	-119	Clear
			3.0	8.06	14.32	1,152	0.45	4.5	0.9	-122	Clear
			4.5	8.01	14.30	1,150	0.45	4.3	0.9	-123	Clear
	2-Jun-14	1.5	0.5	7.15	9.67	1,920	6.09	51.0	1.2	-107	Clear
			1.0	7.16	9.09	1,760	5.45	47.8	1.1	-139	Clear
			2.0	7.17	9.26	1,680	4.81	42.2	1.1	-154	Clear
			3.0	7.17	9.37	1,670	4.16	36.1	1.1	-174	Clear
			4.0	7.17	9.37	1,670	2.50	22.0	1.1	-180	Clear
			5.0	7.17	9.30	1,670	2.25	19.9	1.1	-185	Clear
	2-Oct-14	1.5	1.0	8.74	15.75	2,290	3.59	36.2	1.4	-253	Clear
			2.0	8.68	15.86	2,160	1.36	13.4	1.4	-272	Clear
			3.0	8.70	16.04	2,140	0.58	5.9	1.4	-285	Clear
			4.0	8.71	16.07	2,150	0.45	4.6	1.4	-291	Clear
			5.0	8.71	16.06	2,150	0.42	4.4	1.4	-293	Clear
	28-Apr-15	1.6	1.0	8.33	7.88	2,890	5.15	43.1	1.8	-102	Clear
			2.0	8.28	7.19	2,810	5.00	41.8	1.8	-117	Clear
			3.0	8.23	6.90	2,750	5.04	41.6	1.8	-128	Clear
			4.5	8.18	6.53	2,760	5.10	42.1	1.8	-159	Clear
	19-Oct-15	1.5	1.0	8.20	14.66	2,330	5.10	52.6	1.7	-233	Clear
			2.0	8.14	14.72	2,350	4.24	43.9	1.7	-237	Clear
			3.0	8.00	14.88	2,370	3.33	34.0	1.7	-244	Clear
			4.5	7.97	14.91	2,370	2.87	29.1	1.7	-245	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-5/5R	8-Apr-16	1.5	1.0	7.76	6.54	2,100	4.99	51.6	1.7	-177	Clear
			2.0	7.78	6.29	2,170	4.81	47.7	1.7	-181	Clear
			4.0	7.79	6.33	2,170	4.58	43.9	1.7	-182	Clear
	6-Oct-16	1.5	1.0	7.37	19.87	1,560	4.88	50.6	1.5	-144	Clear
			2.0	7.41	19.71	1,580	4.22	44.2	1.5	-147	Clear
			4.0	7.44	19.69	1,570	3.86	40.1	1.5	-151	Clear
	5-Apr-17	1.7	1.0	7.25	7.13	2,680	1.48	12.4	1.7	-167	Clear
			2.0	7.24	6.80	2,630	1.25	10.2	1.7	-170	Clear
			3.0	7.23	6.30	2,630	0.92	7.7	1.7	-177	Clear
			4.0	7.25	6.23	2,620	0.87	7.1	1.7	-183	Clear
			5.0	7.26	6.21	2,620	0.84	6.8	1.7	-186	Clear
	12-Oct-17	1.5	1.0	9.66	16.79	2,520	13.37	130.2	1.6	-262	Clear
			2.0	9.58	16.77	2,450	5.73	59.6	1.6	-257	Clear
			4.0	9.52	16.87	2,390	2.62	25.7	1.5	-253	Clear
	24-May-18	1.5	1.0	6.52	11.32	2,210	0.99	9.7	2.0	-104	Clear
			2.0	6.37	9.76	3,600	1.40	12.3	2.4	-122	Clear
			3.0	6.46	9.45	3,800	1.21	10.5	2.4	-130	Clear
			4.0	6.53	9.46	3,820	1.05	9.2	2.4	-136	Clear
	15-Oct-18	1.5	1.0	6.44	14.86	3,770	2.66	25.9	2.2	-126	Clear
			2.0	6.49	15.09	3,890	2.32	22.6	2.2	-134	Clear
			4.0	6.51	15.23	3,870	1.95	18.8	2.1	-137	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-5/5R	2-Apr-19	1.5	1.0	7.60	5.96	4,160	2.33	22.0	2.5	-67	Clear
			2.0	7.72	5.68	4,190	1.89	17.8	2.4	-72	Clear
			4.0	7.67	5.23	4,210	1.91	18.6	2.4	-77	Clear
	11-Sep-19	1.5	1.0	7.76	19.03	4,240	10.28	119.4	2.6	-162	Clear
			2.0	7.71	16.93	3,950	4.42	44.2	2.5	-152	Clear
			4.0 PD	7.62	17.36	3,980	2.23	23.6	2.5	-151	Clear; Dry
	27-Mar-20	1.5	1.0	7.49	6.69	4,560	6.30	61.1	2.8	-201	Clear
			2.0	7.59	6.42	4,570	2.33	22.6	2.7	-188	Clear
			4.0	7.66	6.39	4,660	1.89	17.7	2.5	-187	Clear
	13-Oct-20	1.5	1.0	7.08	16.23	4,760	5.22	51.9	2.8	266	Clear
			3.0	7.11	16.14	4,800	4.87	46.3	2.8	260	Clear
			5.0	7.14	16.21	4,810	2.11	20.9	2.8	263	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-9	8-Nov-11	1.4	1.5	9.05	10.48	551	2.40	20.7	0.4	-168	Clear
			3.0	9.04	10.51	543	1.61	15.1	0.4	-171	Clear
			4.5	9.05	10.51	543	1.40	12.5	0.4	-173	Clear
	30-Jan-12	1.5	1.5	9.29	5.65	563	2.96	22.5	0.4	-174	Clear
			3.0	9.33	5.65	564	1.97	15.3	0.4	-160	Clear
			4.5	9.31	5.66	571	1.43	11.2	0.4	-150	Clear
	24-Oct-12	1.5	0.5	8.72	14.74	1,050	2.23	48.1	0.7	-40	Clear
			1.0	8.69	14.82	1,053	1.38	12.2	0.7	-76	Clear
			1.5	8.58	14.91	1,083	0.86	10.1	0.7	-80	Clear
			2.0	8.56	14.93	1,088	0.76	7.1	0.7	-84	Clear
			3.0	8.53	14.94	1,084	0.59	6.1	0.7	-86	Clear
			4.0	8.49	14.94	1,082	0.53	5.1	0.7	-88	Clear
			5.0	8.48	14.95	1,084	0.48	4.9	0.7	-88	Clear
			6.0	8.47	14.95	1,085	0.46	4.5	0.7	-90	Clear
	12-Apr-13	1.7	0.5	8.04	5.36	1,950	6.99	64.9	1.3	-1	Light brown, slightly clear
			1.0	8.08	5.32	1,870	6.06	47.3	1.2	-2	Light brown, slightly clear
			1.5	8.14	5.29	1,890	5.49	45.2	1.2	-2	Clear
			3.0	8.16	5.31	1,980	4.76	34.9	1.3	-7	Clear
			7.0	8.25	5.35	2,060	3.67	29.3	1.3	-13	Clear
			10.0	8.26	5.36	2,070	3.49	27.4	1.3	-16	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-9	17-Sep-13	1.3	0.5	8.12	14.24	1,680	5.50	45.5	1.0	-22	Light Brown
			1.0	8.08	14.30	1,692	3.66	29.0	1.0	-28	Light Brown
			2.0	8.14	14.40	1,700	3.22	27.7	1.1	-30	Light Brown
			3.0	8.20	14.44	1,710	2.26	20.6	1.1	-31	Light Brown
			4.5	8.26	14.48	1,712	2.30	21.2	1.0	-36	Light Brown
	2-Jun-14	1.4	0.5	7.39	10.24	1,960	10.36	92.0	1.2	-38	Clear
			1.0	7.32	9.78	1,930	8.39	71.6	1.3	-31	Clear
			2.0	7.26	9.53	2,050	6.78	59.7	1.3	-26	Clear
			3.0	7.18	9.21	2,200	4.96	43.4	1.4	-18	Clear
			4.0 PD	7.16	9.09	2,250	4.30	37.6	1.5	-13	Clear; Dry
	2-Oct-14	1.5	1.0	8.62	15.65	2,530	2.54	25.0	1.6	-178	Clear
			2.0	8.68	15.59	2,610	1.50	15.3	1.7	-168	Clear
			3.0	8.74	15.68	2,660	0.68	6.7	1.7	-155	Clear
			4.0	8.75	15.67	2,660	0.56	5.7	1.7	-154	Clear
			5.0	8.76	15.67	2,660	0.54	5.5	1.7	-155	Clear
	28-Apr-15	1.5	1.0	7.83	6.97	3,120	10.84	86.7	2.0	64	Few Fines; Brown
			2.0	7.97	6.86	3,170	8.99	74.7	2.0	44	Clear
			3.0	7.99	6.77	3,180	7.78	64.1	2.0	34	Clear
			4.5	8.03	6.73	3,180	7.19	58.6	2.0	28	Clear
	19-Oct-15	1.5	1.0	7.88	15.22	2,770	6.66	68.2	1.8	-141	Clear
			2.0	7.87	15.01	2,560	5.94	60.9	1.8	-144	Clear
			3.0	7.84	14.94	2,550	5.16	52.1	1.8	-147	Clear
			4.5	7.86	14.97	2,570	4.98	50.1	1.7	-150	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-9	8-Apr-16	1.5	1.0	7.36	7.12	2,440	6.23	64.1	1.7	-111	Clear
			2.0	7.37	6.34	2,470	5.17	48.6	1.7	-113	Clear
			4.0	7.33	6.17	2,450	4.69	44.5	1.7	-121	Clear
	6-Oct-16	1.5	1.0	7.08	19.26	2,120	7.22	74.4	1.6	-77	Clear
			2.0	7.12	19.18	2,140	5.43	57.7	1.6	-82	Clear
			4.0	7.10	19.10	2,160	4.42	45.8	1.5	-84	Clear
	5-Apr-17	1.7	1.0	6.58	6.58	3,510	11.64	98.3	2.3	-93	Clear
			2.0	6.97	6.29	3,190	5.93	47.7	2.0	-129	Clear
			3.0	7.02	6.02	3,100	2.32	18.4	2.0	-114	Clear
			4.0	7.01	6.01	3,090	1.77	14.4	2.0	-107	Clear
			5.0	7.06	6.00	3,080	1.54	12.5	2.0	-105	Clear
	12-Oct-17	1.5	1.0	8.56	16.68	2,450	6.11	57.9	1.8	-218	Clear
			2.0	8.64	16.45	2,890	2.09	20.5	1.8	-221	Clear
			4.0	8.70	16.52	2,820	1.32	13.3	1.8	-221	Clear
	24-May-18	1.5	1.0	6.50	9.83	4,220	6.93	52.6	2.7	103	Clear
			2.0	6.53	9.07	4,210	4.18	35.5	2.7	100	Clear
			3.0	6.55	8.86	4,180	3.25	28.5	2.7	92	Clear
			4.0	6.54	8.82	4,170	2.79	24.0	2.7	93	Clear
	15-Oct-18	1.5	1.0	6.36	14.96	3,350	3.48	38.9	1.8	-57	Clear
			2.0	6.44	15.39	2,080	2.60	24.4	1.1	-73	Clear
			3.0	6.38	15.90	1,450	1.47	14.0	0.9	-79	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-9	2-Apr-19	1.5	1.0	8.40	4.46	4,650	11.82	99.0	3.0	95	Clear
			2.0	8.27	4.51	4,800	6.33	58.4	3.1	92	Clear
			4.0	8.22	4.43	4,670	4.61	45.2	3.0	88	Clear
	11-Sep-19	1.5	1.0	7.63	18.17	4,330	9.10	91.3	2.8	-157	Clear
			2.0	7.57	17.20	4,620	3.49	34.8	3.0	-147	Clear
			4.0	7.59	17.41	4,560	1.36	13.9	2.9	-133	Clear
	27-Mar-20	1.5	1.0	7.77	6.96	4,870	10.68	99.7	3.2	-197	Clear
			2.0	7.78	6.33	4,880	7.79	74.3	3.2	-201	Clear
			3.0	7.82	6.26	4,920	5.42	51.9	3.0	-204	Clear
			4.0 PD	7.83	6.41	4,950	5.03	48.9	3.0	-203	Clear
	13-Oct-20	1.5	1.0	7.39	15.88	4,960	7.66	75.2	3.0	144	Clear
			2.0	7.42	15.67	4,970	7.17	69.3	3.0	147	Clear
			3.0	7.45	16.20	4,920	5.93	57.7	2.9	151	Clear
			4.0	7.41	16.19	4,940	4.90	48.8	2.9	155	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-10	30-Jan-12	1.3	0.5	8.91	6.45	5,520	6.16	47.3	3.5	111	Clear
			1.0	8.66	8.29	5,540	3.10	29.5	3.5	97	Clear
			1.5	8.57	8.45	5,540	2.40	20.4	3.5	73	Clear
			2.0	8.54	8.44	5,540	2.12	19.1	3.5	67	Clear
			3.0	8.53	8.39	5,550	1.95	17.0	3.5	51	Clear
			4.0	8.55	8.28	5,550	1.87	16.6	3.5	46	Clear
	24-Oct-12	1.4	0.5	8.03	16.17	4,890	5.62	41.0	3.1	-39	Clear
			1.0	7.99	16.87	4,780	1.13	24.2	3.1	-39	Clear
			1.5	7.98	16.89	4,770	0.79	7.7	3.0	-37	Clear
			2.0	7.98	16.95	4,770	0.50	5.9	3.0	-37	Clear
			2.5	7.97	16.97	4,740	0.45	4.6	3.0	-37	Clear
			3.0 PD	7.95	16.99	4,750	0.40	4.4	3.0	-37	Clear; Dry
	12-Apr-13	1.4	0.5	7.42	7.28	8,010	7.68	56.9	5.2	-69	Clear, Mild PHC type odour
			1.0	7.41	7.79	8,030	7.27	52.3	5.2	-67	Clear, Mild PHC type odour
			3.0	7.48	7.45	8,100	3.85	35.8	5.2	-58	Clear, Mild PHC type odour
			6.0	7.51	7.26	8,040	4.12	35.6	5.2	-47	Clear, Mild PHC type odour
			9.0	7.53	7.41	8,090	2.59	22.8	5.2	-43	Clear, Mild PHC type odour
	17-Sep-13	1.3	0.5	7.60	15.60	6,140	6.60	47.7	4.6	-44	Clear, PHC type odour
			1.0	7.62	15.71	6,206	3.80	36.2	4.4	-40	Clear, PHC type odour
			2.0	7.57	15.75	6,255	3.86	36.1	4.4	-37	Clear, PHC type odour
			3.0 PD	7.54	15.80	6,271	2.74	23.6	4.5	-38	Dry
	2-Jun-14	1.3	0.5	7.10	13.11	7,130	14.02	125.6	4.6	102	Clear
			1.0	6.96	11.73	7,060	9.96	93.6	4.5	74	Clear
			2.0	6.92	11.10	6,890	8.32	76.5	4.3	29	Clear
			3.0	7.06	11.15	6,140	5.89	54.3	3.8	-73	Clear
			4.0 PD	7.14	11.45	5,640	5.40	49.9	3.5	-107	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-10	2-Oct-14	1.3	1.0	7.77	17.47	4,960	6.16	60.8	3.5	-192	Clear
			2.0	7.71	16.56	5,560	2.21	22.6	3.6	-191	Clear
			3.0	7.74	17.01	4,860	0.67	7.0	3.0	-227	Clear
			4.0 PD	7.80	17.31	4,370	0.73	7.8	2.8	-238	Clear; Dry
	28-Apr-15	1.4	1.0	7.64	6.88	7,180	8.22	79.7	4.0	12	Clear
			2.0	7.65	6.79	7,220	7.97	77.6	4.0	16	Clear
			3.0	7.67	6.76	7,250	7.14	70.1	4.0	22	Clear
			4.0 PD	7.69	6.71	7,230	7.08	69.7	3.8	27	Clear; Dry
	19-Oct-15	1.4	1.0	7.74	15.51	6,100	7.24	74.4	3.7	-101	Clear
			2.0	7.71	15.66	6,100	6.11	63.0	3.6	-111	Clear
			3.0	7.68	15.67	5,960	5.97	60.7	3.3	-122	Clear
			4.0 PD	7.67	15.23	5,970	5.55	56.6	3.2	-125	Clear; Dry
	8-Apr-16	1.4	1.0	7.12	6.71	5,950	9.37	100.6	3.4	-64	Clear
			2.0	7.16	6.32	5,900	7.10	73.6	3.3	-70	Clear
			4.0 PD	7.19	6.51	5,870	5.92	61.3	3.3	-73	Clear: Dry
	6-Oct-16	1.5	1.0	6.94	18.86	5,450	8.46	88.1	3.2	-18	Clear
			2.0	7.01	19.22	5,480	6.08	62.4	3.0	-26	Clear
			4.0 PD	7.03	19.17	5,400	4.21	43.7	3.0	-33	Clear; Dy
	5-Apr-17	1.4	1.0	7.11	8.85	4,940	9.74	85.5	3.2	-54	Clear
			2.0	7.12	8.60	5,050	3.60	31.4	3.2	-59	Clear
			3.0	7.14	8.32	5,050	3.14	28.5	3.2	-77	Clear
			4.0 PD	7.20	8.19	5,050	25.02	223.2	3.2	-107	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-10	12-Oct-17	1.5	1.0	9.16	17.22	4,860	9.27	10.1	3.0	-122	Clear
			2.0	9.17	16.56	4,880	5.62	57.6	3.1	-127	Clear
			4.0 PD	9.20	16.66	4,890	4.99	51.1	3.1	-128	Clear; Dry
	24-May-18	1.5	1.0	6.87	12.72	4,190	2.46	23.3	2.8	-161	Clear
			2.0	6.87	11.28	4,470	2.04	18.2	2.9	-155	Clear
			3.0	6.88	10.77	4,550	1.49	13.3	2.9	-150	Clear
			4.0 PD	6.93	10.73	4,550	1.15	10.3	2.9	-147	Clear; Dry
	15-Oct-18	1.5	1.0	6.18	16.06	3,340	5.09	56.6	2.3	-109	Clear
			2.0	6.15	16.32	3,910	3.28	31.8	2.5	-100	Clear
			3.0	6.20	16.99	3,970	1.23	12.3	2.5	-90	Clear
	2-Apr-19	1.5	1.0	7.32	6.76	6,470	1.32	11.1	4.2	-131	Mild PHC odour; Clear
			2.0	7.36	7.05	6,620	1.32	11.2	4.3	-122	Clear
			4.0	7.42	6.35	6,720	1.01	8.2	4.3	-100	Clear
	11-Sep-19	1.5	1.0	8.25	18.27	4,420	8.05	81.8	2.9	-182	Clear; PHC odour
			2.0	8.26	17.65	4,530	4.64	45.6	2.9	-175	Clear; PHC odour
			4.0 PD	8.24	17.75	4,270	2.27	24.2	2.7	-160	Clear; PHC odour; Dry
	27-Mar-20	1.5	1.0	7.50	9.26	3,540	2.58	23.0	3.0	-140	Clear
			2.0	7.36	7.76	5,720	1.36	11.2	3.7	-120	Clear
			3.0	7.46	7.39	5,820	0.82	6.8	3.7	-107	Clear
			4.0 PD	7.56	7.21	5,830	0.62	5.2	3.7	-92	Clear; Dry
	13-Oct-20	1.5	1.0	7.18	17.01	4,670	4.00	38.8	3.0	384	Clear
			2.0	7.21	17.06	4,530	1.73	16.4	2.9	389	Clear
			3.0	7.13	17.35	4,130	0.89	9.3	2.6	397	Clear
			4.0 PD	7.10	17.49	3,840	0.75	7.7	2.4	398	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-11	30-Jan-12	0.7	0.5	9.42	6.51	3,060	13.25	91.9	2.0	186	Clear
			1.0	8.99	8.57	3,080	6.12	55.6	2.0	163	Clear
			1.5 PD	8.95	8.90	3,050	5.47	47.6	2.0	139	Clear; Dry
	24-Oct-12	1.2	0.5	7.86	15.96	2,980	7.65	67.3	1.9	-44	Clear
			1.0 PD	7.98	17.08	3,080	1.53	15.0	2.0	-47	Clear; Dry
	12-Apr-13	1.2	1.0	7.88	7.70	3,290	6.27	48.0	2.2	-77	Clear; Few Fines
			2.0 PD	7.89	7.88	3,060	3.00	30.5	2.1	-81	Clear; Dry
	17-Sep-13	1.1	0.5	7.92	14.96	3,080	7.10	64.4	2.0	-66	Clear
			1.0	7.88	15.24	3,174	3.44	33.6	1.8	-70	Clear
			1.5 PD	7.80	15.40	3,206	2.65	24.5	1.8	-71	Dry
	3-Jun-14	1.0	0.5	7.35	14.13	3,810	8.51	81.8	2.4	2	Clear
			1.0	7.10	12.88	3,810	7.20	68.9	2.4	4	Clear
			2.0 PD	7.02	12.33	3,720	5.91	55.7	2.4	1	Clear; Dry
	2-Oct-14	1.0	1.0	8.66	17.59	2,890	8.63	87.9	2.0	-169	Clear
			2.0 PD	8.69	17.84	3,350	3.06	33.1	2.1	-200	Clear; Dry
	28-Apr-15	1.0	1.0	7.99	10.72	4,370	6.83	60.4	2.8	-19	Clear
			2.0 PD	7.51	9.46	4,290	6.18	54.7	2.8	-12	Clear; Dry
	19-Oct-15	1.0	1.0	8.33	16.76	3,150	7.76	79.1	2.7	-181	Clear
			2.0 PD	8.41	15.94	3,400	6.48	66.0	2.1	-190	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-11	8-Apr-16	1.0	1.0	7.94	7.44	2,970	8.44	91.1	2.1	-55	Clear
			2.0 PD	7.77	6.26	3,100	6.72	68.0	2.0	-51	Clear: Dry
	6-Oct-16	1.0	0.5	7.47	19.79	2,460	15.63	160.5	1.6	-44	Clear
			1.0	7.43	19.43	2,460	6.63	72.8	1.6	-52	Clear
			2.0 PD	7.35	15.40	2,390	2.37	24.3	1.5	-46	Dry
	5-Apr-17	1.3	1.0	7.86	7.20	3,340	5.38	51.6	2.3	-66	Clear
			2.0 PD	7.78	6.97	3,370	4.99	47.1	2.3	-69	Clear; Dry
	12-Oct-17	1.0	1.0	9.25	15.94	2,550	14.64	138.3	1.6	-216	Clear
			2.0	9.20	17.44	2,560	7.10	73.7	1.6	-218	Clear
			3.0 PD	9.14	17.64	2,510	5.23	51.6	1.6	-214	Clear; Dry
	24-May-18	1.0	0.5	6.97	12.11	2,880	3.66	28.8	1.9	-114	Clear
			1.0	6.91	11.34	2,900	2.41	21.0	1.9	-111	Clear
			2.0	6.90	10.82	2,920	1.77	14.9	1.9	-108	Clear
			3.0 PD	6.86	10.22	2,810	1.74	15.1	2.0	-112	Clear; Dry
	16-Oct-18	1.0	1.0	6.70	15.23	2,860	7.46	75.5	1.8	-75	Clear; Sulfur odour
			2.0 PD	6.68	16.08	2,850	6.57	65.1	1.8	-85	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-11	3-Apr-19	1.0	1.0	7.26	5.09	3,670	8.23	79.9	2.1	-121	Clear
			2.0 PD	7.19	4.88	4,130	5.44	49.7	2.0	-111	Clear; Dry
	12-Sep-19	1.0	1.0	8.02	16.24	2,870	9.36	92.0	1.9	-107	Clear
			2.0 PD	7.97	16.06	2,990	4.28	40.6	1.7	-117	Clear; Dry
	30-Mar-20	1.0	0.5	6.49	6.63	4,530	11.93	97.3	2.9	108	Clear
			1.0	6.99	6.66	4,530	3.84	30.9	2.9	94	Clear
			2.0 PD	7.20	6.53	4,620	3.32	29.5	2.9	88	Clear; Dry
	14-Oct-20	1.0	1.0	6.99	16.76	4,160	8.44	80.6	3.1	332	Clear
			2.0 PD	7.10	17.02	4,220	3.39	30.9	3.0	316	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-12	13-Apr-12	1.5	1.5 PD	9.62	10.35	2,740	6.62	49.5	1.8	-110	Clear; Dry
	24-Oct-12	1.8	1.5	8.10	15.84	2,860	3.85	35.9	1.8	25	Clear; Dry
	12-Apr-13	1.0	0.5	7.86	7.23	3,160	6.60	39.3	2.0	-62	Brown, silty
			1.0	7.84	7.14	3,190	2.93	27.6	2.0	-54	Clear
			1.5 PD	7.84	7.25	3,080	2.42	15.7	1.4	-38	Clear; Dry
	17-Sep-13	0.9	0.5	7.96	14.66	2,970	6.20	38.7	2.0	-48	Light Brown
			1.0	7.84	14.81	3,012	2.99	26.6	1.6	-22	Light Brown
			1.5 PD	7.86	14.88	3,026	2.90	25.8	1.6	-18	Dry
	3-Jun-14	0.9	0.5	7.04	16.34	3,680	4.68	47.5	2.3	-33	Clear
			1.0	6.95	14.23	3,680	4.65	45.4	2.4	-39	Clear
			1.5 PD	6.92	13.29	3,680	4.37	42.4	2.4	-42	Clear; Dry
	2-Oct-14	1.0	1.0	8.75	18.06	3,300	9.45	92.0	2.1	-163	Clear
			2.0 PD	8.59	17.30	3,400	2.76	29.0	2.2	-148	Clear; Dry
	28-Apr-15	1.0	1.0	7.65	9.15	3,500	8.64	75.5	2.3	44	Clear
			2.0 PD	7.47	8.62	3,490	8.43	72.4	2.2	47	Clear; Dry
	19-Oct-15	1.0	1.0	7.86	15.99	3,600	8.46	88.1	2.3	-147	Clear
			2.0 PD	7.90	16.14	3,450	5.45	56.2	2.3	-155	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-12	8-Apr-16	1.0	1.0	7.53	7.17	3,330	10.47	110.6	2.0	-94	Clear
			2.0 PD	7.36	6.22	3,370	8.14	77.8	2.0	-88	Clear: Dry
	6-Oct-16	1.0	0.5	7.14	20.07	2,580	14.88	160.7	1.7	-22	Clear
			1.0	7.07	19.37	2,770	5.77	60.7	1.8	-6	Clear
			2.0 PD	7.05	19.10	2,720	2.88	26.2	1.8	8	Dry
	5-Apr-17	1.3	1.0	7.42	6.96	3,230	7.16	66.0	2.1	-70	Clear
			2.0 PD	7.44	7.01	3,310	5.23	46.2	2.1	-61	Clear; Dry
	12-Oct-17	1.0	1.0	9.05	16.44	2,880	18.03	177.5	1.9	-200	Clear
			2.0 PD	8.95	17.44	3,120	6.59	61.3	2.0	-181	Clear; Dry
	24-May-18	1.0	0.5	7.07	12.46	3,860	2.98	28.6	2.1	-88	Clear
			1.0	7.03	11.89	4,440	2.21	20.7	2.1	-96	Clear
			1.5	7.05	11.58	4,670	1.69	15.4	2.0	-92	Clear
			2.0 PD	7.01	10.97	4,880	1.31	11.2	2.0	-94	Clear; Dry
	16-Oct-18	1.0	1.0	6.43	15.78	3,420	4.68	45.7	2.3	-75	Clear
			2.0 PD	6.34	16.23	3,700	3.12	31.8	2.4	-60	Clear; Dry
	3-Apr-19	1.0	1.0	7.67	6.12	4,290	7.69	72.9	2.8	24	Clear
			2.0 PD	7.41	5.57	4,440	4.29	34.7	2.9	38	Clear; Dry
	12-Sep-19	1.0	1.0	8.22	17.26	3,360	6.86	65.6	2.2	-76	Clear
			2.0 PD	8.32	16.68	3,880	4.47	42.9	2.1	-79	Clear; Dry
	30-Mar-20	1.0	0.5	7.99	7.14	5,420	2.11	18.8	3.1	-11	Clear
			1.0	7.86	7.22	5,550	1.96	17.7	3.0	7	Clear
			2.0 PD	7.88	7.18	5,670	1.86	17.6	3.0	12	Clear; Dry
	14-Oct-20	1.0	1.0	7.16	17.33	4,880	4.65	45.3	3.0	167	Clear
			2.0 PD	7.09	17.19	4,940	2.06	19.3	3.0	180	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-13	30-Jan-12	0.1	NA	NA	NA	NA	NA	NA	NA	NA	Insufficient Volume for Readings
	24-Oct-12	1.2	0.5	8.16	16.29	3,180	6.61	49.3	2.0	49	Clear
			1.0	8.09	16.54	3,360	1.50	26.3	2.0	50	Clear
			1.5 PD	8.04	16.64	3,380	1.06	9.6	2.1	24	Clear; Dry
	12-Apr-13	1.2	0.5	7.68	7.71	3,680	8.64	73.9	2.3	-26	Clear
			1.0	7.70	7.39	3,130	5.67	35.0	2.4	-24	Clear
			1.5 PD	7.70	7.30	3,690	2.42	44.0	2.4	-28	Clear; Dry
	17-Sep-13	1.1	0.5	7.76	13.86	3,366	8.60	74.0	2.3	-33	Clear
			1.0	7.70	13.70	3,660	6.67	50.2	2.0	-30	Clear
			1.5 PD	7.67	13.77	3,688	3.74	44.2	2.0	-36	Dry
	3-Jun-14	1.1	0.5	6.97	15.49	7,110	2.10	21.7	3.7	-118	Clear
			1.0	6.96	13.59	5,050	2.43	23.7	3.1	-169	Clear
			2.0 PD	6.95	12.50	4,490	2.43	23.7	2.8	-202	Clear; Dry
	2-Oct-14	1.0	1.0	8.54	17.74	3,970	4.02	39.2	2.6	-96	Clear
			2.0 PD	8.51	17.26	4,160	2.28	23.8	2.7	-91	Clear; Dry
	28-Apr-15	1.1	1.0	7.50	10.65	3,710	5.84	53.4	2.4	30	Clear
			2.0 PD	7.45	9.99	3,880	6.80	60.5	2.5	8	Clear; Dry
	19-Oct-15	1.0	1.0	8.22	16.27	4,050	4.86	50.0	2.5	-76	Clear
			2.0 PD	8.16	16.11	4,220	5.10	52.2	2.5	-101	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-13	8-Apr-16	1.0	1.0	7.08	6.27	3,660	5.12	54.2	2.3	21	Clear
			2.0 PD	7.11	6.04	3,610	3.34	35.6	2.3	5	Clear: Dry
	6-Oct-16	1.0	1.0	6.70	20.13	3,160	12.73	129.0	2.1	43	Clear
			2.0 PD	6.64	19.48	3,460	3.10	32.2	2.2	35	Clear; Dry
	5-Apr-17	1.3	1.0	6.52	8.50	3,770	18.44	160.4	2.4	47	Clear
			2.0 PD	6.56	8.03	3,620	11.01	97.2	2.3	32	Clear; Dry
	12-Oct-17	1.0	1.0	8.81	16.87	3,510	9.86	92.1	2.3	-164	Clear
			2.0 PD	8.78	17.34	3,760	2.81	29.8	2.4	-151	Clear; Dry
	24-May-18	1.0	0.5	7.17	13.28	3,860	3.61	34.7	2.8	-43	Clear
			1.0	7.10	11.73	4,790	3.19	29.8	3.2	-52	Clear
			1.5	7.07	10.97	5,260	1.65	13.9	3.4	-46	Clear
			2.0 PD	7.09	10.88	5,330	1.02	9.0	3.4	-40	Clear; Dry
	16-Oct-18	1.0	1.0	6.12	15.75	4,180	3.71	37.9	2.8	-40	Clear
			2.0 PD	6.15	16.13	4,540	3.06	30.4	2.9	-40	Clear; Dry
	3-Apr-19	1.0	1.0	6.93	6.42	4,880	2.77	23.2	3.2	50	Clear
			2.0 PD	6.90	5.92	4,850	2.24	18.0	3.2	42	Clear; Dry
	12-Sep-19	1.0	1.0	7.54	16.98	4,250	5.23	51.4	2.8	-55	Clear
			2.0 PD	7.45	16.87	4,440	2.98	28.0	2.6	-51	Clear; Dry
	30-Mar-20	1.0	0.5	7.63	6.52	4,790	2.32	19.2	3.1	43	Clear
			1.0	7.63	6.97	5,050	1.31	10.4	3.3	34	Clear
			2.0 PD	7.66	7.16	5,160	0.80	6.4	3.3	25	Clear; Dry
	14-Oct-20	1.0	1.0	7.29	17.09	5,120	2.79	26.0	3.2	196	Clear
			2.0 PD	7.21	16.99	5,144	2.22	21.4	3.2	186	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-14	30-Jan-12	0.2	NA	NA	NA	NA	NA	NA	NA	NA	Insufficient Volume for Readings
	24-Oct-12	1.4	0.5	7.79	15.93	4,680	6.81	46.2	3.0	34	Clear
			1.0	7.95	16.92	4,570	1.73	25.1	3.0	38	Clear
			1.5	7.99	16.86	4,330	1.75	19.4	2.7	42	Clear
			2.0	7.99	16.96	4,560	1.44	19.4	2.8	44	Clear
			2.5	8.00	17.03	4,570	1.09	10.8	2.9	51	Clear
			3.0 PD	7.99	17.09	4,540	0.97	10.3	2.9	53	Brown; Dry
	12-Apr-13	1.2	0.5	7.23	7.21	9,930	7.44	84.4	7.6	-1	Clear
			1.0	6.94	7.05	12,810	13.44	100.1	8.4	0	Clear
			2.0	7.08	6.94	12,510	13.10	119.1	7.9	4	Clear
			5.0 PD	7.22	6.82	12,160	9.98	83.4	8.0	7	Clear; Dry
	17-Sep-13	1.1	0.5	8.62	15.10	4,280	5.08	38.2	2.6	-166	Clear
			1.0	8.56	15.26	4,344	2.20	17.8	2.8	-170	Clear
			2.0 PD	8.40	15.44	4,348	1.94	16.0	2.8	-170	Dry
	3-Jun-14	1.1	0.5	6.88	15.63	6,460	2.73	27.9	5.1	-18	Clear
			1.0	6.90	13.22	8,540	2.95	28.7	5.6	-5	Clear
			2.0 PD	6.92	11.94	8,960	2.51	24.0	5.8	8	Clear; Dry
	2-Oct-14	1.1	1.0	8.56	18.38	5,560	3.46	34.1	4.1	-132	Clear
			2.0	8.57	17.32	6,660	2.07	20.7	4.3	-125	Clear
			3.0 PD	8.65	17.61	5,720	3.15	33.8	3.5	-111	Clear; Dry
	28-Apr-15	1.1	1.0	7.94	9.28	9,160	4.47	43.0	5.1	2	Clear
			2.0	7.97	9.17	9,110	4.28	41.7	5.1	7	Clear
			3.0 PD	8.03	9.01	9,110	4.26	41.4	5.1	10	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-14	19-Oct-15	1.1	1.0	7.99	16.67	7,240	3.88	40.6	4.6	-117	Clear
			2.0 PD	8.16	16.04	6,800	3.66	38.0	4.1	-104	Clear; Dry
	8-Apr-16	1.0	1.0	7.37	7.76	5,570	3.99	42.3	3.9	-3	Clear
			2.0 PD	7.20	7.07	6,240	3.01	28.9	3.7	6	Clear: Dry
	6-Oct-16	1.0	1.0	6.52	20.97	4,460	3.59	41.1	3.0	48	Clear
			2.0 PD	6.55	19.47	4,890	3.14	35.6	3.1	63	Clear; Dry
	5-Apr-17	1.4	1.0	6.80	8.32	5,250	30.19	288.5	4.3	-6	Clear
			2.0	6.79	8.03	7,580	44.36	388.7	5.0	-4	Clear
			3.0 PD	7.00	7.79	7,900	42.28	364.2	5.1	-2	Clear; Dry
	12-Oct-17	1.0	1.0	8.66	16.63	4,720	3.72	34.1	3.3	-196	Clear
			2.0 PD	8.69	17.34	5,500	1.90	19.7	3.6	-184	Clear; Dry
	24-May-18	1.0	0.5	6.96	13.09	5,250	1.54	15.9	4.9	-26	Clear
			1.0	6.85	11.15	8,460	2.49	23.7	5.6	-23	Clear
			2.0	6.97	10.53	8,970	2.75	25.6	5.8	-21	Clear
			3.0 PD	7.01	10.48	9,010	2.85	26.8	5.8	-19	Clear; Dry
	16-Oct-18	1.0	1.0	6.10	16.65	6,140	2.41	24.4	4.0	-30	Clear
			2.0 PD	6.14	17.11	6,310	1.72	16.3	4.1	-24	Clear; Dry
	3-Apr-19	1.0	1.0	6.86	6.33	5,760	3.22	26.7	5.0	44	Clear
			2.0 PD	7.01	5.99	5,990	1.98	17.7	5.2	61	Clear; Dry
	12-Sep-19	1.0	1.0	7.69	16.46	6,770	4.08	38.6	5.1	-36	Clear
			2.0 PD	7.78	17.12	6,810	2.11	20.6	4.7	-43	Clear; Dry
	30-Mar-20	1.0	0.5	7.72	6.74	8,020	1.44	12.3	5.5	-98	Clear
			1.0	7.63	6.97	9,610	1.19	9.8	6.3	-142	Clear
			2.0 PD	7.66	7.16	9,920	0.81	6.8	6.4	-161	Clear; Dry
	14-Oct-20	1.0	1.0	6.88	16.69	8,550	1.97	18.6	6.2	112	Clear
			2.0 PD	7.03	16.95	8,890	1.23	12.0	6.0	122	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-16	30-Jan-12	1.3	NA	NA	NA	NA	NA	NA	NA	NA	No Readings due to LPH
	24-Oct-12	1.2	0.5	8.40	15.97	1,245	5.57	32.3	0.8	-93	Brown; Sheen; Petroleum Odour
			1.0	8.19	15.99	1,339	1.13	15.9	0.9	-91	Brown; Sheen; Petroleum Odour
			1.5	8.17	15.98	1,333	0.82	7.5	0.9	-84	Clear; Sheen; Petroleum Odour
			2.0	8.10	15.98	1,312	0.56	6.2	0.8	-84	Clear; Sheen; Petroleum Odour
			2.5	8.07	16.03	1,226	0.44	4.2	0.8	-86	Brown; Sheen; Petroleum Odour
			3.0 PD	8.05	16.13	1,206	0.43	4.0	0.8	-86	Brown; Sheen; Petroleum Odour; Dry
	12-Apr-13	1.2	0.5	7.86	7.12	3,470	6.08	38.9	1.8	-124	Clear, PHC odour
			1.0	8.23	6.77	1,810	2.56	26.9	1.3	-126	Clear, PHC odour
			2.0	8.25	6.66	1,570	1.69	12.3	1.0	-126	Clear, PHC odour
			5.0	8.18	6.76	1,540	0.64	5.6	1.0	-125	Clear, PHC odour
			7.0	8.18	6.83	1,510	0.51	4.1	1.0	-125	Clear, PHC odour
	17-Sep-13	1.0	0.5	8.07	15.88	1,670	5.54	33.1	1.4	-111	Clear, PHC odour
			1.0	8.18	15.96	1,588	1.72	11.8	1.0	-116	Clear, PHC odour
			2.0	8.24	15.44	1,570	0.60	6.1	0.9	-116	Clear, PHC odour
			3.0 PD	8.26	15.56	1,562	0.56	6.0	0.9	-120	Dry
	2-Jun-14	1.0	0.5	7.15	11.40	2,210	7.11	64.9	1.2	-186	Clear, PHC odour
			1.0	7.14	10.97	1,740	4.54	40.9	1.1	-197	Clear, PHC odour
			2.0	7.13	11.24	1,680	3.54	31.8	1.1	-202	Clear, PHC odour
			3.0	7.13	11.37	1,650	2.09	19.2	1.1	-209	Clear, PHC odour
			4.0 PD	7.13	10.82	1,610	1.84	16.7	1.0	-210	Clear, PHC odour; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-16	2-Oct-14	1.0	1.0	8.83	16.96	1,740	1.28	12.6	1.1	-276	Clear, PHC odour
			2.0	8.80	16.91	1,750	0.83	8.4	1.1	-276	Clear, PHC odour
			3.0	8.81	16.82	1,770	0.66	6.7	1.1	-276	Clear, PHC odour
			4.0 PD	8.80	16.49	1,840	0.51	5.4	1.2	-277	Clear, PHC odour; Dry
	28-Apr-15	1.0	1.0	8.18	9.15	1,930	7.34	61.8	1.2	-202	Clear, PHC odour
			2.0	7.98	8.68	1,900	5.93	51.4	1.2	-197	Clear, PHC odour
			3.0	7.87	8.64	1,920	5.59	48.3	1.2	-194	Clear, PHC odour
	19-Oct-15	1.0	1.0	8.47	15.91	1,770	3.27	33.4	1.2	-254	Clear, PHC odour
			2.0	8.33	16.12	1,810	3.05	31.1	1.2	-257	Clear, PHC odour
			3.0	8.29	16.16	1,800	2.76	29.0	1.2	-259	Clear, PHC odour
	8-Apr-16	1.0	1.0	8.24	7.99	1,470	3.02	31.9	1.1	-188	Clear, PHC odour
			2.0	8.21	7.54	1,510	2.78	29.4	1.1	-186	Clear, PHC odour
			3.0	8.22	6.98	1,500	2.69	25.9	1.0	-180	Clear, PHC odour
	6-Oct-16	1.0	1.0	8.16	19.94	1,214	6.24	63.3	0.9	-131	Clear
			2.0	8.20	19.85	1,326	3.11	33.1	0.9	-133	Clear
			3.0	8.14	19.79	1,320	2.68	27.9	0.9	-134	Clear
	5-Apr-17	1.3	1.0	7.69	8.06	2,490	0.81	6.5	1.6	-208	Grey
			2.0	7.65	7.66	2,500	0.63	5.3	1.6	-205	Clear
			3.0	7.65	7.35	2,550	0.65	5.4	1.6	-203	Clear
			4.0 PD	7.60	7.31	2,590	0.48	4.0	1.7	-201	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-16	12-Oct-17	1.0	1.0	9.11	17.31	2,340	1.10	10.1	1.6	-220	Clear
			2.0	9.14	17.11	2,440	0.89	9.2	1.6	-217	Clear
			3.0 PD	9.19	16.88	2,510	0.76	8.0	1.6	-218	Clear; Dry
	24-May-18	1.0	0.5	7.01	11.80	5,260	0.78	7.8	3.6	-171	Clear; PHC Odour
			1.0	6.96	10.93	4,470	0.76	7.1	2.5	-181	Clear; PHC Odour
			2.0	7.06	10.95	3,520	0.62	5.4	2.2	-184	Clear; PHC Odour
			3.0 PD	7.05	11.09	3,260	0.46	4.0	2.1	-185	Clear; PHC odour; Dry
	15-Oct-18	1.0	1.0	6.32	15.06	3,110	6.88	72.2	1.9	-109	Clear; PHC odour
			2.0	6.32	15.97	2,860	4.00	38.4	1.8	-112	Clear; PHC odour
			3.0	6.27	16.51	2,710	2.24	21.5	1.7	-114	Clear; PHC odour
	2-Apr-19	1.0	1.0	7.58	5.30	9,040	7.14	68.6	5.1	-123	Clear; PHC odour
			2.0	7.71	5.74	6,660	6.27	60.2	3.7	-137	Clear; PHC odour
			3.0 PD	7.82	5.55	4,570	5.06	50.8	2.8	-144	Clear; PHC odour; Dry
	11-Sep-19	1.0	1.0	8.55	17.83	4,160	6.36	62.7	2.5	-191	Black; PHC odour
			2.0	8.57	18.03	3,460	2.87	29.2	2.1	-195	Clear; PHC odour
			3.0 PD	8.47	18.68	3,080	1.82	19.8	2.0	-195	Clear; PHC odour; Dry
	27-Mar-20	1.0	0.5	7.67	7.22	8,030	1.25	10.8	5.7	-218	Grey-Black; PHC odour
			1.0	7.61	6.93	6,010	0.83	6.6	3.3	-235	Clear; PHC odour
			2.0 PD	7.68	6.23	3,920	0.54	4.4	2.5	-223	Clear; PHC odour; Dry
	13-Oct-20	1.0	1.0	7.49	16.38	5,210	1.08	11.3	3.2	382	Light grey; PHC odour
			2.0	7.52	16.66	4,160	0.91	9.2	2.4	373	Clear; PHC odour
			3.0	7.61	16.98	3,310	1.01	11.6	2.1	366	Clear; PHC odour
			4.0 PD	7.59	17.07	3,320	1.22	12.8	2.2	352	Clear; PHC odour; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-17	30-Jan-12	1.3	1.0	8.99	8.10	2,780	3.58	28.9	1.8	-146	Slightly Clear/Brown
			2.0	9.08	7.35	3,050	1.89	16.6	2.0	-155	Slightly Clear/Brown
			3.0	9.10	7.26	3,090	1.62	13.4	2.0	-159	Slightly Clear/Brown
			4.0 PD	9.14	7.05	3,150	1.49	12.7	2.0	-158	Slightly Clear/Brown; Dry
	24-Oct-12	1.3	0.5	7.86	15.13	3,360	5.58	36.2	2.2	-55	Clear
			1.0	7.98	14.75	3,440	1.20	17.5	2.2	-49	Clear
			1.5	8.01	14.60	3,450	0.97	8.4	2.2	-38	Clear
			2.0	8.08	14.40	3,480	0.58	6.7	2.2	-35	Clear
			2.5	8.08	14.39	3,480	0.52	5.1	2.2	-32	Clear
			3.0 PD	8.07	14.83	3,390	0.52	5.1	2.2	-37	Clear; Dry
	12-Apr-13	1.4	0.5	7.38	6.67	4,470	2.51	16.6	1.4	-129	Clear, PHC odour
			1.0	7.38	6.97	5,040	3.65	35.4	3.2	-118	Clear, PHC odour
			2.0 PD	7.51	7.09	5,000	4.53	41.4	3.2	-115	Clear, PHC odour; Dry
	17-Sep-13	1.2	0.5	7.50	12.26	3,440	3.56	29.0	2.2	-88	Clear, PHC odour
			1.0	7.44	12.80	3,512	1.66	13.6	2.6	-94	Clear, PHC odour
			1.5 PD	7.36	13.11	3,520	1.11	9.4	2.6	-106	Dry
	2-Jun-14	1.2	0.5	7.05	10.52	4,880	3.00	27.1	3.1	-190	Clear
			1.0	7.10	10.88	4,730	2.47	22.9	3.0	-188	Clear
			2.0	7.26	11.75	4,320	3.46	32.6	3.0	-178	Clear
			3.0 PD	7.21	11.80	4,570	4.68	43.8	3.0	-168	Silty; Dry
	2-Oct-14	1.2	1.0	7.96	15.34	3,490	2.33	23.4	2.2	-278	Clear; Mild PHC odour
			2.0	7.98	15.45	3,330	3.09	32.6	2.0	-275	Clear; Mild PHC odour
			3.0 PD	8.26	15.81	3,010	6.09	60.5	2.0	-240	Clear; Mild PHC odour; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-17	28-Apr-15	1.4	1.0	8.29	8.05	5,360	9.06	75.0	3.4	-117	Clear
			2.0	8.31	8.01	5,350	9.11	78.5	3.4	-111	Clear
			3.0	8.32	7.97	5,340	8.79	75.4	3.4	-106	Clear
			4.0	8.33	7.93	5,360	8.84	76.6	3.4	-102	Clear
	19-Oct-15	1.2	1.0	8.04	15.77	3,750	4.44	46.0	3.0	-196	Clear
			2.0	8.11	15.84	3,760	4.86	48.2	3.0	-201	Clear
			3.0	8.14	15.96	3,790	4.90	48.0	2.7	-204	Clear
	8-Apr-16	1.2	1.0	7.99	7.57	3,560	4.96	52.3	2.6	-174	Clear
			2.0	8.02	7.63	3,580	4.62	48.1	2.6	-171	Clear
			3.0	8.03	7.27	3,520	4.01	41.6	2.5	-177	Clear
	6-Oct-16	1.2	1.0	7.77	19.81	3,330	9.24	100.7	2.5	-124	Clear; PHC odour
			2.0	7.80	19.88	3,350	4.12	43.2	2.4	-129	Clear
			3.0	7.81	19.75	3,150	4.04	41.1	2.4	-131	Clear
	5-Apr-17	1.4	1.0	7.42	8.53	3,670	4.62	38.4	2.5	-170	Clear; PHC Odour
			2.0	7.50	8.08	3,910	2.83	24.3	2.5	-152	Clear
			3.0 PD	7.57	7.57	4,020	3.64	31.4	2.5	-148	Clear; Dry
	12-Oct-17	1.0	1.0	9.27	17.08	3,870	3.56	37.2	2.4	-202	Clear
			2.0	9.25	16.66	3,940	2.42	25.0	2.4	-216	Clear
			3.0 PD	9.29	16.89	3,970	2.77	28.9	2.5	-221	Clear; Dry
	24-May-18	1.0	0.5	6.91	12.73	3,740	2.29	23.3	2.5	-155	Clear
			1.0	6.92	11.00	3,920	2.51	22.2	2.5	-162	Clear
			2.0	6.95	11.42	3,770	2.20	20.6	2.4	-157	Clear
			3.0 PD	6.98	11.89	3,730	2.21	20.8	2.4	-157	Clear; Dry
	15-Oct-18	1.0	1.0	6.27	14.35	2,820	14.54	146.7	1.9	-90	Clear
			2.0	6.32	14.78	3,070	10.04	100.5	2.0	-94	Clear
			3.0	6.30	15.25	3,190	5.88	59.8	2.0	-96	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-17	2-Apr-19	1.0	1.0	7.11	3.91	6,090	1.40	12.6	5.7	-52	Clear
			2.0	6.98	6.06	10,320	2.84	24.7	6.8	-50	Clear
			4.0	7.18	6.01	10,990	3.52	29.9	7.1	-47	Clear
	11-Sep-19	1.0	1.0	8.83	17.35	4,210	14.53	154.6	2.7	-189	Clear
			2.0	8.91	16.83	4,040	9.41	93.7	2.5	-196	Clear
			3.0 PD	8.79	17.23	3,840	6.89	75.1	2.5	-197	Clear; Dry
	27-Mar-20	1.0	1.0	7.88	7.07	7,650	2.58	23.6	4.3	-211	Clear
			2.0	7.91	6.83	7,670	2.44	23.9	4.0	-219	Clear
			3.0 PD	7.90	6.33	7,700	2.79	25.8	3.7	-222	Clear; Dry
	13-Oct-20	1.0	1.0	7.36	16.79	6,990	12.23	118.9	3.5	138	Clear
			2.0	7.08	16.95	7,000	3.16	30.2	3.5	141	Clear
			3.0 PD	7.19	17.00	7,120	2.44	21.1	3.1	144	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-19	30-Jan-12	1.1	1.0	8.90	7.47	944	4.11	38.2	0.6	-149	Clear
			2.0	8.92	7.04	956	2.99	24.4	0.6	-136	Clear
			3.0 PD	8.89	7.07	956	2.48	21.1	0.6	-134	Clear; Dry
	24-Oct-12	1.3	0.5	7.88	15.51	1,088	2.10	53.2	0.7	-83	Clear
			1.0	7.90	15.53	1,089	1.37	12.0	0.7	-59	Clear
			1.5	7.90	15.52	1,090	0.75	9.0	0.7	-56	Clear
			2.0	7.88	15.51	1,091	0.63	6.2	0.7	-50	Clear
			2.5 PD	7.88	15.56	1,089	0.48	5.4	0.7	-49	Brown; Dry
	12-Apr-13	1.4	0.5	9.58	6.49	1,060	4.14	28.6	0.7	1	Clear
			1.0	9.51	5.59	1,087	3.32	16.2	0.7	-39	Clear
			1.5	9.46	5.30	1,090	1.53	13.8	0.7	-46	Clear
			2.0 PD	9.40	5.28	674	1.13	10.5	0.5	-47	Clear; Dry
	17-Sep-13	1.1	0.5	8.64	14.77	1,076	2.90	25.8	0.6	-86	Clear
			1.0	8.70	14.92	1,080	1.56	14.7	0.7	-64	Clear
			2.0 PD	8.70	14.96	1,088	1.22	10.2	0.6	-56	Dry
	2-Jun-14	1.2	0.5	6.96	11.41	1,148	11.92	106.8	0.7	-192	Clear
			1.0	6.79	10.56	1,152	8.90	80.0	0.7	-193	Clear
			2.0	6.70	11.01	1,156	5.71	52.0	0.7	-190	Clear
			3.0 PD	6.67	11.12	1,156	4.42	39.5	0.7	-190	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-19	2-Oct-14	1.2	1.0	8.92	16.26	1,114	3.19	31.4	0.7	-250	Clear
			2.0	8.69	16.18	1,190	1.81	18.5	0.8	-271	Clear
			3.0 PD	8.59	16.92	1,204	0.54	5.5	0.8	-273	Clear; Dry
	28-Apr-15	1.4	1.0	8.01	7.22	1,204	8.66	85.9	0.9	-55	Clear
			2.0	8.03	6.97	1,210	8.42	82.2	0.9	-57	Clear
			3.0	7.99	6.95	1,210	8.08	79.7	0.9	-57	Clear
			4.0 PD	7.96	6.88	1,218	7.89	76.0	0.9	-58	Clear; Dry
	19-Oct-15	1.2	1.0	8.30	15.44	1,190	7.42	75.6	0.9	-221	Clear
			2.0	8.26	15.32	1,200	4.66	48.1	0.8	-224	Clear
			3.0	8.27	15.67	1,220	4.21	43.2	0.8	-227	Clear
	8-Apr-16	1.2	1.0	8.14	6.33	1,170	9.35	99.6	0.8	-190	Clear
			2.0	8.08	6.76	1,186	8.54	88.2	0.7	-191	Clear
			3.0	8.06	6.59	1,189	7.86	76.5	0.7	-197	Clear
	6-Oct-16	1.2	1.0	7.86	19.11	977	6.77	69.9	0.7	-148	Clear
			2.0	7.84	18.97	980	5.69	58.1	0.7	-151	Clear
			3.0	7.81	19.23	996	4.11	42.0	0.6	-154	Clear
	5-Apr-17	1.5	1.0	8.15	7.13	1,152	3.36	28.2	0.7	-176	Clear
			2.0	8.06	6.27	1,071	1.59	12.1	0.7	-168	Clear
			3.0 PD	7.92	5.96	1,068	1.08	8.1	0.7	-157	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-19	12-Oct-17	1.2	1.0	8.95	16.64	2,190	15.95	147.8	1.0	-213	Clear
			2.0	8.98	16.58	1,202	4.51	46.6	0.7	-216	Clear
			3.0 PD	8.93	16.91	1,056	3.18	32.5	0.7	-213	Clear; Dry
	24-May-18	1.2	1.0	6.63	10.17	2,250	1.39	12.9	1.1	-39	Clear
			2.0	6.81	9.80	1,352	1.31	11.3	0.9	-48	Clear
			3.0	6.73	10.12	1,273	1.10	9.8	0.8	-40	Clear
			4.0	6.65	10.41	1,258	0.99	8.8	0.8	-35	Clear
	15-Oct-18	1.2	1.0	6.47	15.16	1,027	2.76	28.0	1.1	-27	Clear
			2.0	6.39	16.09	1,008	2.24	21.6	1.0	-27	Clear
			3.0	6.32	15.89	1,011	1.80	17.7	1.0	-31	Clear
	2-Apr-19	1.2	1.0	7.80	5.16	3,280	1.81	14.2	2.0	-124	Clear
			2.0	7.74	5.11	3,170	1.68	13.2	2.0	-110	Clear
			4.0	7.68	4.37	3,160	1.54	11.8	2.0	-98	Clear
	11-Sep-19	1.2	1.0	7.78	19.13	2,010	3.86	41.0	1.3	-126	Clear
			2.0	7.63	18.96	1,810	3.31	35.6	1.1	-126	Clear
			3.0 PD	7.48	18.64	1,710	2.72	29.7	1.1	-127	Clear; Dry
	27-Mar-20	1.2	1.0	7.64	6.89	3,450	3.46	33.1	1.7	-92	Clear
			2.0	7.71	6.66	3,490	2.74	26.6	1.6	-97	Clear
			3.0 PD	7.73	6.67	3,520	2.19	20.0	1.4	-96	Clear
	13-Oct-20	1.0	1.0	6.93	16.98	2,770	2.01	19.0	1.8	366	Clear
			2.0	6.99	17.25	2,560	1.81	17.4	1.8	360	Clear
			3.0 PD	6.97	17.33	2,490	1.67	17.0	1.6	354	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-23	13-Apr-12	1.3	0.5	8.66	9.55	1,162	8.78	70.3	0.9	-18	Brown; Silty
			1.0	8.50	8.98	1,610	6.82	67.7	1.0	-19	Brown; Silty
			1.5 PD	8.47	8.93	1,640	5.85	49.7	1.0	-18	Brown; Silty; Dry
	24-Oct-12	1.5	0.5	8.17	16.07	1,710	4.53	74.2	1.1	10	Clear
			1.0	8.13	16.11	1,710	3.55	34.1	1.1	23	Clear
			1.5	8.12	15.94	1,740	2.67	30.4	1.1	26	Clear
			2.0	8.12	15.82	1,670	2.94	31.5	1.1	37	Clear
			2.5	8.10	15.84	1,640	3.46	34.1	1.0	39	Clear
			3.0	8.12	15.89	1,640	3.54	36.1	1.0	45	Clear
			4.0	8.10	15.92	1,550	3.68	36.9	1.0	48	Clear
			6.0	8.11	15.88	1,470	3.94	40.2	0.9	53	Clear
	12-Apr-13	1.4	0.5	8.04	9.14	2,010	5.68	44.1	1.3	58	Clear
			1.0	7.84	8.33	1,860	3.93	39.0	1.3	62	Clear
	17-Sep-13	1.1	0.5	8.32	15.82	1,866	3.99	42.2	1.2	22	Clear
			1.0	8.17	15.66	1,670	3.64	36.6	1.2	40	Clear
			1.5 PD	8.08	15.64	1,666	3.48	34.2	1.0	54	Dry
	3-Jun-14	1.2	0.5	7.40	13.53	2,050	10.82	102.7	1.3	234	Clear
			1.0	7.24	11.93	2,040	11.88	110.4	1.3	236	Clear
			2.0 PD	7.15	11.64	2,020	12.36	114.7	1.3	235	Clear; Dry
	2-Oct-14	1.2	1.0	8.34	17.67	2,410	10.73	108.9	1.5	-106	Clear
			2.0	8.06	16.86	2,370	8.82	92.2	1.5	-94	Clear
			3.0 PD	7.80	16.55	2,190	3.52	34.9	1.4	-73	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-23	28-Apr-15	1.3	1.0	7.27	8.79	4,190	4.04	35.9	2.6	32	Clear
			2.0	7.31	8.98	4,170	4.86	43.7	2.7	28	Clear
			3.0	7.33	8.44	4,010	4.50	40.0	2.5	22	Clear
			4.0	7.32	8.52	3,960	4.23	38.8	2.4	25	Clear
	19-Oct-15	1.2	1.0	7.68	16.22	2,770	9.46	97.2	1.7	-91	Clear
			2.0	7.70	16.08	2,790	6.24	64.4	1.7	-99	Clear
			3.0 PD	7.71	16.14	2,790	4.44	45.0	1.7	-102	Clear
	8-Apr-16	1.2	1.0	7.40	7.66	2,580	8.11	82.1	1.6	-49	Clear
			2.0	7.43	7.88	2,590	6.23	60.7	1.6	-55	Clear
			3.0 PD	7.44	7.36	2,570	4.88	47.2	1.6	-57	Clear ; Dry
	6-Oct-16	1.2	1.0	7.19	18.66	2,440	5.44	56.6	1.4	-16	Clear
			2.0 PD	7.26	18.96	2,490	3.72	39.1	1.4	2	Clear; Dry
	5-Apr-17	1.4	1.0	7.56	7.91	2,870	8.44	77.6	1.8	-33	Clear
			2.0 PD	7.62	7.63	2,900	4.60	38.8	1.6	-41	Clear; Dry
	12-Oct-17	1.2	1.0	8.77	15.82	2,770	7.26	69.9	1.7	-88	Clear
			2.0 PD	8.94	16.64	2,880	4.21	43.0	1.5	-93	Clear; Dry
	24-May-18	1.2	0.5	7.04	11.37	2,810	8.75	79.4	1.9	-36	Clear
			1.0	7.11	10.61	2,920	7.61	68.6	1.8	-35	Clear
			2.0	7.16	10.90	2,620	6.82	62.3	1.5	-36	Clear
			3.0 PD	7.21	11.52	2,330	6.05	55.0	1.5	-36	Clear; Dry
	16-Oct-18	1.2	1.0	6.70	14.86	2,550	7.24	71.0	1.7	-42	Clear
			2.0	7.02	15.23	2,580	5.89	57.6	1.7	-44	Clear
			3.0	7.10	15.44	2,310	5.40	52.3	1.7	-39	Clear

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-23	3-Apr-19	1.2	1.0	7.73	6.03	3,780	10.80	96.2	2.5	94	Clear
			2.0	7.77	5.68	4,000	9.31	84.6	2.5	83	Clear
			3.0	7.83	4.81	3,030	9.05	81.4	1.8	69	Clear
	30-Mar-20	1.2	1.0	8.00	6.24	2,200	9.32	88.9	2.0	7	Clear
			2.0	7.93	6.19	2,320	6.66	63.5	2.0	-2	Clear
			3.0	7.90	6.32	2,360	6.23	61.3	1.8	-7	Clear
	14-Oct-20	1.2	1.0	7.68	15.96	2,490	11.22	110.0	2.0	189	Clear
			2.0	7.81	16.64	2,610	9.36	92.6	2.0	188	Clear
			3.0 PD	7.88	16.54	2,670	6.03	58.7	2.0	186	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-25	13-Apr-12	1.3	0.5	9.04	10.04	4,390	8.13	70.4	2.8	8	Clear
			1.0	8.69	9.47	4,660	5.19	57.4	2.7	7	Clear
			1.5	8.58	9.43	4,770	4.37	34.7	3.0	-1	Clear
			2.0 PD	8.33	9.47	4,550	2.78	28.8	3.0	-13	Brown; Dry
	24-Oct-12	1.4	0.5	7.84	16.37	5,100	6.26	39.8	3.3	22	Clear
			1.0 PD	7.91	17.17	5,240	1.17	16.5	3.4	22	Clear; Dry
	12-Apr-13	1.4	0.5	7.78	6.89	8,220	9.57	69.8	3.5	0	Clear
			1.0	7.63	7.00	5,620	1.88	27.7	3.6	-4	Clear
			2.0 PD	7.63	7.15	5,410	1.35	10.4	3.5	-3	Clear; Dry
	17-Sep-13	1.3	0.5	7.80	16.00	4,920	4.38	37.4	3.0	11	Clear
			1.0	7.86	15.92	5,111	1.90	22.0	3.4	2	Clear
			1.5 PD	7.76	15.88	5,200	1.88	21.6	3.4	-2	Dry
	3-Jun-14	1.2	0.5	6.88	15.74	5,390	2.14	21.9	3.5	-222	Clear
			1.0 PD	6.84	14.55	5,690	2.60	25.8	3.7	-220	Clear; Dry
	2-Oct-14	1.2	1.0	8.70	18.61	4,880	3.72	37.0	3.3	-133	Clear
			2.0 PD	8.62	17.46	5,190	1.76	18.4	3.3	-129	Clear; Dry
	28-Apr-15	1.4	1.0	8.22	7.15	8,340	7.55	73.7	3.9	-10	Clear
			2.0	8.24	7.10	6,980	5.42	52.1	3.9	-11	Clear
			3.0 PD	8.17	7.12	6,960	4.86	47.0	3.8	-14	Clear; Dry
	19-Oct-15	1.2	1.0	7.97	16.96	5,670	4.18	42.7	3.7	-118	Clear
			2.0 PD	7.99	17.04	5,720	3.90	40.1	3.4	-111	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-25	8-Apr-16	1.2	1.0	7.59	7.22	4,760	5.21	54.4	3.3	-9	Clear
			2.0 PD	7.66	6.94	4,450	2.66	27.2	3.2	-14	Clear; Dry
	6-Oct-16	1.2	1.0	6.58	20.92	4,250	4.10	39.9	2.5	27	Clear
			2.0 PD	6.67	19.66	3,770	1.42	14.8	2.4	17	Clear; Dry
	5-Apr-17	1.4	1.0	7.42	8.32	4,700	23.27	198.9	2.7	-72	Clear
			2.0 PD	7.45	7.93	3,530	5.53	48.0	2.3	-109	Clear; Dry
	12-Oct-17	1.2	1.0	8.92	17.42	4,530	2.86	28.6	2.5	-166	Clear
			2.0 PD	8.97	17.64	3,610	1.30	12.0	2.3	-164	Clear; Dry
	24-May-18	1.2	0.5	7.20	13.27	7,350	2.49	24.7	3.8	-39	Clear
			1.0	7.33	11.80	5,160	2.48	23.1	3.1	-44	Clear
			2.0	7.38	10.92	4,550	1.88	16.9	2.9	-45	Clear
			3.0 PD	7.32	10.86	4,460	1.21	11.0	2.8	-45	Clear; Dry
	16-Oct-18	1.2	1.0	6.29	16.34	5,360	1.43	14.4	3.1	-15	Clear
			2.0 PD	6.34	16.68	4,460	0.80	8.0	2.8	-12	Clear; Dry
	3-Apr-19	1.2	1.0	6.99	5.87	6,660	1.56	12.2	3.3	2	Clear
			2.0 PD	7.12	6.02	5,340	0.78	5.6	3.4	11	Clear; Dry
	12-Sep-19	1.2	1.0	7.44	16.48	5,770	3.27	31.1	3.7	-26	Clear
			2.0 PD	7.47	16.16	4,890	1.11	9.6	3.4	-33	Clear; Dry
	30-Mar-20	1.2	0.5	7.97	7.09	7,200	2.32	22.1	3.6	12	Clear
			1.0	8.03	6.84	5,690	1.47	12.9	3.7	16	Clear
			2.0 PD	7.66	6.77	5,560	1.03	9.9	3.7	17	Clear; Dry
	14-Oct-20	1.2	1.0	7.69	18.81	4,590	11.83	113.2	2.9	341	Clear
			2.0 PD	7.48	18.27	4,550	4.62	47.8	2.9	337	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-26	13-Apr-12	1.2	0.5	8.46	9.92	987	4.90	37.8	0.6	17	Clear
			1.0	8.58	9.99	951	2.98	37.9	0.6	15	Clear
			1.5 PD	8.58	10.14	949	2.14	19.8	0.6	-31	Clear; Dry
	24-Oct-12	1.2	0.5	8.05	15.34	792	4.21	32.6	0.5	-55	Clear
			1.0	8.04	15.66	804	1.91	23.9	0.5	-52	Clear
			1.5 PD	8.03	15.74	797	1.49	14.1	0.5	-38	Clear; Dry
	12-Apr-13	1.3	0.5	8.34	8.33	825	6.15	66.0	0.5	101	Clear
			1.0	8.52	8.03	830	5.54	41.5	0.5	103	Clear
			2.0 PD	8.56	8.14	809	3.39	26.4	0.5	104	Clear; Dry
	17-Sep-13	1.1	0.5	8.26	15.22	940	4.32	34.0	0.6	-60	Clear
			1.0	8.14	14.76	896	2.96	26.2	0.5	-56	Clear
			1.5 PD	8.06	14.84	892	2.20	24.7	0.5	-52	Dry
	2-Jun-14	1.2	0.5	7.40	13.23	946	10.67	101.1	0.6	59	Clear
			1.0	7.21	11.94	952	8.82	81.7	0.6	60	Clear
			2.0	7.06	11.64	951	8.03	73.8	0.6	61	Clear
			3.0 PD	7.09	11.30	931	5.83	49.3	0.6	58	Clear; Dry
	2-Oct-14	1.2	1.0	7.78	14.93	883	3.59	34.2	0.6	16	Clear
			2.0 PD	7.78	15.54	855	1.85	18.4	0.6	9	Clear; Dry
	28-Apr-15	1.4	1.0	8.16	8.24	1,011	7.11	69.7	0.7	76	Clear
			2.0	8.06	7.87	1,050	6.80	66.9	0.7	80	Clear
			3.0 PD	7.99	7.76	990	5.56	53.9	0.7	88	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-26	19-Oct-15	1.2	1.0	7.57	15.21	966	5.28	54.1	0.8	27	Clear
			2.0 PD	7.70	15.56	980	3.21	33.7	0.6	22	Clear; Dry
	8-Apr-16	1.2	1.0	7.82	6.96	790	4.54	44.2	0.6	18	Clear
			2.0 PD	7.77	6.44	786	4.23	40.9	0.6	14	Clear; Dry
	6-Oct-16	1.2	1.0	7.39	18.14	666	4.80	50.2	0.5	33	Clear
			2.0 PD	7.44	18.29	690	3.34	34.1	0.5	27	Clear; Dry
	5-Apr-17	1.5	1.0	7.75	8.69	937	3.77	33.9	0.6	-155	Clear
			2.0	7.73	8.45	939	3.87	33.9	0.6	-140	Clear
			3.0 PD	7.77	8.32	874	3.21	28.9	0.6	-128	Clear; Dry
	12-Oct-17	1.2	1.0	8.56	16.26	926	3.44	35.0	0.5	-138	Clear
			2.0 PD	8.77	16.64	956	2.88	29.6	0.5	-121	Clear; Dry
	24-May-18	1.2	0.5	7.36	10.66	1,196	5.92	53.8	0.9	-50	Clear
			1.0	7.21	10.30	1,610	5.48	49.1	1.1	-46	Clear
			2.0	7.24	10.35	1,700	3.82	33.7	1.1	-44	Clear
			3.0 PD	7.20	10.22	1,640	1.77	15.1	1.1	-40	Clear; Dry
	15-Oct-18	1.2	1.0	7.09	15.99	1,210	1.82	16.6	1.0	-66	Clear
			2.0 PD	7.17	16.47	1,440	1.11	9.5	1.0	-61	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-26	2-Apr-19	1.2	1.0	7.72	6.77	3,040	2.29	20.0	1.7	-102	Clear
			2.0	7.68	7.17	2,500	2.97	25.5	1.5	-95	Clear
			3.0 PD	7.65	6.13	2,260	4.23	36.7	1.4	-84	Clear; Dry
	11-Sep-19	1.2	1.0	7.35	16.40	1,069	8.80	86.6	0.7	-110	Clear
			2.0 PD	7.41	16.23	1,097	4.61	44.3	0.7	-108	Clear; Dry
	27-Mar-20	1.2	0.5	7.64	8.11	2,760	7.69	75.0	1.3	-66	Clear
			1.0	7.71	7.65	2,880	6.37	61.6	1.2	-67	Clear
			2.0 PD	7.77	7.54	2,910	5.94	56.6	1.2	-67	Clear; Dry
	14-Oct-20	1.2	1.0	7.14	16.96	1,940	6.54	64.0	1.1	228	Clear
			2.0 PD	7.17	17.21	2,110	5.53	55.1	1.0	219	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-27	13-Apr-12	1.2	0.5	9.69	10.09	3,220	9.72	25.3	0.6	-163	Brown; Silty
			1.0	9.63	9.26	841	4.11	35.0	0.5	-160	Brown; Silty
			1.5	9.55	9.01	835	3.82	34.8	0.5	-149	Slightly Clear/Brown
			2.0	9.45	8.85	824	4.11	35.8	0.5	-135	Slightly Clear/Brown
			2.5 PD	9.33	8.81	822	5.25	42.7	0.5	-131	Brown; Dry
	24-Oct-12	1.3	0.5	8.40	14.38	1,190	7.03	48.3	0.7	-51	Clear
			1.0	8.33	14.13	910	2.67	24.3	0.7	-42	Clear
			1.5 PD	8.22	14.03	942	1.50	17.5	0.6	-33	Brown; Dry
	12-Apr-13	1.4	0.5	8.21	7.61	1,353	9.01	60.2	0.4	-114	Light Brown, some fines
			1.0	8.39	7.87	879	5.70	46.1	0.4	-111	Clear
			3.0 PD	8.31	6.62	670	7.88	61.6	0.4	-96	Light Brown, some fines; Dry
	17-Sep-13	1.1	0.5	8.44	14.48	1,270	7.66	51.1	0.6	-106	Clear
			1.0	8.28	14.36	944	5.80	48.6	0.5	-96	Clear
			1.5 PD	8.21	14.10	914	5.70	48.2	0.6	-88	Dry
	2-Jun-14	1.0	0.5	7.28	14.85	1,510	8.82	81.8	0.7	-113	Clear
			1.0	7.33	11.71	890	7.49	68.6	0.5	-103	Clear
			2.0 PD	7.39	10.83	755	7.37	66.5	0.5	-96	Clear; Dry
	2-Oct-14	1.0	1.0	8.62	16.10	2,250	1.35	14.2	1.2	-222	Clear
			2.0	8.56	16.14	2,290	3.63	44.3	1.0	-226	Clear
			3.0 PD	8.42	16.40	2,330	3.58	39.4	1.0	-230	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-27	28-Apr-15	1.1	1.0	8.41	7.51	1,280	9.21	89.0	0.6	-97	Clear
			2.0	8.44	7.56	1,270	5.76	55.7	0.6	-94	Clear
			3.0 PD	8.40	7.26	1,270	5.44	52.9	0.6	-89	Clear; Dry
	28-Apr-15	1.1	1.0	8.41	7.51	1,280	9.21	89.0	0.6	-97	Clear
			2.0	8.44	7.56	1,270	5.76	55.7	0.6	-94	Clear
			3.0 PD	8.40	7.26	1,270	5.44	52.9	0.6	-89	Clear; Dry
	6-Oct-16	1.0	1.0	8.02	18.68	996	3.54	37.6	0.5	-19	Clear
			2.0 PD	8.11	18.86	880	3.22	34.2	0.5	-24	Clear; Dry
	5-Apr-17	1.3	1.0	8.37	8.03	1,370	8.96	79.0	0.7	-79	Clear
			2.0 PD	8.31	6.97	1,390	6.22	56.4	0.7	-66	Clear; Dry
	12-Oct-17	1.0	1.0	9.08	17.63	1,140	5.66	57.6	0.6	-101	Clear
			2.0 PD	9.14	17.48	1,210	4.54	44.1	0.6	-89	Clear; Dry
	24-May-18	1.0	0.5	7.24	12.22	1,356	4.47	42.0	0.8	-77	Clear
			1.0	7.18	11.68	1,380	4.27	39.6	0.9	-76	Clear
			2.0	7.17	10.96	1,420	3.91	35.7	0.9	-70	Clear
			3.0 PD	7.14	10.85	1,442	3.37	31.1	0.9	-73	Clear; Dry
	15-Oct-18	1.0	1.0	6.88	16.12	999	5.23	49.9	0.8	-88	Clear
			2.0 PD	7.02	16.23	1,120	3.71	35.7	0.7	-94	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-27	2-Apr-19	1.0	1.0	7.46	5.23	1,240	4.87	45.5	1.0	-26	Clear
			2.0	7.52	5.44	1,265	3.76	34.6	0.9	-27	Clear
			3.0 PD	7.48	5.37	1,310	3.43	31.9	0.9	-31	Clear; Dry
	11-Sep-19	1.0	1.0	7.67	15.86	980	7.23	70.9	0.8	-78	Clear
			2.0 PD	7.84	16.16	1,066	5.91	57.9	0.8	-84	Clear; Dry
	27-Mar-20	1.0	0.5	7.89	7.69	1,330	5.33	52.1	1.0	-21	Clear
			1.0	7.80	7.54	1,127	4.98	48.9	1.0	-23	Clear
			2.0 PD	7.77	7.58	1,114	4.88	48.2	1.0	-23	Clear; Dry
	14-Oct-20	1.0	1.0	7.46	16.09	1,117	4.49	43.2	0.9	96	Clear
			2.0 PD	7.43	16.39	1,094	3.67	35.0	0.9	88	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-28	13-Apr-12	1.2	0.5	8.93	11.45	3,710	5.48	40.3	2.4	-181	Clear; Petroleum Odour
			1.0	8.86	11.24	3,680	2.33	34.9	2.4	-181	Clear; Petroleum Odour
			1.5	8.84	11.21	3,680	2.55	22.2	2.4	-182	Clear; Petroleum Odour
			2.0 PD	8.83	11.22	3,700	2.21	21.1	2.4	-183	Brown; Dry
	24-Oct-12	1.4	0.5	8.00	15.38	3,010	6.10	42.3	1.9	-71	Clear; Petroleum Odour
			1.0	8.05	15.72	2,920	1.49	25.6	1.9	-73	Clear; Petroleum Odour
			1.5	8.05	15.71	2,910	1.20	11.1	1.9	-75	Clear; Petroleum Odour
			2.0	8.06	15.73	2,900	0.83	9.2	1.9	-76	Clear; Petroleum Odour
			2.5 PD	8.04	15.77	2,890	0.83	9.0	1.8	-85	Brown; Petroleum Odour; Dry
	12-Apr-13	1.4	0.5	7.70	8.23	4,920	5.56	30.4	2.7	-112	Clear
			1.0	7.86	9.01	4,370	5.04	30.1	2.7	-112	Clear
			2.0	7.92	8.33	3,690	3.06	35.2	2.3	-115	Clear
			3.5 PD	7.84	8.45	3,980	3.82	31.1	2.5	-123	Clear; Dry
	17-Sep-13	1.2	0.5	8.20	15.48	3,460	4.86	40.4	2.4	-120	Light brown; PHC odour
			1.0	8.36	15.70	3,510	3.10	33.3	1.8	-132	Light brown; PHC odour
			2.0 PD	8.32	15.86	3,522	3.04	32.6	2.0	-133	Dry
	2-Jun-14	1.2	0.5	6.91	13.18	3,660	5.30	49.0	2.3	-200	Brown; Silty
			1.0	6.90	12.54	3,450	4.51	42.1	2.1	-207	Brown; Silty
			2.0	7.00	12.68	2,990	3.74	35.6	1.9	-203	Clear
			3.0 PD	7.02	12.60	3,010	3.35	32.3	2.0	-202	Clear; Dry
	2-Oct-14	1.2	1.0	8.68	15.86	4,330	4.58	46.6	2.8	-238	Clear
			2.0 PD	8.58	15.54	4,290	2.36	22.9	2.7	-245	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-28	28-Apr-15	1.3	1.0	7.75	11.49	4,160	4.73	44.1	2.7	-188	Clear; PHC odour
			2.0	7.59	11.40	4,150	4.29	39.5	2.7	-183	Clear; PHC odour
			3.0 PD	7.41	11.31	4,140	4.29	39.7	2.7	-177	Dry
	19-Oct-15	1.3	1.0	8.16	14.74	4,440	4.58	47.0	2.8	-206	Clear; PHC odour
			2.0	8.23	15.02	4,400	4.42	45.4	2.8	-211	Clear; PHC odour
			3.0 PD	8.26	15.08	4,410	4.10	41.6	2.7	-212	Dry
	8-Apr-16	1.3	1.0	8.37	7.11	2,166	6.78	70.1	0.6	-170	Clear
			2.0 PD	8.34	7.00	2,160	3.95	38.4	0.6	-176	Clear; Dry
	6-Oct-16	1.2	1.0	7.88	19.26	3,960	4.76	50.6	2.2	-166	Clear
			2.0 PD	7.84	19.09	3,980	4.37	44.8	2.3	-173	Clear; Dry
	5-Apr-17	1.4	1.0	7.39	10.25	4,330	16.52	151.4	2.7	-170	Clear
			2.0	7.38	11.10	4,020	7.19	66.8	2.5	-174	Clear
			3.0 PD	7.45	10.98	3,170	9.91	90.8	2.1	-161	Clear; Dry
	12-Oct-17	1.0	1.0	8.87	17.34	4,140	8.65	88.1	2.5	-191	Clear
			2.0 PD	8.95	16.86	3,770	6.21	64.2	2.3	-177	Clear; Dry
	24-May-18	1.2	0.5	6.91	11.25	4,760	0.67	6.1	3.1	-157	Clear
			1.0	6.86	11.17	4,990	0.73	6.5	3.2	-167	Clear
			2.0	6.84	11.25	4,410	0.63	5.9	2.7	-176	Clear
			3.0 PD	6.90	11.49	3,810	0.67	6.3	2.4	-178	Clear; Dry
	15-Oct-18	1.2	1.0	6.72	16.69	4,460	1.11	9.4	3.0	-170	Clear
			2.0 PD	6.79	16.92	4,280	0.67	5.2	2.7	-174	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-28	2-Apr-19	1.2	1.0	7.52	7.20	6,070	1.37	11.8	3.7	-122	Clear; PHC odour
			2.0	7.50	9.42	5,400	1.82	15.8	3.4	-136	Clear; PHC odour
			3.0 PD	7.54	9.21	3,430	2.11	18.5	2.3	-149	Clear; Dry
	11-Sep-19	1.0	1.0	8.30	17.26	4,330	9.06	88.9	2.9	-154	Clear; PHC odour
			2.0 PD	8.01	16.06	4,770	3.91	37.4	3.1	-150	Clear; Dry
	27-Mar-20	1.0	0.5	6.34	9.57	5,060	10.14	85.0	3.2	-110	Silty, PHC Odour
			1.0	6.76	10.36	4,710	9.05	36.6	2.8	-157	Clear; PHC odour
			2.0 PD	7.04	10.31	2,370	2.79	23.5	1.3	-166	Clear; Dry
	13-Oct-20	1.2	1.0	6.77	16.14	4,330	4.85	36.9	2.7	363	Clear; PHC odour
			2.0	6.84	16.03	4,030	1.07	11.0	2.4	352	Clear; PHC odour
			3.0 PD	6.87	16.06	2,470	0.62	6.4	1.5	321	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
							Dissolved Oxygen				
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	(mg/L)	(%)	TDS (g/L)	ORP (mV)	Notes
MW-30	13-Apr-12	0.6	NA	NA	NA	NA	NA	NA	NA	NA	Insufficient Volume for Readings
	24-Oct-12	1.0	1.0	7.99	15.39	1,770	3.97	87.5	1.1	-4	Clear; Dry
	12-Apr-13	1.2	0.5	7.42	7.41	4,270	8.42	98.3	2.7	-20	Clear
			1.0	7.45	7.16	3,920	4.55	30.1	1.8	-39	Clear
			2.0PD	7.63	6.86	3,430	6.62	126.8	1.9	-42	Clear; Dry
	17-Sep-13	1.1	0.5	7.88	15.56	2,720	6.60	98.7	2.0	-10	Clear
			1.0 PD	7.90	15.40	2,466	3.99	86.2	1.8	-24	Dry
	3-Jun-14	1.5	0.5	7.03	16.34	5,340	1.89	19.4	3.4	-190	Clear
			1.0	7.10	13.33	5,220	2.17	21.2	3.3	-190	Clear
			2.0	7.14	12.48	5,000	2.22	21.2	3.1	-201	Clear
			3.0 PD	7.21	13.23	2,480	4.57	44.2	1.6	-211	Clear; Dry
	2-Oct-14	1.5	1.0	8.66	18.47	4,730	3.10	32.4	2.9	-183	Clear
			1.5 PD	8.77	17.36	4,140	2.52	26.6	2.6	-197	Clear; Dry
	28-Apr-15	1.1	1.0	7.66	8.12	5,260	7.14	69.9	3.1	-33	Clear
			2.0 PD	7.70	7.66	5,240	6.60	64.7	2.7	-40	Clear; Dry
	19-Oct-15	1.1	1.0	8.48	16.66	4,960	6.23	63.5	3.0	-66	Clear
			2.0 PD	8.51	16.39	4,990	5.85	59.9	3.0	-74	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-30	8-Apr-16	1.1	1.0	7.25	6.84	3,770	7.22	69.4	2.6	-54	Clear
			2.0 PD	7.31	7.10	3,790	5.66	54.3	2.5	-59	Clear; Dry
	6-Oct-16	1.1	1.0	6.58	20.85	3,290	5.11	57.2	2.0	4	Clear
			2.0 PD	6.72	19.47	2,730	1.88	14.7	1.7	29	Clear; Dry
	5-Apr-17	1.3	1.0	7.33	8.36	4,950	8.69	79.4	3.4	-104	Clear
			2.0 PD	7.37	7.90	5,180	24.16	238.1	3.3	-87	Clear; Dry
	12-Oct-17	1.1	1.0	8.91	17.47	3,670	6.41	63.0	2.4	-179	Clear
			2.0 PD	8.93	17.46	3,750	3.67	38.9	2.4	-178	Clear; Dry
	24-May-18	1.1	0.5	7.16	12.83	4,560	0.83	8.3	3.3	-39	Clear
			1.0	7.08	11.66	5,550	1.20	11.4	3.7	-43	Clear
			1.5	7.10	11.07	6,010	1.27	11.7	3.9	-32	Clear
			2.0 PD	7.13	10.62	6,030	1.24	11.2	3.9	-28	Clear; Dry
	16-Oct-18	1.1	1.0	6.69	15.48	5,760	1.36	12.2	3.8	-69	Clear
			2.0 PD	6.86	15.76	6,240	1.34	12.0	3.6	-74	Clear; Dry
	2-Apr-19	1.1	1.0	7.22	6.33	7,440	1.11	10.7	3.9	-88	Clear
			2.0 PD	7.18	5.84	7,620	0.96	8.6	3.9	-94	Clear; Dry
	12-Sep-19	1.1	1.0	7.79	15.86	4,860	1.98	18.2	2.8	-106	Clear
			2.0 PD	7.86	16.28	5,120	1.29	11.1	2.9	-114	Clear; Dry
	30-Mar-20	1.1	0.5	8.06	7.77	6,230	1.36	12.0	4.1	-33	Clear
			1.0	7.99	7.23	6,445	0.77	6.9	4.0	-40	Clear
			2.0 PD	7.93	7.32	6,540	0.69	6.0	4.0	-41	Clear; Dry
	14-Oct-20	1.1	1.0	7.54	18.61	4,310	4.04	42.5	2.6	269	Grey; Some fines
			2.0	7.51	17.58	3,970	2.02	19.8	2.5	235	Grey-brown; Silty
			3.0 PD	7.48	17.52	3,910	1.13	11.5	2.5	224	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-32	13-Apr-12	0.7	1.0 PD	8.67	9.25	858	5.70	46.5	0.6	-32	Clear; Dry
	24-Oct-12	1.4	1.5	8.16	13.37	925	4.37	38.0	0.6	-29	Clear; Dry
	12-Apr-13	1.5	0.5	7.98	7.60	890	6.73	66.5	0.6	55	Clear
			1.0	7.52	5.93	902	7.13	72.0	0.6	62	Clear
			1.5 PD	7.36	6.79	893	4.78	42.4	0.6	78	Clear; Dry
	17-Sep-13	1.3	0.5	8.06	14.27	910	5.76	47.6	0.6	34	Clear
			1.0	7.90	14.40	886	4.77	42.0	0.6	40	Clear
			2.0 PD	7.67	14.46	890	4.42	39.5	0.6	41	Dry
	2-Jun-14	0.9	0.5	7.57	11.11	906	12.66	112.7	0.6	-100	Clear
			1.0	7.37	10.34	883	9.04	80.5	0.6	-119	Clear
			2.0	7.18	9.86	847	7.97	70.4	0.6	-110	Clear
			3.0 PD	7.20	9.49	870	7.83	68.0	0.6	-97	Clear; Dry
	2-Oct-14	0.9	1.0	9.01	14.21	978	2.90	28.3	0.6	-27	Clear
			2.0	8.45	13.82	953	2.93	28.6	0.6	-19	Clear
			3.0 PD	8.13	14.11	950	2.57	26.1	0.6	-15	Clear; Dry
	28-Apr-15	1.3	1.0	8.67	7.40	990	5.73	54.7	0.6	48	Clear
			2.0 PD	8.68	5.97	987	4.83	46.6	0.6	51	Clear; Dry
	19-Oct-15	1.3	1.0	8.40	14.68	977	3.28	33.6	0.6	-11	Clear
			2.0 PD	8.44	15.11	970	3.04	31.5	0.6	-9	Clear; Dry
	8-Apr-16	1.2	1.0	8.55	6.80	840	3.11	30.9	0.6	1	Clear
			2.0 PD	8.56	6.16	857	2.93	30.1	0.5	11	Clear; Dry
	6-Oct-16	1.2	1.0	8.22	19.74	686	4.44	45.2	0.4	39	Clear
			2.0 PD	8.25	19.91	694	3.01	31.0	0.4	44	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-32	5-Apr-17	1.4	1.0	7.86	8.67	808	5.48	48.0	0.5	-105	Clear
			2.0 PD	7.91	7.91	709	2.73	22.9	0.4	-103	Clear; Dry
	12-Oct-17	1.2	1.0	8.88	16.97	910	4.66	45.0	0.5	-144	Clear
			2.0 PD	8.96	17.24	770	3.97	41.2	0.5	-139	Clear; Dry
	24-May-18	1.2	0.5	7.66	12.00	906	6.62	64.1	0.6	-66	Clear
			1.0	7.58	10.12	866	6.61	55.4	0.5	-65	Clear
			2.0	7.52	9.47	769	5.46	46.8	0.5	-63	Clear
			3.0 PD	7.47	9.32	727	5.29	46.4	0.5	-62	Clear; Dry
	15-Oct-18	1.2	1.0	7.34	15.22	647	5.08	48.8	0.4	-94	Clear
			2.0 PD	7.28	15.86	627	4.46	43.0	0.4	-97	Clear; Dry
	2-Apr-19	1.2	1.0	7.82	6.32	1,420	6.35	52.1	0.7	-60	Clear
			2.0 PD	7.89	6.85	986	6.27	51.6	0.6	-62	Clear; Dry
	11-Sep-19	1.2	1.0	7.35	19.03	1,271	7.80	79.7	0.7	-129	Clear
			2.0 PD	7.42	16.06	971	8.17	81.6	0.6	-124	Clear; Dry

TABLE 2.1

GROUNDWATER PURGING SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

				Field Stabilization Parameters							
Location	Date	Well Volume (L)	Cumulative Volume Purged (L)	pH	Temperature (^{o}C)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	TDS (g/L)	ORP (mV)	Notes
MW-32	27-Mar-20	1.2	0.5	7.76	6.54	1,110	6.22	59.6	0.8	-55	Clear
			1.0	7.62	6.66	999	6.01	58.8	0.6	-59	Clear
			2.0 PD	7.59	6.80	990	5.87	58.0	0.6	-61	Clear; Dry
	14-Oct-20	1.2	1.0	7.88	17.86	1,230	6.99	67.9	0.9	308	Clear
			2.0 PD	7.54	16.69	1,066	6.07	58.9	0.8	296	Clear; Dry

Notes
L - Liters
^{o}C - Degrees Celsius
uS/cm - microSiemens per centimeter
mg/L - milligrams per liter
TDS - Total Dissolved Solids
g/L - grams per liter
ORP - Oxidation Reduction Potential
mV - milliVolts
PD - Purged Dry
NA - Not Available

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-3/MW-3R									
Sample ID:	**Potable Groundwater**	**W-003**	**W-003**	**W-008**	**W-003**	**MW-03**	**DUP-02**	**MW-03**	**MW-03**	**MW-3**	**MW-3**
Sample Date:	**Medium/Fine Textured Soil**	**9-Aug-11**	**8-Nov-11**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**17-Apr-13 Duplicate**	**19-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	4,000	510	137	38	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	220	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	270	60.5	14.4	3.81	0.73	0.70	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	12	4.32	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	28	10.6	7.76	1.38	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	1,350	88.7	24.1	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-3/MW-3R										
Sample ID:	**Potable Groundwater**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**	**MW-3**
Sample Date:	**Medium/Fine Textured Soil**	**23-Oct-15**	**14-Apr-16**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)												
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	30	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	110	140	ND 100	ND 100	ND 130	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 330	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 330	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)												
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-4/MW-4R									
Sample ID:	**Potable Groundwater**	**W-004**	**W-004**	**W-009**	**W-010**	**W-001**	**W-002**	**MW-04**	**DUP-01**	**MW-4**	**MW-4**
Sample Date:	**Medium/Fine Textured Soil**	**9-Aug-11**	**8-Nov-11**	**30-Jan-12**	**30-Jan-12 Duplicate**	**25-Oct-12**	**25-Oct-12 Duplicate**	**17-Apr-13**	**17-Apr-13 Duplicate**	**18-Sep-13**	**4-Jun-14**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	21,600	540	230	219	81	117	27	56	ND 25	ND 25
PHC F2 (C10-C16)	150	1,460	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	4,040	105	29.5	27.0	19.9	33.1	5.02	5.18	3.85	ND 0.50
Toluene	24	1,790	37.2	1.97	1.98	0.53	0.54	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	2,090	43.7	18.8	18.4	10.8	13.5	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	7,060	101	44.2	43.6	ND 1.0	1.5	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-4/MW-4R									
Sample ID:	**Potable Groundwater**	**MW-4**	**MW-4**	**DUP-2**	**MW-4**	**MW-4**	**MW-4**	**MW-4**	**MW-4**	**MW-4**	**DUP-1**
Sample Date:	**Medium/Fine Textured Soil**	**6-Oct-14**	**30-Apr-15**	**30-Apr-15 Duplicate**	**23-Oct-15**	**14-Apr-16**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**29-May-18 Duplicate**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-4/MW-4R				
Sample ID:	**Potable Groundwater**	**MW-4**	**MW-4**	**MW-4**	**MW-4**	**MW-4**
Sample Date:	**Medium/Fine Textured Soil**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)						
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)						
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-5/MW-5R									
Sample ID:	**Potable Groundwater**	**W-005**	**W-005**	**W-011**	**W-007**	**MW-05**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**
Sample Date:	**Medium/Fine Textured Soil**	**9-Aug-11**	**8-Nov-11**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	580	ND 100	31	143	83	25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	110
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	250	ND 250	ND 250	ND 250	ND 250	380
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	460	ND 250	ND 250	370	ND 250	420
Volatile Organic Compounds (ug/L)											
Benzene	5.0	10.1	ND 0.50	0.68	0.91	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 1.0	ND 0.50	1.66	1.54	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	7.8	ND 0.50	1.62	7.18	3.65	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	2.6	ND 1.5	3.5	25.0	2.74	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-5/MW-5R									
Sample ID:	**Potable Groundwater**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**	**MW-5**
Sample Date:	**Medium/Fine Textured Soil**	**14-Apr-16**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-9										
Sample ID:	**Potable Groundwater**	**W-009**	**W-012**	**W-006**	**MW-09**	**DUP-03**	**MW-09**	**DUP-002**	**MW-09**	**DUP-1**	**MW-9**	**DUP-1**
Sample Date:	**Medium/Fine Textured Soil**	**8-Nov-11**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**17-Apr-13 Duplicate**	**18-Sep-13**	**18-Sep-13**	**4-Jun-14**	**4-Jun-14 Duplicate**	**6-Oct-14**	**6-Oct-14 Duplicate**
Petroleum Hydrocarbons (ug/L)												
PHC F1 (C6-C10)	750	ND 100	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)												
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-9										
Sample ID:	**Potable Groundwater**	**MW-9**	**DUP-1**	**MW-9**	**DUP-1**	**MW-9**	**DUP-1**	**MW-9**	**DUP-2**	**MW-9**	**DUP-2**	**MW-9**
Sample Date:	**Medium/Fine Textured Soil**	**30-Apr-15**	**30-Apr-15 Duplicate**	**23-Oct-15**	**23-Oct-15 Duplicate**	**14-Apr-16**	**14-Apr-16 Duplicate**	**18-Oct-16**	**18-Oct-16 Duplicate**	**13-Apr-17**	**13-Apr-17 Duplicate**	**18-Oct-17**
Petroleum Hydrocarbons (ug/L)												
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	110	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	420	670	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	280	ND 250	ND 250	ND 250	420	760	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)												
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-9								
Sample ID:	**Potable Groundwater**	**MW-9**	**MW-9**	**DUP-1**	**MW-9**	**DUP-1**	**MW-9**	**DUP-1**	**MW-9**	**MW-9**
Sample Date:	**Medium/Fine Textured Soil**	**29-May-18**	**25-Oct-18**	**25-Oct-18 Duplicate**	**16-Apr-19**	**16-Apr-19 Duplicate**	**17-Sep-19**	**17-Sep-19 Duplicate**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-10								
Sample ID:	**Potable Groundwater**	**W-004**	**W-005**	**W-029**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**30-Jan-12 Duplicate**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	3,610	3,850	98	70	ND 25	ND 25	ND 25	101	47
PHC F2 (C10-C16)	150	220	290	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	120
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 10	ND 10	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	16	16	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	433	451	0.70	2.83	ND 0.50	ND 0.50	1.24	10.7	1.60
Xylenes (total)	300	459	517	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	1.99	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-10									
Sample ID:	**Potable Groundwater**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**	**MW-10**
Sample Date:	**Medium/Fine Textured Soil**	**14-Apr-16**	**18-Oct-16**	**17-Apr-17**	**24-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	115	72	66	111	109	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	1.24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	0.64	0.82	ND 0.50	ND 0.50	1.79	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	1.00	1.14	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-11								
Sample ID:	**Potable Groundwater**	**W-003**	**W-022**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	1,070	168	62	ND 25	ND 25	ND 25	ND 25	41	ND 25
PHC F2 (C10-C16)	150	280	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	150	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	5.8	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	1.26	1.38
Toluene	24	2.9	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	146	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	89.5	ND 1.0	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-11								
Sample ID:	**Potable Groundwater**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**	**MW-11**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	26	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	0.81	ND 0.50	0.89	ND 0.50	ND 0.50	ND 0.50	ND 0.50	0.51
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-12								
Sample ID:	**Potable Groundwater**	**W-029**	**W-019**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**
Sample Date:	**Medium/Fine Textured Soil**	**13-Apr-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	1,920	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	480	ND 100	ND 100	ND 100	ND 160	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	390	850	ND 250	570	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	520	1,420	ND 250	1,030	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	58.5	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	0.59	0.63	7.61
Toluene	24	2.13	ND 0.50	ND 0.50	ND 0.50	ND 0.50	0.55	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	147	ND 0.50	ND 0.50	ND 0.50	1.01	ND 0.50	ND 0.50	ND 0.50	7.72
Xylenes (total)	300	650	ND 1.0	ND 0.50	ND 0.50	0.68	ND 0.50	0.72	ND 0.50	2.24

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-12								
Sample ID:	**Potable Groundwater**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**	**MW-12**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	1.79	ND 0.50	1.48	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	1.39	ND 0.50	1.83	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-13								
Sample ID:	**Potable Groundwater**	**W-002**	**W-032**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	773	443	342	297	ND 25	47	77	27	ND 25
PHC F2 (C10-C16)	150	1,070	370	210	320	ND 100	ND 100	ND 100	150	140
PHC F3 (C16-C34)	500	3,300	960	ND 250	ND 250	310	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	590	1,010	ND 250	ND 250	270	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	31.8	61.1	42.4	43.7	9.89	11.2	36.9	4.21	0.96
Toluene	24	4.76	2.96	0.98	1.12	ND 0.50	ND 0.50	0.89	ND 0.50	ND 0.50
Ethylbenzene	2.4	61.7	5.79	ND 0.50	5.37	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	46.8	57.9	5.55	6.50	ND 0.50	ND 0.50	3.01	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-13								
Sample ID:	**Potable Groundwater**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**	**MW-13**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	34	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	26
PHC F2 (C10-C16)	150	610	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	1,100	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	0.96	ND 0.50	ND 0.50	ND 0.50	0.50	ND 0.50	ND 0.50	1.93	4.47
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	2.22
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	0.92

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-14								
Sample ID:	**Potable Groundwater**	**W-001**	**W-033**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	31	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	0.69	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	0.54	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-14								
Sample ID:	**Potable Groundwater**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**	**MW-14**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	440	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	890	ND 250	ND 250	ND 250	ND 250	540	480	400	440
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	460	350	370	380
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-16								
Sample ID:	**Potable Groundwater**	**W-007**	**W-030**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	1,560,000	60,600	23,700	33,300	12,300	10,400	2,600	3,300	15,300
PHC F2 (C10-C16)	150	141,000	7,020	2,990	2,380	2,030	1,920	2,340	2,240	2,690
PHC F3 (C16-C34)	500	4,400	420	430	ND 250	ND 250	ND 250	ND 250	290	350
PHC F4 (C34-C50)	500	ND 2,500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 2,500	269	115	111	63.0	68.8	19.5	85.4	185
Toluene	24	6,100	91.4	188	20.1	54.2	33.1	6.6	13.2	166
Ethylbenzene	2.4	62,600	1,130	1,130	924	730	882	20.3	375	891
Xylenes (total)	300	271,000	8,790	7,890	3,830	3,840	2,690	236	1,370	7,230

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-16								
Sample ID:	**Potable Groundwater**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**	**MW-16**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	7,400	8,990	10,700	12,400	8,770	12,500	4,310	8,750	5,240
PHC F2 (C10-C16)	150	3,400	1,610	2,240	1,740	1,690	1,000	570	900	760
PHC F3 (C16-C34)	500	1,350	ND 250	ND 250	360	260	480	760	990	ND 250
PHC F4 (C34-C50)	500	480	ND 250	ND 250	ND 250	ND 250	300	460	720	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	71.6	83.8	80	75.4	53.3	69.4	24.4	32.3	26.0
Toluene	24	22.4	75.3	37	106	25.6	73.1	13.9	39.0	10.5
Ethylbenzene	2.4	635	541	759	860	618	724	377	527	451
Xylenes (total)	300	2,200	3,040	3,390	4,720	2,480	4,830	1,330	3,410	1,630

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-17									
Sample ID:	**Potable Groundwater**	**W-017**	**W-031**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**DUP-2**	**MW-17**	**MW-17**	**MW-17**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**6-Oct-14 Duplicate**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	779	225	ND 25	51	ND 25	29	ND 25	ND 25	239	83
PHC F2 (C10-C16)	150	180	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	418	65.0	0.64	5.88	5.73	28.3	5.47	0.59	180	10.3
Toluene	24	4.99	0.65	ND 0.50	ND 0.50	0.64	0.69	0.61	ND 0.50	0.57	ND 0.50
Ethylbenzene	2.4	191	27.7	ND 0.50	ND 0.50	2.66	7.24	2.55	1.11	16.0	0.69
Xylenes (total)	300	117	2.9	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-17								
Sample ID:	**Potable Groundwater**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	69	ND 25	117	ND 25	29	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	140	ND 100	120	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	4.80	ND 0.50	12.9	2.36	1.09	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	0.90	0.59	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	1.32	ND 0.50	10.1	0.94	1.67	ND 0.50	ND 0.50	ND 0.50	3.64
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-19									
Sample ID:	**Potable Groundwater**	**W-016**	**W-011**	**MW-19**	**MW-19**	**MW-19**	**DUP-2**	**MW-19**	**MW-19**	**MW-19**	**MW-19**
Sample Date:	**Medium/Fine Textured Soil**	**30-Jan-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**4-Jun-14 Duplicate**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	119	ND 25	113	ND 25	ND 25	ND 25	38	38	ND 25	ND 25
PHC F2 (C10-C16)	150	780	130	430	130	ND 100	240	ND 100	750	820	610
PHC F3 (C16-C34)	500	280	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	620	360	460
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	0.60	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-19										
Sample ID:	**Potable Groundwater**	**MW-19**	**DUP-1**	**MW-19**	**DUP-1**	**MW-19**	**DUP-1**	**MW-19**	**MW-19**	**MW-19**	**MW-19**	**MW-19**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**18-Oct-16 Duplicate**	**13-Apr-17**	**13-Apr-17 Duplicate**	**18-Oct-17**	**18-Oct-17 Duplicate**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**
Petroleum Hydrocarbons (ug/L)												
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	360	260	190	130	260	250	380	ND 100	120	140	ND 100
PHC F3 (C16-C34)	500	290	570	ND 250	ND 250	270	270	470	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)												
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard		
Sample ID:	**Potable Groundwater**	**MW-19**	**DUP-1**
Sample Date:	**Medium/Fine Textured Soil**	**26-Oct-20**	**26-Oct-20 Duplicate**
Petroleum Hydrocarbons (ug/L)			
PHC F1 (C6-C10)	750	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250
Volatile Organic Compounds (ug/L)			
Benzene	5.0	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-23									
Sample ID:	**Potable Groundwater**	**W-032**	**W-015**	**W-016**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**
Sample Date:	**Medium/Fine Textured Soil**	**23-Apr-12**	**25-Oct-12**	**25-Oct-12 Duplicate**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	330	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	0.79	0.56	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	0.77	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-23								
Sample ID:	**Potable Groundwater**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**	**MW-23**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 380	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 380	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-25								
Sample ID:	**Potable Groundwater**	**W-039**	**W-018**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**
Sample Date:	**Medium/Fine Textured Soil**	**23-Apr-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	180	310	ND 100	110	ND 100	ND 100	160	250	440
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	320	ND 250	320	320
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	0.56
Toluene	24	ND 0.50	0.96	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-25								
Sample ID:	**Potable Groundwater**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**	**MW-25**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	110	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	100
PHC F3 (C16-C34)	500	480	ND 250	ND 250	ND 250	270	280	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	0.52	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-26								
Sample ID:	**Potable Groundwater**	**W-040**	**W-012**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**
Sample Date:	**Medium/Fine Textured Soil**	**23-Apr-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-26								
Sample ID:	**Potable Groundwater**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**	**MW-26**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-27							
Sample ID:	**Potable Groundwater**	**W-035**	**W-025**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**
Sample Date:	**Medium/Fine Textured Soil**	**23-Apr-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)									
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)									
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	0.57	1.12	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-27								
Sample ID:	**Potable Groundwater**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**	**MW-27**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

	O. Reg 153 Table 2									
Sample Location:	**Groundwater Standard**	**MW-28**								
Sample ID:	**Potable Groundwater**	**W-036**	**W-026**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**
Sample Date:	**Medium/Fine Textured Soil**	**23-Apr-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	5,310	4,070	8,000	4,990	2,180	2,630	1,530	3,040	1,550
PHC F2 (C10-C16)	150	1,020	570	420	660	350	310	450	790	1,270
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 25	0.74	ND 0.50	ND 2.5	1.61	ND 1.25	0.85	1.00	0.88
Toluene	24	61	35.1	48.9	20.0	27.8	20.4	19.8	20.9	9.55
Ethylbenzene	2.4	487	190	494	249	216	295	296	400	279
Xylenes (total)	300	1,330	1,160	2,080	1,010	824	836	436	853	450

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-28								
Sample ID:	**Potable Groundwater**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**	**MW-28**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	1,320	901	1,880	3,030	3,670	4,490	3,580	2,530	2,450
PHC F2 (C10-C16)	150	910	160	310	400	490	500	450	370	310
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.70	ND 0.50	ND 1.5	1.05	ND 2.0	ND 0.88	ND 1.7	ND 0.9	ND 0.95
Toluene	24	9.30	7.20	20.1	22.0	29.9	25.3	21.4	15.1	11.2
Ethylbenzene	2.4	187	53.1	385	493	704	667	577	380	319
Xylenes (total)	300	344	242	418	667	836	848	718	553	374

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-30								
Sample ID:	**Potable Groundwater**	**W-027**	**W-017**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**
Sample Date:	**Medium/Fine Textured Soil**	**13-Apr-12**	**25-Oct-12**	**17-Apr-13**	**19-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	1,350	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	1,110	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	0.70	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-30								
Sample ID:	**Potable Groundwater**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**	**MW-30**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	360	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	1,020	280	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	410
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	340
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-32								
Sample ID:	**Potable Groundwater**	**W-026**	**W-013**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**
Sample Date:	**Medium/Fine Textured Soil**	**13-Apr-12**	**25-Oct-12**	**17-Apr-13**	**18-Sep-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**
Petroleum Hydrocarbons (ug/L)										
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)										
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	0.63	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	MW-32									
Sample ID:	**Potable Groundwater**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**MW-32**	**DUP-1**	**MW-32**
Sample Date:	**Medium/Fine Textured Soil**	**18-Oct-16**	**13-Apr-17**	**18-Oct-17**	**29-May-18**	**25-Oct-18**	**16-Apr-19**	**17-Sep-19**	**3-Apr-20**	**3-Apr-20 Duplicate**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	170	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	PW-1									
Sample ID:	**Potable Groundwater**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**
Sample Date:	**Medium/Fine Textured Soil**	**27-Mar-12**	**25-Oct-12**	**22-Apr-13**	**13-Oct-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**	**18-Oct-16**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	140
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	PW-1									
Sample ID:	**Potable Groundwater**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**	**PW-1**
Sample Date:	**Medium/Fine Textured Soil**	**17-Nov-16**	**6-Dec-16**	**11-Apr-17**	**24-Oct-17**	**5-Jun-18**	**25-Oct-18**	**16-Apr-19**	**26-Sep-19**	**31-Mar-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	PW-2									
Sample ID:	**Potable Groundwater**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**
Sample Date:	**Medium/Fine Textured Soil**	**27-Mar-12**	**25-Oct-12**	**22-Apr-13**	**13-Oct-13**	**4-Jun-14**	**6-Oct-14**	**30-Apr-15**	**23-Oct-15**	**14-Apr-16**	**18-Oct-16**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 1.5	ND 1.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.2

GROUNDWATER ANALYTICAL DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Sample Location:	O. Reg 153 Table 2 Groundwater Standard	PW-2									
Sample ID:	**Potable Groundwater**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**	**PW-2**
Sample Date:	**Medium/Fine Textured Soil**	**17-Nov-16**	**6-Dec-16**	**11-Apr-17**	**24-Oct-17**	**5-Jun-18**	**25-Oct-18**	**16-Apr-19**	**26-Sep-19**	**31-Mar-20**	**26-Oct-20**
Petroleum Hydrocarbons (ug/L)											
PHC F1 (C6-C10)	750	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25	ND 25
PHC F2 (C10-C16)	150	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100	ND 100
PHC F3 (C16-C34)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
PHC F4 (C34-C50)	500	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250	ND 250
Volatile Organic Compounds (ug/L)											
Benzene	5.0	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Toluene	24	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Ethylbenzene	2.4	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50
Xylenes (total)	300	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 0.50

Notes
ND xx - Not detected at detection limit xx
NA - Not analyzed
Detected concentration exceeds applicable O. Reg. 153 Table 2 Groundwater Standard

TABLE 2.3

GROUNDWATER ELEVATION/LPH SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Location	Ground Elevation (m ASD)	Top of Casing Elevation (m ASD)	Screened Interval (m ASD)	Groundwater Elevation 8-Nov-11 (m ASD)	30-Jan-12 (m ASD)	13-Apr-12 (m ASD)	24-Oct-12 (m ASD)	10-Apr-13 (m ASD)	4-Jun-13 (m ASD)	13-Sep-13 (m ASD)	28-Nov-13 (m ASD)	2-Jun-14 (m ASD)
Monitoring Wells												
MW-3R	100.00	99.87	98.80 to 95.70	98.74	98.96	98.41	98.75	99.38	98.75	98.42	98.38	98.68
MW-4R	100.03	99.86	98.83 to 95.73	98.73	98.96	98.41	98.77	99.39	98.75	98.41	98.37	98.68
MW-5R	100.11	99.94	98.91 to 95.81	98.72	98.96	98.40	98.74	99.37	98.74	98.42	98.44	98.69
MW-9	100.14	99.94	98.94 to 95.84	98.72	98.96	98.40	98.75	99.28	98.74	98.40	98.36	98.68
MW-10	99.71	99.57	98.51 to 95.41	NI	98.03	98.04	98.22	98.29	98.27	98.01	97.95	98.11
MW-11	99.96	99.86	98.76 to 95.66	NI	97.29	97.82	97.97	98.06	97.96	97.83	97.85	97.87
MW-12	99.99	99.91	98.79 to 95.69	NI	DRY	97.85	98.19	97.99	97.97	97.86	97.83	97.94
MW-13	100.02	99.92	98.82 to 95.72	NI	96.03	97.98	98.02	98.12	98.05	97.90	97.85	97.96
MW-14	100.06	99.95	98.86 to 95.76	NI	96.18	97.90	98.58	98.30	98.20	97.96	97.91	98.15
MW-16	99.72	99.65	98.82 to 95.72	NI	98.17	97.97	98.13	98.30	98.14	97.98	98.21	98.07
MW-17	99.88	99.76	98.68 to 95.58	NI	98.34	98.10	98.24	98.38	98.26	98.09	98.29	98.17
MW-19	100.60	100.45	99.60 to 96.50	NI	98.68	98.78	99.16	99.41	99.15	98.79	98.75	99.07
MW-23	99.80	99.70	98.60 to 95.50	NI	NI	98.01	98.45	98.53	98.37	98.00	98.18	98.13
MW-25	100.21	100.11	98.71 to 95.61	NI	NI	98.13	98.30	98.35	98.34	98.23	98.14	98.36
MW-26	100.65	100.56	99.45 to 96.35	NI	NI	98.65	98.83	99.00	98.87	98.60	98.84	98.87
MW-27	99.72	99.64	98.82 to 95.72	NI	NI	98.05	98.32	98.55	98.22	97.95	98.02	98.03
MW-28	99.91	99.82	98.71 to 95.61	NI	NI	97.99	98.30	98.36	98.53	98.02	97.97	98.12
MW-30	100.41	100.33	98.91 to 95.81	NI	NI	97.01	97.90	98.26	97.98	98.05	98.25	98.89
MW-32	100.62	100.48	99.12 to 96.02	NI	NI	97.36	98.72	99.06	98.75	98.63	98.84	98.75

Notes
Site Datum Reference - Top of monitoring well MW-1 casing at
an assumed elevation of 100.00 m.
m ASD - meters above site datum
m BGS - meters below ground surface
m BTOC - meters below top of casing
NA - Not Applicable
NI - Not Installed

TABLE 2.3

GROUNDWATER ELEVATION/LPH SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Location	Ground Elevation (m ASD)	Top of Casing Elevation (m ASD)	Screened Interval (m ASD)	Groundwater Elevation 2-Oct-14 (m ASD)	28-Apr-15 (m ASD)	19-Oct-15 (m ASD)	8-Apr-16 (m ASD)	6-Oct-16 (m ASD)	5-Apr-17 (m ASD)	12-Oct-17 (m ASD)	11-May-18 (m ASD)	15-Oct-18 (m ASD)
Monitoring Wells												
MW-3R	100.00	99.87	98.80 to 95.70	98.67	98.86	98.43	99.38	98.15	99.27	98.42	98.79	98.41
MW-4R	100.03	99.86	98.83 to 95.73	98.69	98.86	98.33	99.38	98.16	99.27	98.42	98.80	98.42
MW-5R	100.11	99.94	98.91 to 95.81	98.70	98.87	98.30	99.38	98.13	99.25	98.41	98.80	98.42
MW-9	100.14	99.94	98.94 to 95.84	98.68	98.89	98.31	99.38	98.17	99.27	98.42	98.79	98.43
MW-10	99.71	99.57	98.51 to 95.41	98.18	98.19	97.91	98.25	97.89	98.18	97.86	98.18	97.90
MW-11	99.96	99.86	98.76 to 95.66	97.92	97.98	97.78	98.08	97.62	98.16	97.73	98.06	97.74
MW-12	99.99	99.91	98.79 to 95.69	97.92	98.03	97.81	98.08	97.67	98.17	97.69	98.02	97.70
MW-13	100.02	99.92	98.82 to 95.72	98.06	98.13	97.86	98.20	97.62	98.20	97.78	98.10	98.15
MW-14	100.06	99.95	98.86 to 95.76	98.48	98.31	97.72	98.34	97.69	98.59	97.82	98.15	97.83
MW-16	99.72	99.65	98.82 to 95.72	98.10	98.11	97.93	98.30	97.86	98.21	97.74	98.10	97.94
MW-17	99.88	99.76	98.68 to 95.58	98.23	98.35	98.26	98.44	98.00	98.37	97.89	98.24	98.03
MW-19	100.60	100.45	99.60 to 96.50	99.10	99.43	98.57	99.66	98.59	99.44	98.69	99.25	98.70
MW-23	99.80	99.70	98.60 to 95.50	98.33	98.32	97.56	98.46	97.41	98.28	98.38	98.33	97.94
MW-25	100.21	100.11	98.71 to 95.61	98.35	98.60	98.19	99.21	98.03	98.43	98.15	98.27	98.15
MW-26	100.65	100.56	99.45 to 96.35	98.85	99.23	98.37	NM	98.45	99.32	98.51	98.73	98.48
MW-27	99.72	99.64	98.82 to 95.72	98.18	98.17	98.00	98.35	97.92	98.31	98.13	98.24	97.87
MW-28	99.91	99.82	98.71 to 95.61	98.22	98.15	97.93	98.36	97.89	98.30	98.09	98.22	98.00
MW-30	100.41	100.33	98.91 to 95.81	98.97	98.30	97.66	98.44	97.78	98.38	97.74	97.91	97.65
MW-32	100.62	100.48	99.12 to 96.02	98.76	98.76	98.47	99.42	98.44	98.70	98.50	98.98	98.42

Notes
Site Datum Reference - Top of monitoring well MW-1 casing at
an assumed elevation of 100.00 m.
m ASD - meters above site datum
m BGS - meters below ground surface
m BTOC - meters below top of casing
NA - Not Applicable
NI - Not Installed

TABLE 2.3

GROUNDWATER ELEVATION/LPH SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Location	Ground Elevation (m ASD)	Top of Casing Elevation (m ASD)	Screened Interval (m ASD)	Groundwater Elevation 2-Apr-19 (m ASD)	11-Sep-19 (m ASD)	26-Mar-20 (m ASD)	13-Oct-20 (m ASD)
Monitoring Wells							
MW-3R	100.00	99.87	98.80 to 95.70	99.44	98.03	99.37	98.47
MW-4R	100.03	99.86	98.83 to 95.73	99.44	98.03	99.37	98.45
MW-5R	100.11	99.94	98.91 to 95.81	99.45	98.06	99.37	98.45
MW-9	100.14	99.94	98.94 to 95.84	99.44	98.02	99.37	98.47
MW-10	99.71	99.57	98.51 to 95.41	98.46	97.96	98.24	98.01
MW-11	99.96	99.86	98.76 to 95.66	98.10	97.63	97.99	97.75
MW-12	99.99	99.91	98.79 to 95.69	98.07	97.61	98.02	97.77
MW-13	100.02	99.92	98.82 to 95.72	98.06	97.63	98.16	97.83
MW-14	100.06	99.95	98.86 to 95.76	97.76	97.54	98.89	98.64
MW-16	99.72	99.65	98.82 to 95.72	98.26	97.78	98.20	97.97
MW-17	99.88	99.76	98.68 to 95.58	98.31	97.91	98.32	98.07
MW-19	100.60	100.45	99.60 to 96.50	99.58	98.36	99.43	98.75
MW-23	99.80	99.70	98.60 to 95.50	98.43	98.07	98.30	98.07
MW-25	100.21	100.11	98.71 to 95.61	98.07	97.74	98.02	98.19
MW-26	100.65	100.56	99.45 to 96.35	99.63	98.39	99.45	98.59
MW-27	99.72	99.64	98.82 to 95.72	98.31	97.82	98.56	98.16
MW-28	99.91	99.82	98.71 to 95.61	98.33	97.70	98.25	98.04
MW-30	100.41	100.33	98.91 to 95.81	97.99	97.82	98.00	97.83
MW-32	100.62	100.48	99.12 to 96.02	98.79	98.33	99.45	98.50

Notes
Site Datum Reference - Top of monitoring well MW-1 casing at
an assumed elevation of 100.00 m.
m ASD - meters above site datum
m BGS - meters below ground surface
m BTOC - meters below top of casing
NA - Not Applicable
NI - Not Installed

TABLE 2.3

GROUNDWATER ELEVATION/LPH SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Location	Ground Elevation (m ASD)	Top of Casing Elevation (m ASD)	Screened Interval (m ASD)	LPH Thickness 8-Nov-11 (mm)	30-Jan-12 (mm)	13-Apr-12 (mm)	24-Oct-12 (mm)	10-Apr-13 (mm)	4-Jun-13 (mm)	13-Sep-13 (mm)	28-Nov-13 (mm)	2-Jun-14 (mm)
Monitoring Wells												
MW-3R	100.00	99.87	98.80 to 95.70	0	0	0	0	0	0	0	0	0
MW-4R	100.03	99.86	98.83 to 95.73	0	0	0	0	0	0	0	0	0
MW-5R	100.11	99.94	98.91 to 95.81	0	0	0	0	0	0	0	0	0
MW-9	100.14	99.94	98.94 to 95.84	0	0	0	0	0	0	0	0	0
MW-10	99.71	99.57	98.51 to 95.41	NI	0	0	0	0	0	0	0	0
MW-11	99.96	99.86	98.76 to 95.66	NI	0	0	0	0	0	0	0	0
MW-12	99.99	99.91	98.79 to 95.69	NI	DRY	0	0	0	0	0	0	0
MW-13	100.02	99.92	98.82 to 95.72	NI	0	0	0	0	0	0	0	0
MW-14	100.06	99.95	98.86 to 95.76	NI	0	0	0	0	0	0	0	0
MW-16	99.72	99.65	98.82 to 95.72	NI	10	5	5	0	0	0	0	0
MW-17	99.88	99.76	98.68 to 95.58	NI	0	0	0	0	0	0	0	0
MW-19	100.60	100.45	99.60 to 96.50	NI	0	0	0	0	0	0	0	0
MW-23	99.80	99.70	98.60 to 95.50	NI	NI	0	0	0	0	0	0	0
MW-25	100.21	100.11	98.71 to 95.61	NI	NI	0	0	0	0	0	0	0
MW-26	100.65	100.56	99.45 to 96.35	NI	NI	0	0	0	0	0	0	0
MW-27	99.72	99.64	98.82 to 95.72	NI	NI	0	0	0	0	0	0	0
MW-28	99.91	99.82	98.71 to 95.61	NI	NI	0	0	0	0	0	0	0
MW-30	100.41	100.33	98.91 to 95.81	NI	NI	0	0	0	0	0	0	0
MW-32	100.62	100.48	99.12 to 96.02	NI	NI	0	0	0	0	0	0	0

Notes
Site Datum Reference - Top of monitoring well MW-1 casing at
an assumed elevation of 100.00 m.
m ASD - meters above site datum
m BGS - meters below ground surface
m BTOC - meters below top of casing
NA - Not Applicable
NI - Not Installed

TABLE 2.3

GROUNDWATER ELEVATION/LPH SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Location	Ground Elevation (m ASD)	Top of Casing Elevation (m ASD)	Screened Interval (m ASD)	LPH Thickness 2-Oct-14 (mm)	28-Apr-15 (mm)	19-Oct-15 (mm)	8-Apr-16 (mm)	6-Oct-16 (mm)	5-Apr-17 (mm)	12-Oct-17 (mm)	11-May-18 (mm)	15-Oct-18 (mm)
Monitoring Wells												
MW-3R	100.00	99.87	98.80 to 95.70	0	0	0	0	0	0	0	0	0
MW-4R	100.03	99.86	98.83 to 95.73	0	0	0	0	0	0	0	0	0
MW-5R	100.11	99.94	98.91 to 95.81	0	0	0	0	0	0	0	0	0
MW-9	100.14	99.94	98.94 to 95.84	0	0	0	0	0	0	0	0	0
MW-10	99.71	99.57	98.51 to 95.41	0	0	0	0	0	0	0	0	0
MW-11	99.96	99.86	98.76 to 95.66	0	0	0	0	0	0	0	0	0
MW-12	99.99	99.91	98.79 to 95.69	0	0	0	0	0	0	0	0	0
MW-13	100.02	99.92	98.82 to 95.72	0	0	0	0	0	0	0	0	0
MW-14	100.06	99.95	98.86 to 95.76	0	0	0	0	0	0	0	0	0
MW-16	99.72	99.65	98.82 to 95.72	0	0	0	0	0	0	0	0	0
MW-17	99.88	99.76	98.68 to 95.58	0	0	0	0	0	0	0	0	0
MW-19	100.60	100.45	99.60 to 96.50	0	0	0	0	0	0	0	0	0
MW-23	99.80	99.70	98.60 to 95.50	0	0	0	0	0	0	0	0	0
MW-25	100.21	100.11	98.71 to 95.61	0	0	0	0	0	0	0	0	0
MW-26	100.65	100.56	99.45 to 96.35	0	0	0	0	0	0	0	0	0
MW-27	99.72	99.64	98.82 to 95.72	0	0	0	0	0	0	0	0	0
MW-28	99.91	99.82	98.71 to 95.61	0	0	0	0	0	0	0	0	0
MW-30	100.41	100.33	98.91 to 95.81	0	0	0	0	0	0	0	0	0
MW-32	100.62	100.48	99.12 to 96.02	0	0	0	0	0	0	0	0	0

Notes
Site Datum Reference - Top of monitoring well MW-1 casing at
an assumed elevation of 100.00 m.
m ASD - meters above site datum
m BGS - meters below ground surface
m BTOC - meters below top of casing
NA - Not Applicable
NI - Not Installed

TABLE 2.3

GROUNDWATER ELEVATION/LPH SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

Location	Ground Elevation (m ASD)	Top of Casing Elevation (m ASD)	Screened Interval (m ASD)	LPH Thickness 2-Apr-19 (mm)	11-Sep-19 (mm)	26-Mar-20 (mm)	13-Oct-20 (mm)
Monitoring Wells							
MW-3R	100.00	99.87	98.80 to 95.70	0	0	0	0
MW-4R	100.03	99.86	98.83 to 95.73	0	0	0	0
MW-5R	100.11	99.94	98.91 to 95.81	0	0	0	0
MW-9	100.14	99.94	98.94 to 95.84	0	0	0	0
MW-10	99.71	99.57	98.51 to 95.41	0	0	0	0
MW-11	99.96	99.86	98.76 to 95.66	0	0	0	0
MW-12	99.99	99.91	98.79 to 95.69	0	0	0	0
MW-13	100.02	99.92	98.82 to 95.72	0	0	0	0
MW-14	100.06	99.95	98.86 to 95.76	0	0	0	0
MW-16	99.72	99.65	98.82 to 95.72	0	0	0	0
MW-17	99.88	99.76	98.68 to 95.58	0	0	0	0
MW-19	100.60	100.45	99.60 to 96.50	0	0	0	0
MW-23	99.80	99.70	98.60 to 95.50	0	0	0	0
MW-25	100.21	100.11	98.71 to 95.61	0	0	0	0
MW-26	100.65	100.56	99.45 to 96.35	0	0	0	0
MW-27	99.72	99.64	98.82 to 95.72	0	0	0	0
MW-28	99.91	99.82	98.71 to 95.61	0	0	0	0
MW-30	100.41	100.33	98.91 to 95.81	0	0	0	0
MW-32	100.62	100.48	99.12 to 96.02	0	0	0	0

Notes
Site Datum Reference - Top of monitoring well MW-1 casing at an assumed elevation of 100.00 m.
m ASD - meters above site datum
m BGS - meters below ground surface
m BTOC - meters below top of casing
NA - Not Applicable
NI - Not Installed

TABLE 2.4

HEADSPACE CONCENTRATIONS DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

	Headspace Concentrations													
	30-Jan-12		13-Apr-12		24-Oct-12		10-Apr-13		4-Jun-13		13-Sep-13		28-Nov-13	
	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)
Monitoring Wells														
MW-3R	0.0	0	0.0	0	0.0	0	12.6	0	0.3	0	10.2	0	1.4	0
MW-4R	0.0	0	0.0	0	0.0	0	0.2	0	0.7	0	6.1	0	0.0	0
MW-5R	0.0	0	0.1	0	0.0	0	0.0	0	0.0	0	5.7	0	0.0	0
MW-9	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	3.1	0	0.0	0
MW-10	377	30	45.7	5	1.0	0	0.1	0	0.0	0	15.1	0	3.2	0
MW-11	13.4	0	2.8	0	0.0	0	0.0	0	0.6	0	0.0	0	0.0	0
MW-12	49.7	0	5.2	0	0.0	0	0.0	0	2.0	0	1.6	0	0.4	0
MW-13	447	48	572	53	624	16	0.0	0	222	0	16.4	0	8.0	0
MW-14	4.0	0	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-16	1,455	50	1,470	33	549	2	637	0	249	0	190	0	144	0
MW-17	0.6	0	1.2	0	0.0	0	0.0	0	0.0	0	17.8	0	0.8	0
MW-19	123	0	8.5	8	11.9	0	0.4	0	1.4	0	27.9	0	1.1	0
MW-23	NI	NI	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-25	NI	NI	5.6	0	0.0	0	0.0	0	6.2	0	0.0	0	0.0	0
MW-26	NI	NI	8.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-27	NI	NI	0.2	0	0.0	0	0.0	0	0.0	0	0.2	0	0.0	0
MW-28	NI	NI	300	8	230	0	4.3	0	0.7	0	10.3	0	7.6	0
MW-30	NI	NI	3.1	0	0.0	0	0.0	0	4.5	0	0.0	0	0.0	0
MW-32	NI	NI	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gas Probes														
GP-1	NI	NI	0.1	0	0.0	0	0.0	0	0.0	0	7.7	0	7.7	0

Notes
VOCs - Volatile Organic Compounds
LEL - Lower Explosive Limit
NI - not installed
ppm - parts per million

TABLE 2.4

HEADSPACE CONCENTRATIONS DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

	Headspace Concentrations											
	2-Jun-14		2-Oct-14		28-Apr-15		19-Oct-15		8-Apr-16		6-Oct-16	
	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)
Monitoring Wells												
MW-3R	0.3	0	0.1	0	1.8	0	2.7	0	0.2	0	1.2	0
MW-4R	0.0	0	0.2	0	1.1	0	0.0	0	0.0	0	0.7	0
MW-5R	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	0
MW-9	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	0
MW-10	0.2	0	3.7	0	1.6	0	2.4	0	0.7	0	0.2	0
MW-11	0.0	0	0.0	0	0.0	0	0.0	0	0.3	0	0.1	0
MW-12	1.1	0	0.4	0	0.7	0	0.2	0	0.2	0	0.0	0
MW-13	6.5	0	7.6	0	9.1	0	0.0	0	0.0	0	0.2	0
MW-14	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	0
MW-16	384	5	121	0	167	0	3.1	0	0.0	0	4.6	0
MW-17	0.0	0	0.0	0	0.8	0	0.3	0	1.1	0	0.3	0
MW-19	11.2	0	132	0	86.7	0	0.8	0	1.0	0	7.6	0
MW-23	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-25	2.7	0	0.2	0	0.1	0	0.0	0	0.0	0	0.0	0
MW-26	0.0	0	0.2	0	0.0	0	0.0	0	0.0	0	0.1	0
MW-27	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-28	0.4	0	0.4	0	0.4	0	1.1	0	0.3	0	0.1	0
MW-30	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	9.2	0
MW-32	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gas Probes												
GP-1	0.6	0	1.1	0	0.5	0	0.0	0	0.0	0	0.0	0

Notes
VOCs - Volatile Organic Compounds
LEL - Lower Explosive Limit
NI - not installed
ppm - parts per million

TABLE 2.4

HEADSPACE CONCENTRATIONS DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

	Headspace Concentrations											
	5-Apr-17		12-Oct-17		11-May-18		15-Oct-18		2-Apr-19		11-Sep-19	
	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)
Monitoring Wells												
MW-3R	1.2	0	2.1	0	0.1	0	0.2	0	0.0	0	0.0	0
MW-4R	0.9	0	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-5R	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-9	0.0	0	0.1	0	0.0	0	0.1	0	0.0	0	0.0	0
MW-10	2.1	0	1.2	0	2.9	0	3.6	0	4.7	0	1.1	0
MW-11	0.2	0	0.0	0	0.2	0	0.0	0	0.0	0	0.0	0
MW-12	0.1	0	0.1	0	0.1	0	0.0	0	0.0	0	0.0	0
MW-13	0.7	0	0.4	0	0.2	0	0.0	0	0.0	0	0.0	0
MW-14	0.3	0	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-16	9.1	0	18.1	0	1.0	0	1.7	0	5.9	0	12.2	0
MW-17	0.1	0	1.4	0	0.0	0	0.2	0	0.0	0	0.0	0
MW-19	2.8	0	5.4	0	0.4	0	0.9	0	6.7	0	2.1	0
MW-23	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-25	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-26	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-27	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
MW-28	0.0	0	0.0	0	0.0	0	0.4	0	0.0	0	11.7	0
MW-30	1.7	0	3.1	0	0.4	0	0.2	0	0.1	0	0.0	0
MW-32	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Gas Probes												
GP-1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Notes
VOCs - Volatile Organic Compounds
LEL - Lower Explosive Limit
NI - not installed
ppm - parts per million

TABLE 2.4

HEADSPACE CONCENTRATIONS DATA SUMMARY
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO

	Headspace Concentrations			
	26-Mar-20		13-Oct-20	
	VOCs (ppm)	LEL (%)	VOCs (ppm)	LEL (%)
Monitoring Wells				
MW-3R	0.0	0	0.3	0
MW-4R	0.0	0	0.1	0
MW-5R	0.0	0	0.1	0
MW-9	0.0	0	0.0	0
MW-10	0.4	0	1.3	0
MW-11	0.0	0	0.0	0
MW-12	0.0	0	0.0	0
MW-13	0.0	0	0.0	0
MW-14	0.0	0	0.0	0
MW-16	0.2	0	7.6	0
MW-17	0.0	0	0.0	0
MW-19	0.0	0	0.4	0
MW-23	0.0	0	0.0	0
MW-25	0.0	0	0.0	0
MW-26	0.0	0	0.0	0
MW-27	0.0	0	0.0	0
MW-28	0.6	0	14.9	0
MW-30	0.0	0	0.0	0
MW-32	0.0	0	0.0	0
Gas Probes				
GP-1	0.0	0	0.0	0

Notes
VOCs - Volatile Organic Compounds
LEL - Lower Explosive Limit
NI - not installed
ppm - parts per million

APPENDIX A

LABORATORY ANALYTICAL DATA REPORTS

JEFFREY ENVIRONMENTAL
ATTN: MARK JEFFREY
616 BLUENOSE COURT
WATERLOO ON N2K 4C5

Date Received: 31-MAR-20
Report Date: 02-APR-20 14:08 (MT)
Version: FINAL

Client Phone: 519-747-3570

Certificate of Analysis

Lab Work Order #: L2432809

Project P.O. #: NOT SUBMITTED
Job Reference: 1227
C of C Numbers: 17-620124
Legal Site Desc:

Gayle Braun
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2432809-1 PW1 Sampled By: J. DIVELL on 31-MAR-20 @ 10:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		01-APR-20	R5048022
Ethylbenzene	<0.50		0.50	ug/L		01-APR-20	R5048022
Toluene	<0.50		0.50	ug/L		01-APR-20	R5048022
o-Xylene	<0.30		0.30	ug/L		01-APR-20	R5048022
m+p-Xylenes	<0.40		0.40	ug/L		01-APR-20	R5048022
Xylenes (Total)	<0.50		0.50	ug/L		01-APR-20	
Surrogate: 4-Bromofluorobenzene	97.8		70-130	%		01-APR-20	R5048022
Surrogate: 1,4-Difluorobenzene	100.2		70-130	%		01-APR-20	R5048022
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		01-APR-20	R5048022
F1-BTEX	<25		25	ug/L		01-APR-20	
F2 (C10-C16)	<100		100	ug/L	31-MAR-20	31-MAR-20	R5048947
F3 (C16-C34)	<250		250	ug/L	31-MAR-20	31-MAR-20	R5048947
F4 (C34-C50)	<250		250	ug/L	31-MAR-20	31-MAR-20	R5048947
Total Hydrocarbons (C6-C50)	<370		370	ug/L		01-APR-20	
Chrom. to baseline at nC50	YES				31-MAR-20	31-MAR-20	R5048947
Surrogate: 2-Bromobenzotrifluoride	85.0		60-140	%	31-MAR-20	31-MAR-20	R5048947
Surrogate: 3,4-Dichlorotoluene	94.2		60-140	%		01-APR-20	R5048022
L2432809-2 PW2 Sampled By: J. DIVELL on 31-MAR-20 @ 10:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		01-APR-20	R5048022
Ethylbenzene	<0.50		0.50	ug/L		01-APR-20	R5048022
Toluene	<0.50		0.50	ug/L		01-APR-20	R5048022
o-Xylene	<0.30		0.30	ug/L		01-APR-20	R5048022
m+p-Xylenes	<0.40		0.40	ug/L		01-APR-20	R5048022
Xylenes (Total)	<0.50		0.50	ug/L		01-APR-20	
Surrogate: 4-Bromofluorobenzene	97.8		70-130	%		01-APR-20	R5048022
Surrogate: 1,4-Difluorobenzene	100.5		70-130	%		01-APR-20	R5048022
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		01-APR-20	R5048022
F1-BTEX	<25		25	ug/L		01-APR-20	
F2 (C10-C16)	<100		100	ug/L	31-MAR-20	31-MAR-20	R5048947
F3 (C16-C34)	<250		250	ug/L	31-MAR-20	31-MAR-20	R5048947
F4 (C34-C50)	<250		250	ug/L	31-MAR-20	31-MAR-20	R5048947
Total Hydrocarbons (C6-C50)	<370		370	ug/L		01-APR-20	
Chrom. to baseline at nC50	YES				31-MAR-20	31-MAR-20	R5048947
Surrogate: 2-Bromobenzotrifluoride	89.7		60-140	%	31-MAR-20	31-MAR-20	R5048947
Surrogate: 3,4-Dichlorotoluene	93.2		60-140	%		01-APR-20	R5048022

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
BTX-511-HS-WT	Water	BTEX by Headspace	SW846 8260 (511)

BTX is determined by analyzing by headspace-GC/MS.

F1-F4-511-CALC-WT	Water	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Water	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS

Fraction F1 is determined by analyzing by headspace-GC/FID.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F2-F4-511-WT	Water	F2-F4-O.Reg 153/04 (July 2011)	EPA 3511/CCME Tier 1

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

XYLENES-SUM-CALC-WT	Water	Sum of Xylene Isomer Concentrations	CALCULATION

Total xylenes represents the sum of o-xylene and m&p-xylene.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

17-620124

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Workorder: L2432809 Report Date: 02-APR-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTX-511-HS-WT	**Water**							
Batch R5048022								
WG3301393-4 DUP		**WG3301393-3**						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	01-APR-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	01-APR-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	01-APR-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	01-APR-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	01-APR-20
WG3301393-1 LCS								
Benzene			103.2		%		70-130	31-MAR-20
Ethylbenzene			99.3		%		70-130	31-MAR-20
m+p-Xylenes			97.3		%		70-130	31-MAR-20
o-Xylene			98.1		%		70-130	31-MAR-20
Toluene			99.0		%		70-130	31-MAR-20
WG3301393-2 MB								
Benzene			<0.50		ug/L		0.5	01-APR-20
Ethylbenzene			<0.50		ug/L		0.5	01-APR-20
m+p-Xylenes			<0.40		ug/L		0.4	01-APR-20
o-Xylene			<0.30		ug/L		0.3	01-APR-20
Toluene			<0.50		ug/L		0.5	01-APR-20
Surrogate: 1,4-Difluorobenzene			99.7		%		70-130	01-APR-20
Surrogate: 4-Bromofluorobenzene			97.0		%		70-130	01-APR-20
WG3301393-5 MS		**WG3301393-3**						
Benzene			103.3		%		50-140	01-APR-20
Ethylbenzene			94.5		%		50-140	01-APR-20
m+p-Xylenes			87.6		%		50-140	01-APR-20
o-Xylene			95.8		%		50-140	01-APR-20
Toluene			94.8		%		50-140	01-APR-20
F1-HS-511-WT	**Water**							
Batch R5048022								
WG3301393-4 DUP		**WG3301393-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	01-APR-20
WG3301393-1 LCS								
F1 (C6-C10)			107.4		%		80-120	31-MAR-20
WG3301393-2 MB								
F1 (C6-C10)			<25		ug/L		25	01-APR-20
Surrogate: 3,4-Dichlorotoluene			93.2		%		60-140	01-APR-20
WG3301393-5 MS		**WG3301393-3**						

Quality Control Report

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT	**Water**							
Batch R5048022								
WG3301393-5 MS		**WG3301393-3**						
F1 (C6-C10)			75.8		%		60-140	01-APR-20
F2-F4-511-WT	**Water**							
Batch R5048947								
WG3301736-2 LCS								
F2 (C10-C16)			104.0		%		70-130	31-MAR-20
F3 (C16-C34)			101.8		%		70-130	31-MAR-20
F4 (C34-C50)			122.9		%		70-130	31-MAR-20
WG3301736-1 MB								
F2 (C10-C16)			<100		ug/L		100	31-MAR-20
F3 (C16-C34)			<250		ug/L		250	31-MAR-20
F4 (C34-C50)			<250		ug/L		250	31-MAR-20
Surrogate: 2-Bromobenzotrifluoride			89.4		%		60-140	31-MAR-20

Quality Control Report

Workorder: L2432809 Report Date: 02-APR-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

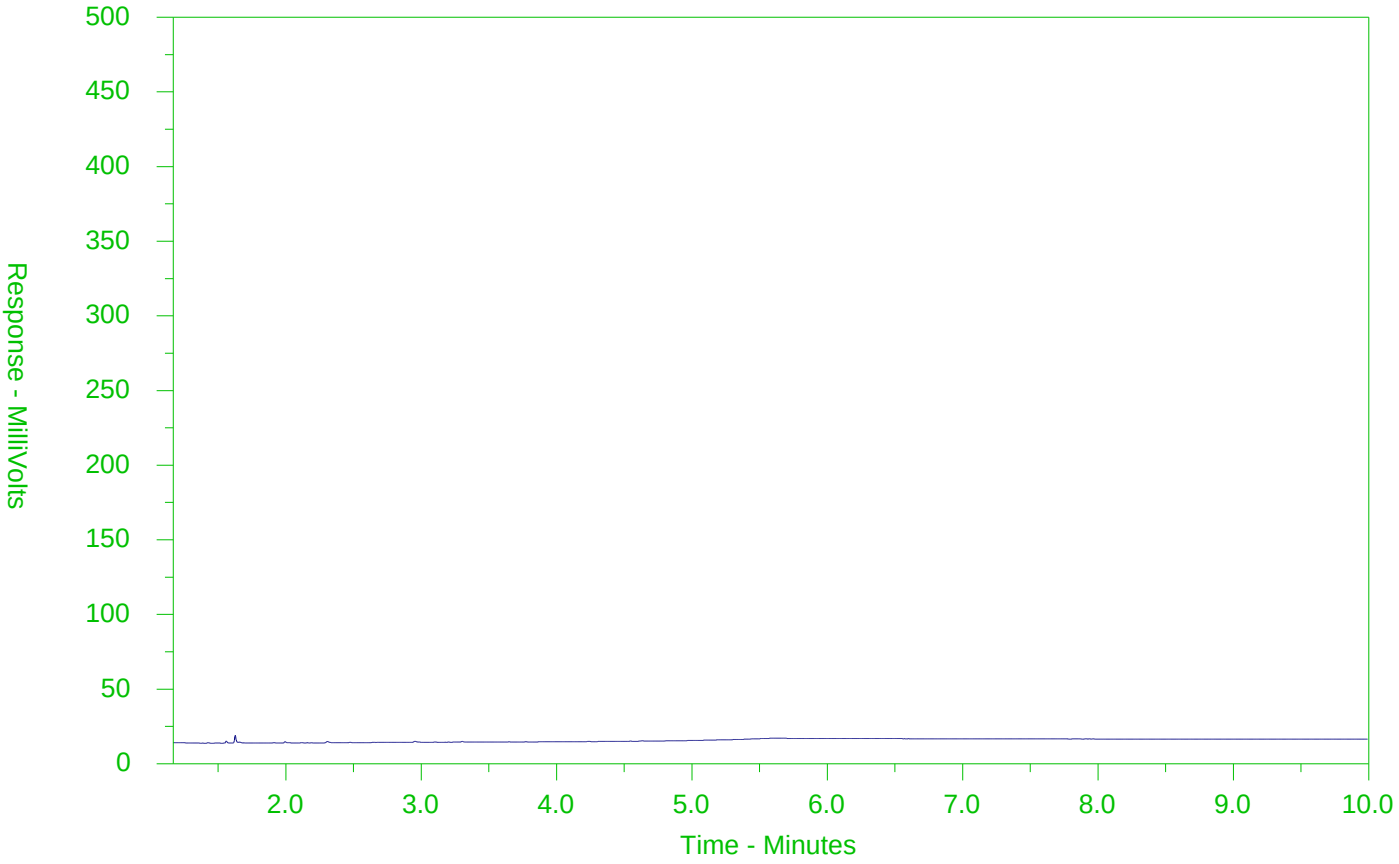
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L2432809-1
Client Sample ID: PW1



←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.

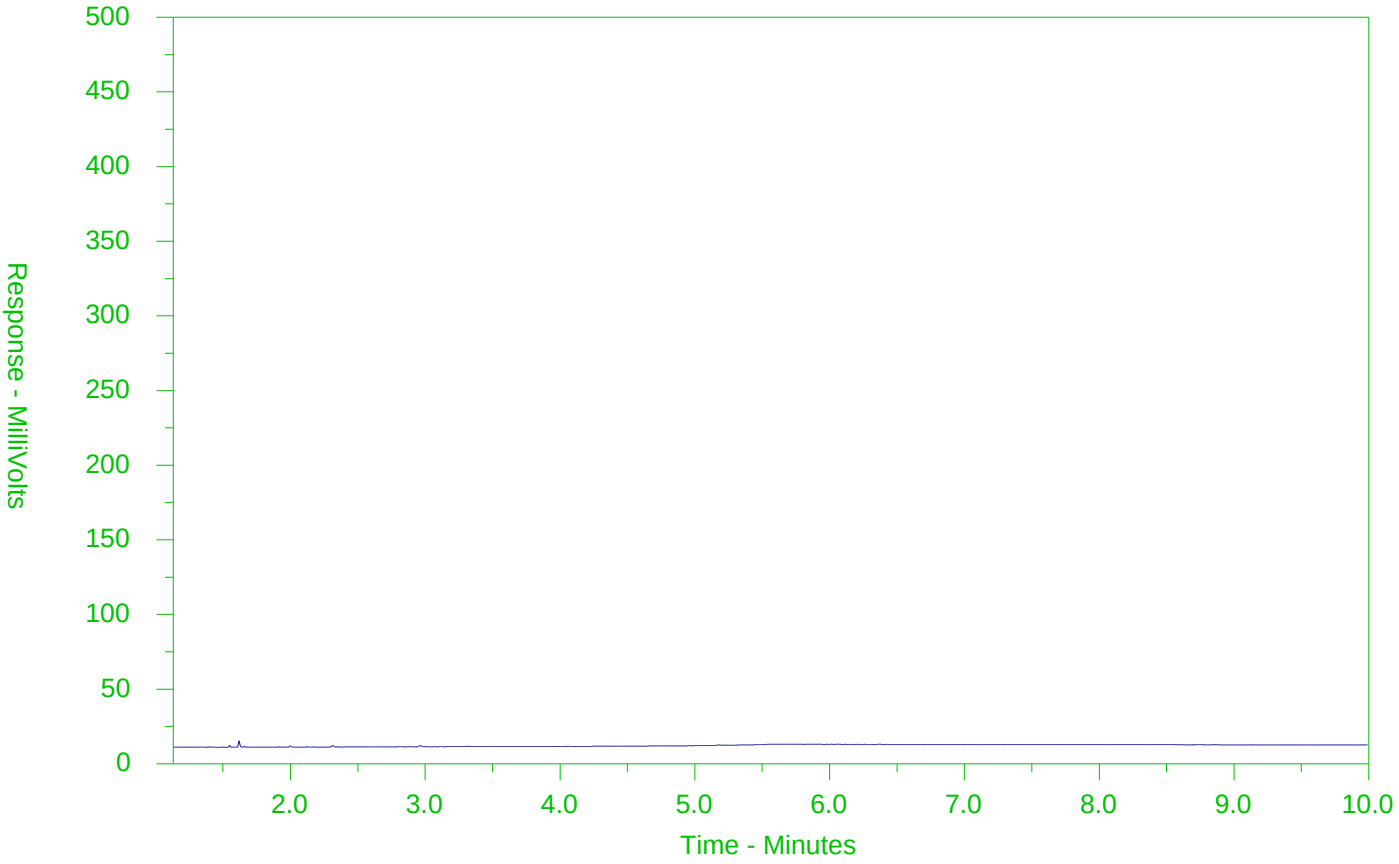
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2432809-2
Client Sample ID: PW2



←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

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2432809-COFC

COC Number: 17 - 620124

Page 1 of 1

Report To	Contact and company name below will appear on the final report
Company:	JEC
Contact:	M. JEFFREY
Phone:	
	Company address below will appear on the final report
Street:	
City/Province:	
Postal Code:	

Report Format / Distribution	
Select Report Format:	[X] PDF [X] EXCEL [ ] EDD (DIGITAL)
Quality Control (QC) Report with Report	[X] YES [ ] NO
[ ] Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	myoffrey@
Email 2	jdivell@
Email 3	

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] [ ] | 3 day [P3-25%] [ ] | 2 day [P2-50%] [ ]

EMERGENCY: 1 Business day [E-100%] [ ] | Same Day, Weekend or Statutory holiday [E2-200% (Laboratory opening fees may apply)] [ ]

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Invoice To		
	Same as Report To	[X] YES [ ] NO
	Copy of Invoice with Report	[ ] YES [ ] NO
Company:		
Contact:		

Invoice Distribution	
Select Invoice Distribution:	[ ] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	
Email 2	

Project Information	
ALS Account # / Quote #:	
Job #:	1227
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): L2432809 MAR 31A

ALS Contact: G.B. Sampler: J. Divell

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	Pue F-F	BTEX	SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
	PW 1	31-3-20	10 AM	WATER	X	X			4
	PW 2	"	10:05 AM	"	X	X			4

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? [X] YES [ ] NO

Are samples for human consumption/ use? [X] YES [ ] NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

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
	11.2

SHIPMENT RELEASE (client use)		
Released by:	Date:	Time:
	March 31/20	1200

INITIAL SHIPMENT RECEPTION (lab use only)		
Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (lab use only)		
Received by:	Date:	Time:
	Mar 31/20	12:00 pm

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JULY 2017 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**.

JEFFREY ENVIRONMENTAL
ATTN: MARK JEFFREY
616 BLUENOSE COURT
WATERLOO ON N2K 4C5

Date Received: 03-APR-20
Report Date: 07-APR-20 09:55 (MT)
Version: FINAL

Client Phone: 519-747-3570

Certificate of Analysis

Lab Work Order #: L2434231

Project P.O. #: NOT SUBMITTED
Job Reference: 1227
C of C Numbers: 17-620125, 17-620126
Legal Site Desc:

Gayle Braun
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-1 MW3 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	98.2		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.5		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	104.7		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	90.8		60-140	%		06-APR-20	R5051131
L2434231-2 MW4 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	98.1		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.9		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	108.1		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	92.6		60-140	%		06-APR-20	R5051131
L2434231-3 MW5 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-3 MW5 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	97.8		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.6		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	100.4		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	94.1		60-140	%		06-APR-20	R5051131
L2434231-4 MW9 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.9		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	100.0		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	113.2		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	87.3		60-140	%		06-APR-20	R5051131
L2434231-5 MW10 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-5 MW10 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	97.3		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.9		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	101.1		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	93.1		60-140	%		06-APR-20	R5051131
L2434231-6 MW11 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.4		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.4		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	107.8		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	88.1		60-140	%		06-APR-20	R5051131
L2434231-7 MW12 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-7 MW12 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.2		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.0		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	102.0		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	86.8		60-140	%		06-APR-20	R5051131
L2434231-8 MW13 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	1.93		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.5		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.6		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	107.7		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	91.5		60-140	%		06-APR-20	R5051131
L2434231-9 MW14 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-9 MW14 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.9		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.0		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	400		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	370		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	770		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	106.0		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	90.8		60-140	%		06-APR-20	R5051131
L2434231-10 MW16 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	32.3	OWP	0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	527	OWP	0.50	ug/L		06-APR-20	R5051131
Toluene	39.0	OWP	0.50	ug/L		06-APR-20	R5051131
o-Xylene	402	OWP	0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	3010	DLHC	4.0	ug/L		07-APR-20	R5051315
Xylenes (Total)	3410		4.0	ug/L		07-APR-20	
Surrogate: 4-Bromofluorobenzene	104.8		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	90.1		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	8750	DLHC	250	ug/L		07-APR-20	R5051315
F1-BTEX	4700		1300	ug/L		07-APR-20	
F2 (C10-C16)	900		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	990		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	720		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	11400		440	ug/L		07-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	113.9		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	98.9		60-140	%		07-APR-20	R5051315
Report Remarks : Organic water sample contained visible sediment (must be inlcluded as part of anaylsis). Measured concentrations of organic substances in water can be biased high due to presence of sediment.							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-11 MW17 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	97.9		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	99.2		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	104.0		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	87.8		60-140	%		06-APR-20	R5051131
L2434231-12 MW19 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051131
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051131
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051131
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051131
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.7		70-130	%		06-APR-20	R5051131
Surrogate: 1,4-Difluorobenzene	98.5		70-130	%		06-APR-20	R5051131
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051131
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	104.9		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	85.6		60-140	%		06-APR-20	R5051131
L2434231-13 MW23 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-13 MW23 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	97.0		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	99.8		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	103.5		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	79.2		60-140	%		06-APR-20	R5051315
L2434231-14 MW25 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	97.1		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	99.1		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	111.7		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	73.1		60-140	%		06-APR-20	R5051315
L2434231-15 MW26 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-15 MW26 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	98.5		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	99.7		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	100.3		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	82.9		60-140	%		06-APR-20	R5051315
L2434231-16 MW27 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.8		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	99.2		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	109.6		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	81.2		60-140	%		06-APR-20	R5051315
L2434231-17 MW28 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-17 MW28 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.90	DLQ	0.90	ug/L		06-APR-20	R5051315
Ethylbenzene	380	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	15.1	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	30.2	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	523	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	553		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	104.8		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	89.9		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	2530	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	1590		380	ug/L		06-APR-20	
F2 (C10-C16)	370		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	2910		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	101.7		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	82.3		60-140	%		06-APR-20	R5051315
L2434231-18 MW30 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	98.0		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	98.9		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	107.0		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	84.0		60-140	%		06-APR-20	R5051315
L2434231-19 MW32 Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-19 MW32 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50	OWP	0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30	OWP	0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40	OWP	0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.1		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	98.9		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	100.1		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	78.0		60-140	%		06-APR-20	R5051315
L2434231-20 DUP1 Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	96.8		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	99.1		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
F2 (C10-C16)	<100		100	ug/L	05-APR-20	06-APR-20	R5051453
F3 (C16-C34)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
F4 (C34-C50)	<250		250	ug/L	05-APR-20	06-APR-20	R5051453
Total Hydrocarbons (C6-C50)	<370		370	ug/L		06-APR-20	
Chrom. to baseline at nC50	YES				05-APR-20	06-APR-20	R5051453
Surrogate: 2-Bromobenzotrifluoride	104.9		60-140	%	05-APR-20	06-APR-20	R5051453
Surrogate: 3,4-Dichlorotoluene	77.9		60-140	%		06-APR-20	R5051315
L2434231-21 TB Sampled By: J. DIVELL on 03-APR-20 @ 08:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2434231-21 TB Sampled By: J. DIVELL on 03-APR-20 @ 08:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		06-APR-20	R5051315
Ethylbenzene	<0.50		0.50	ug/L		06-APR-20	R5051315
Toluene	<0.50		0.50	ug/L		06-APR-20	R5051315
o-Xylene	<0.30		0.30	ug/L		06-APR-20	R5051315
m+p-Xylenes	<0.40		0.40	ug/L		06-APR-20	R5051315
Xylenes (Total)	<0.50		0.50	ug/L		06-APR-20	
Surrogate: 4-Bromofluorobenzene	98.2		70-130	%		06-APR-20	R5051315
Surrogate: 1,4-Difluorobenzene	99.7		70-130	%		06-APR-20	R5051315
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		06-APR-20	R5051315
F1-BTEX	<25		25	ug/L		06-APR-20	
Surrogate: 3,4-Dichlorotoluene	90.1		60-140	%		06-APR-20	R5051315

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
DLHC	Detection Limit Raised: Dilution required due to high concentration of test analyte(s).
DLQ	Detection Limit raised due to co-eluting interference. GCMS qualifier ion ratio did not meet acceptance criteria.
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.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
BTX-511-HS-WT	Water	BTEX by Headspace	SW846 8260 (511)

BTX is determined by analyzing by headspace-GC/MS.

F1-F4-511-CALC-WT	Water	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Water	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS

Fraction F1 is determined by analyzing by headspace-GC/FID.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F2-F4-511-WT	Water	F2-F4-O.Reg 153/04 (July 2011)	EPA 3511/CCME Tier 1

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

XYLENES-SUM-CALC-WT	Water	Sum of Xylene Isomer Concentrations	CALCULATION

Total xylenes represents the sum of o-xylene and m&p-xylene.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

17-620125 17-620126

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Workorder: L2434231 Report Date: 07-APR-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTX-511-HS-WT	**Water**							
Batch R5051131								
WG3303942-4 DUP		**WG3303942-3**						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	06-APR-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	06-APR-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	06-APR-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	06-APR-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	06-APR-20
WG3303942-1 LCS								
Benzene			100.8		%		70-130	06-APR-20
Ethylbenzene			98.7		%		70-130	06-APR-20
m+p-Xylenes			99.5		%		70-130	06-APR-20
o-Xylene			97.9		%		70-130	06-APR-20
Toluene			102.1		%		70-130	06-APR-20
WG3303942-2 MB								
Benzene			<0.50		ug/L		0.5	06-APR-20
Ethylbenzene			<0.50		ug/L		0.5	06-APR-20
m+p-Xylenes			<0.40		ug/L		0.4	06-APR-20
o-Xylene			<0.30		ug/L		0.3	06-APR-20
Toluene			<0.50		ug/L		0.5	06-APR-20
Surrogate: 1,4-Difluorobenzene			99.9		%		70-130	06-APR-20
Surrogate: 4-Bromofluorobenzene			100.8		%		70-130	06-APR-20
WG3303942-5 MS		**WG3303942-3**						
Benzene			101.3		%		50-140	06-APR-20
Ethylbenzene			97.3		%		50-140	06-APR-20
m+p-Xylenes			99.6		%		50-140	06-APR-20
o-Xylene			97.0		%		50-140	06-APR-20
Toluene			100.9		%		50-140	06-APR-20
Batch R5051315								
WG3304223-4 DUP		**WG3304223-3**						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	06-APR-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	06-APR-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	06-APR-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	06-APR-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	06-APR-20
WG3304223-1 LCS								
Benzene			101.8		%		70-130	06-APR-20

Quality Control Report

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTX-511-HS-WT	**Water**							
Batch R5051315								
WG3304223-1 LCS								
Ethylbenzene			97.9		%		70-130	06-APR-20
m+p-Xylenes			100.3		%		70-130	06-APR-20
o-Xylene			97.8		%		70-130	06-APR-20
Toluene			102.0		%		70-130	06-APR-20
WG3304223-2 MB								
Benzene			<0.50		ug/L		0.5	06-APR-20
Ethylbenzene			<0.50		ug/L		0.5	06-APR-20
m+p-Xylenes			<0.40		ug/L		0.4	06-APR-20
o-Xylene			<0.30		ug/L		0.3	06-APR-20
Toluene			<0.50		ug/L		0.5	06-APR-20
Surrogate: 1,4-Difluorobenzene			99.5		%		70-130	06-APR-20
Surrogate: 4-Bromofluorobenzene			97.1		%		70-130	06-APR-20
WG3304223-5 MS		**WG3304223-3**						
Benzene			102.5		%		50-140	06-APR-20
Ethylbenzene			94.5		%		50-140	06-APR-20
m+p-Xylenes			98.0		%		50-140	06-APR-20
o-Xylene			95.4		%		50-140	06-APR-20
Toluene			99.9		%		50-140	06-APR-20
F1-HS-511-WT	**Water**							
Batch R5051131								
WG3303942-4 DUP		**WG3303942-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	06-APR-20
WG3303942-1 LCS								
F1 (C6-C10)			97.3		%		80-120	06-APR-20
WG3303942-2 MB								
F1 (C6-C10)			<25		ug/L		25	06-APR-20
Surrogate: 3,4-Dichlorotoluene			90.1		%		60-140	06-APR-20
WG3303942-5 MS		**WG3303942-3**						
F1 (C6-C10)			87.1		%		60-140	06-APR-20
Batch R5051315								
WG3304223-4 DUP		**WG3304223-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	06-APR-20
WG3304223-1 LCS								
F1 (C6-C10)			93.5		%		80-120	06-APR-20
WG3304223-2 MB								

Quality Control Report

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT	**Water**							
Batch R5051315								
WG3304223-2 MB								
F1 (C6-C10)			<25		ug/L		25	06-APR-20
Surrogate: 3,4-Dichlorotoluene			93.3		%		60-140	06-APR-20
WG3304223-5 MS		**WG3304223-3**						
F1 (C6-C10)			83.6		%		60-140	06-APR-20
F2-F4-511-WT	**Water**							
Batch R5051453								
WG3304181-2 LCS								
F2 (C10-C16)			117.8		%		70-130	06-APR-20
F3 (C16-C34)			125.1		%		70-130	06-APR-20
F4 (C34-C50)			124.3		%		70-130	06-APR-20
WG3304181-1 MB								
F2 (C10-C16)			<100		ug/L		100	06-APR-20
F3 (C16-C34)			<250		ug/L		250	06-APR-20
F4 (C34-C50)			<250		ug/L		250	06-APR-20
Surrogate: 2-Bromobenzotrifluoride			102.8		%		60-140	06-APR-20

Quality Control Report

Workorder: L2434231 Report Date: 07-APR-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

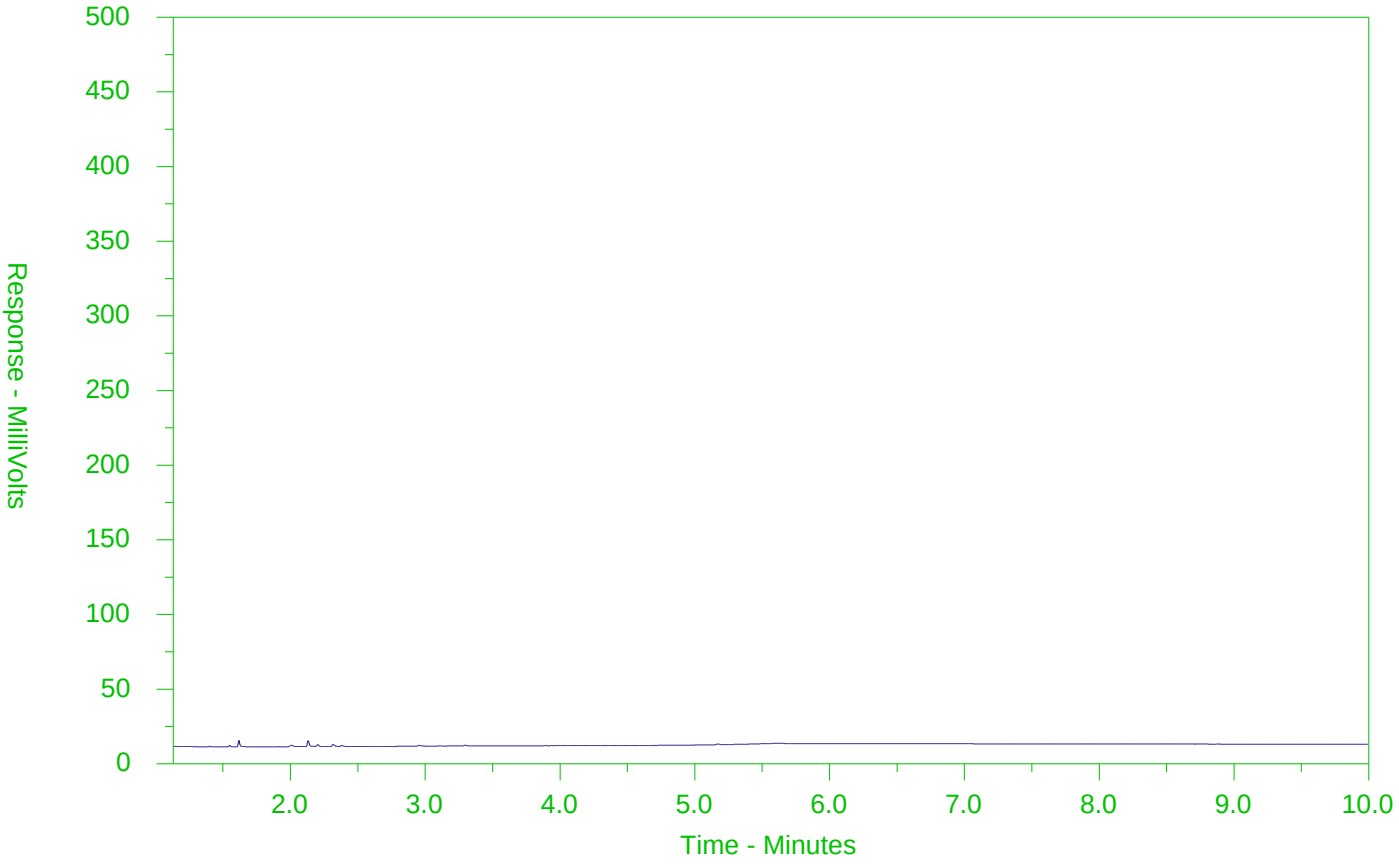
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L2434231-1
Client Sample ID: MW3



←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.

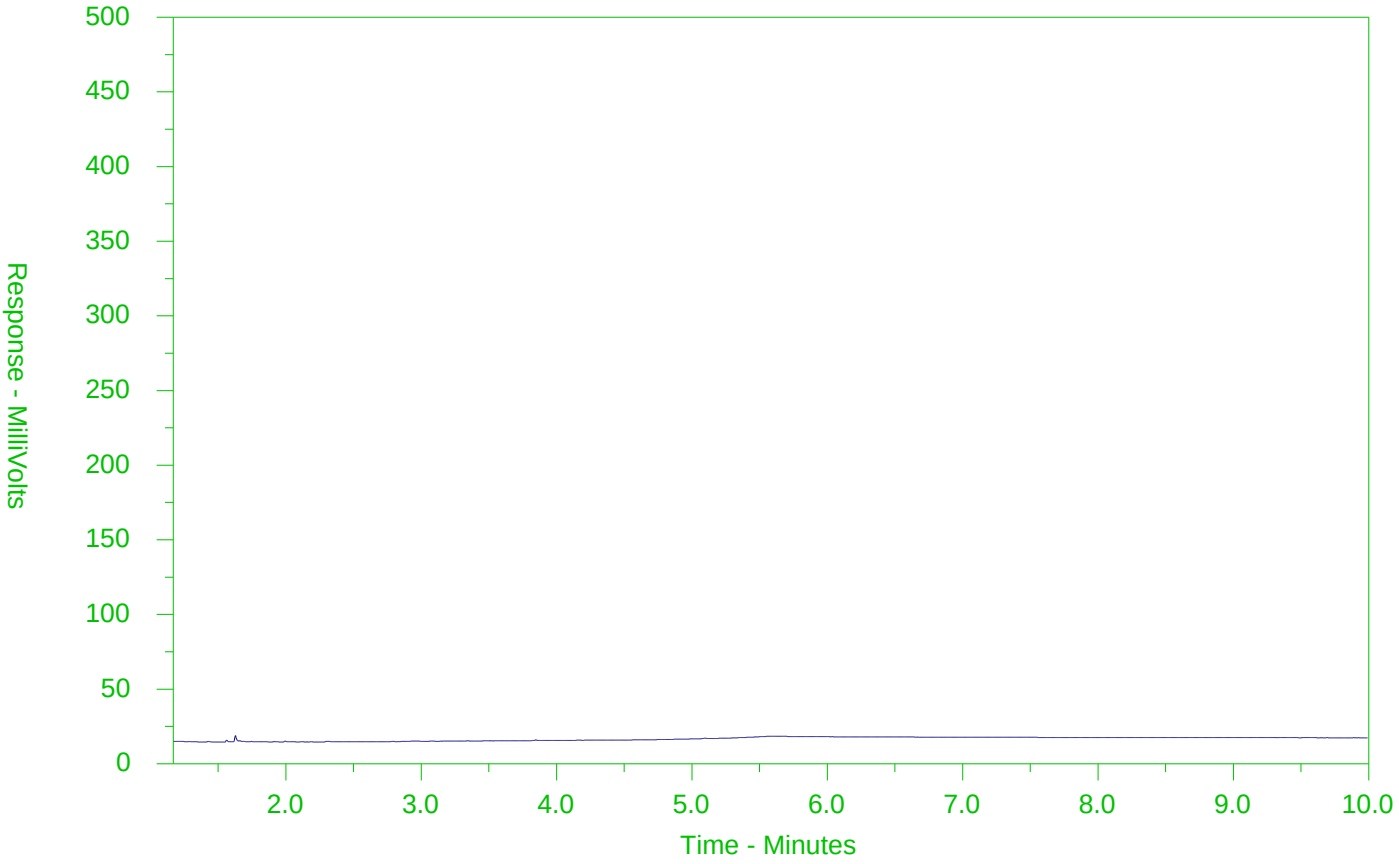
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-2
Client Sample ID: MW4



←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.

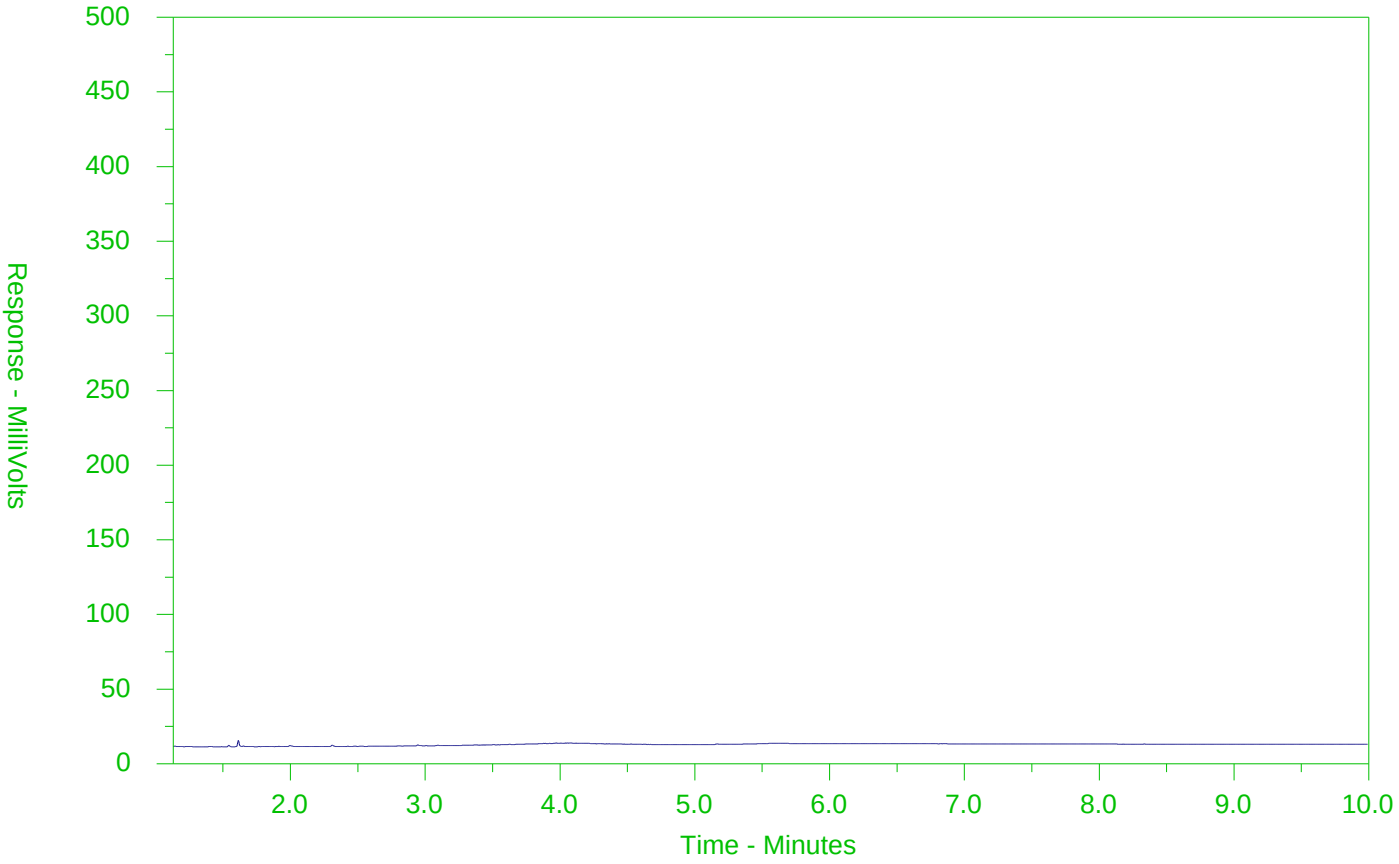
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-3
Client Sample ID: MW5



←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.

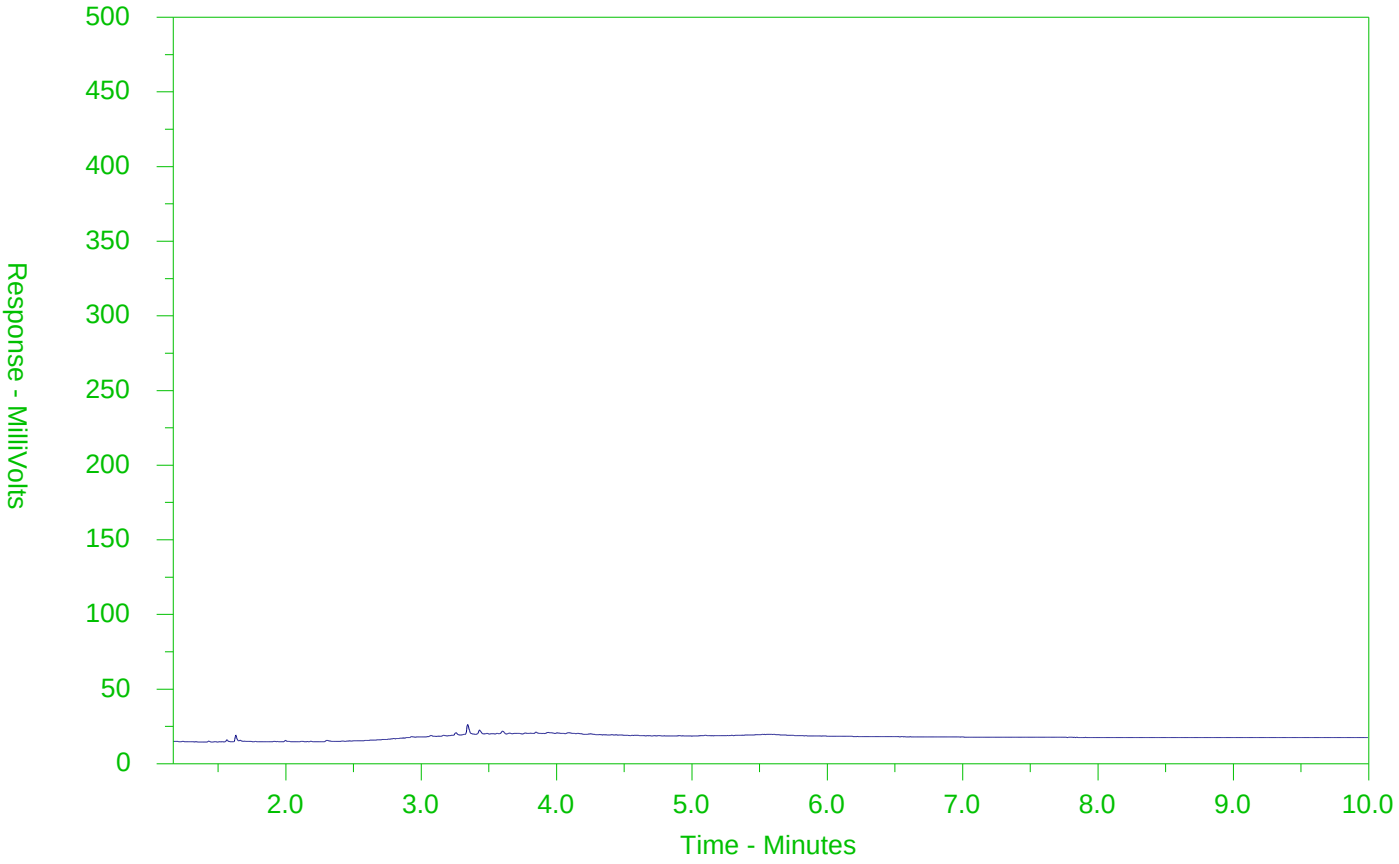
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-4
Client Sample ID: MW9



←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.

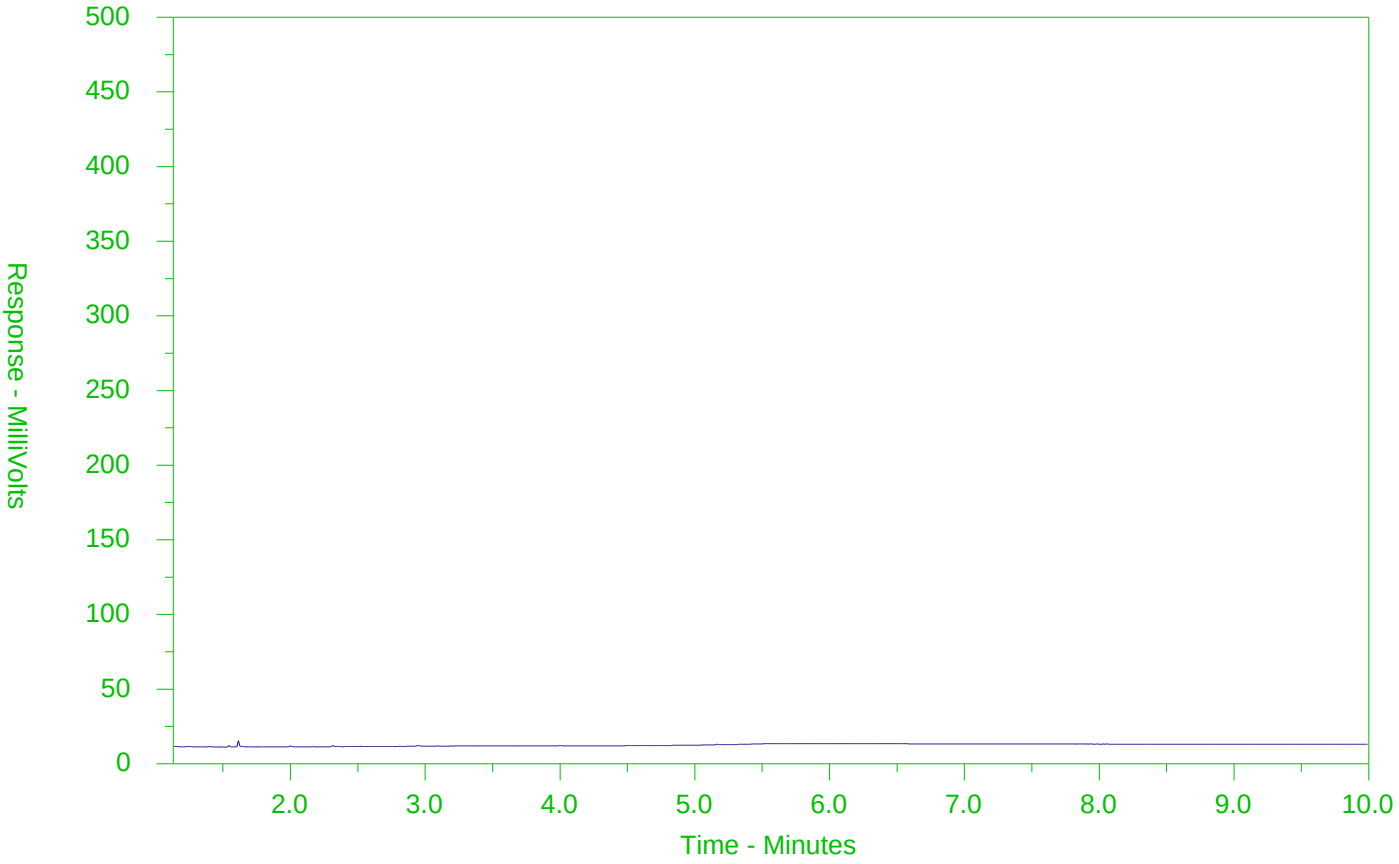
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-5
Client Sample ID: MW10



←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.

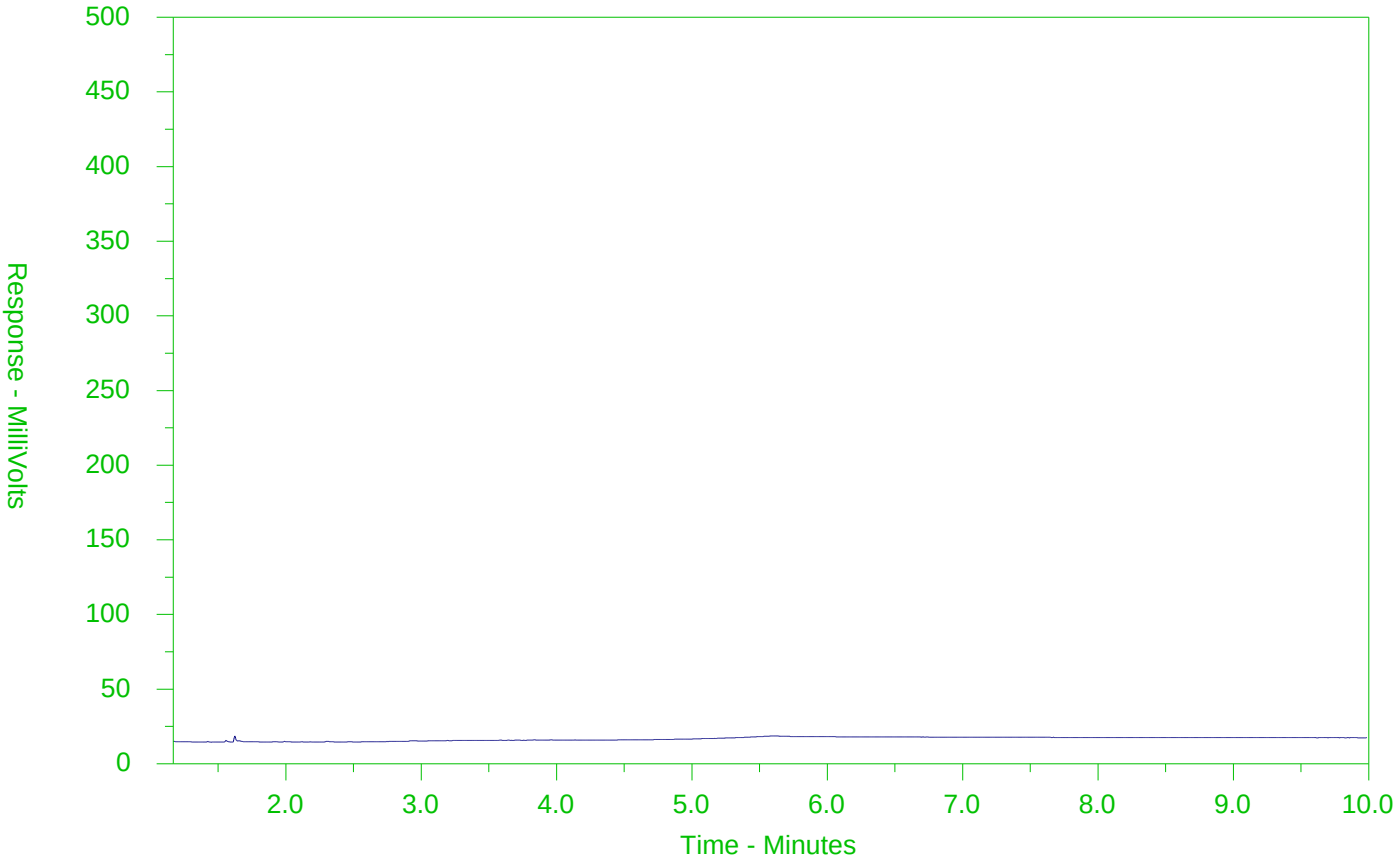
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-6
Client Sample ID: MW11



←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.

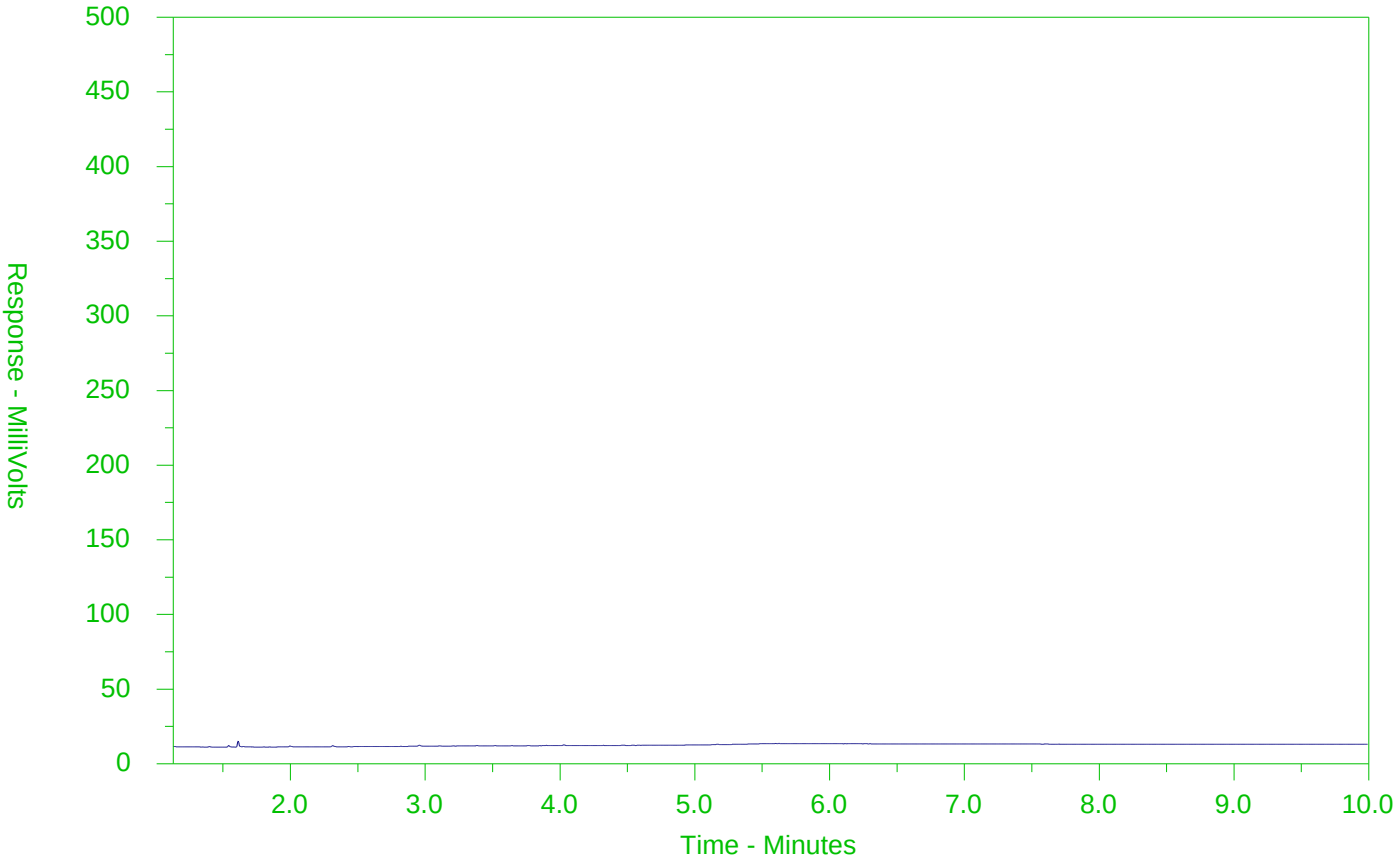
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-7
Client Sample ID: MW12



←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.

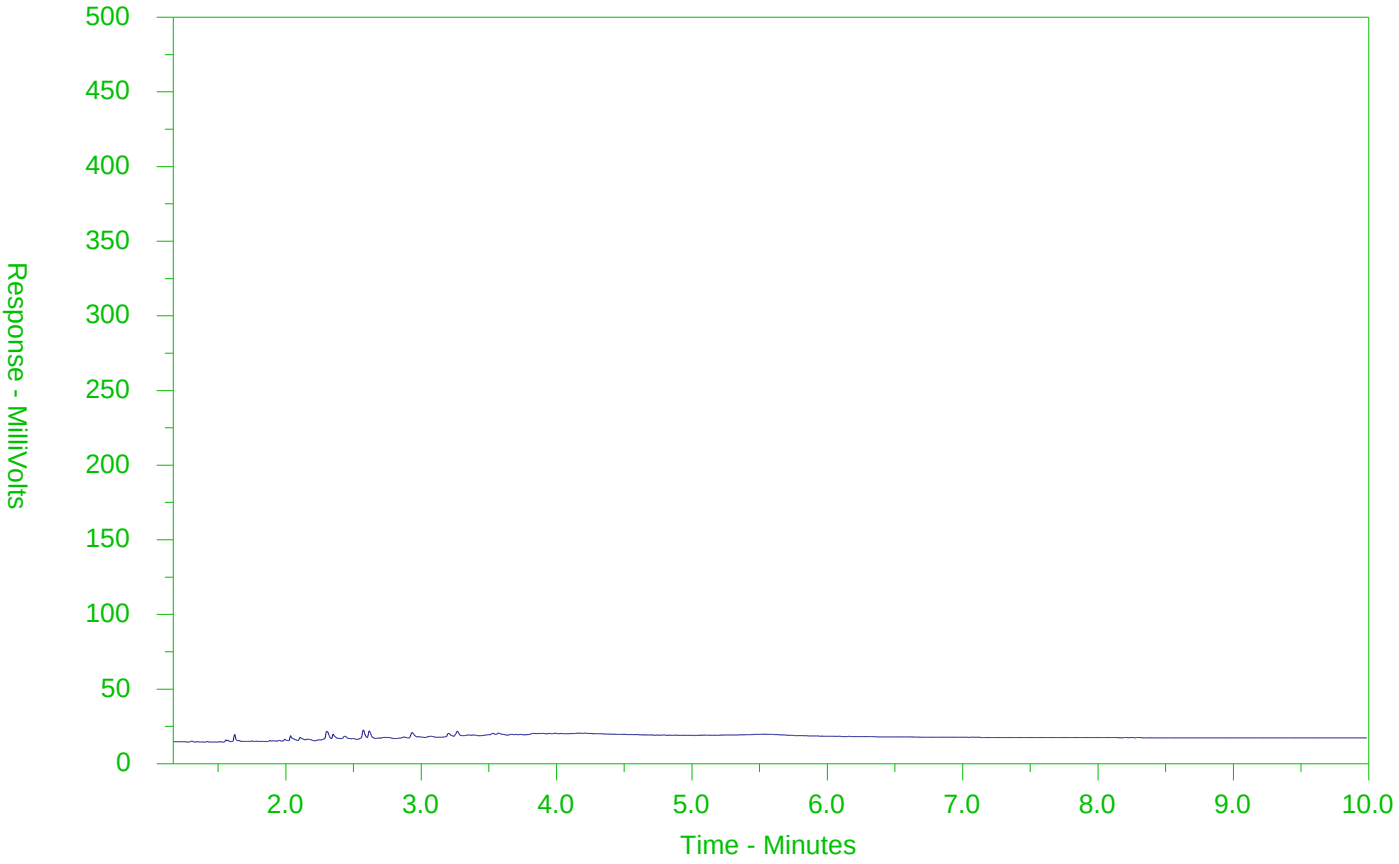
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-8
Client Sample ID: MW13



←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.

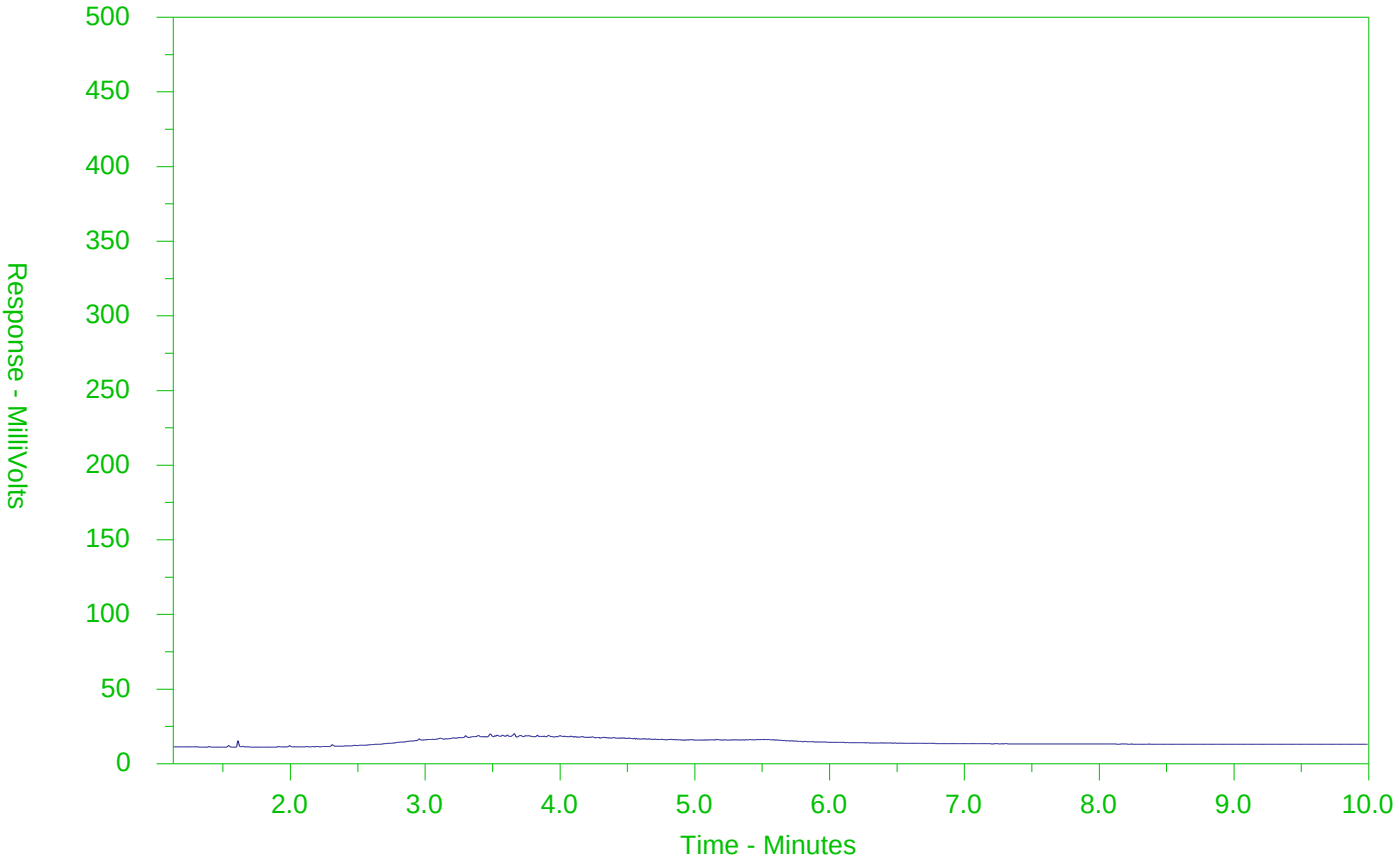
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-9
Client Sample ID: MW14



←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.

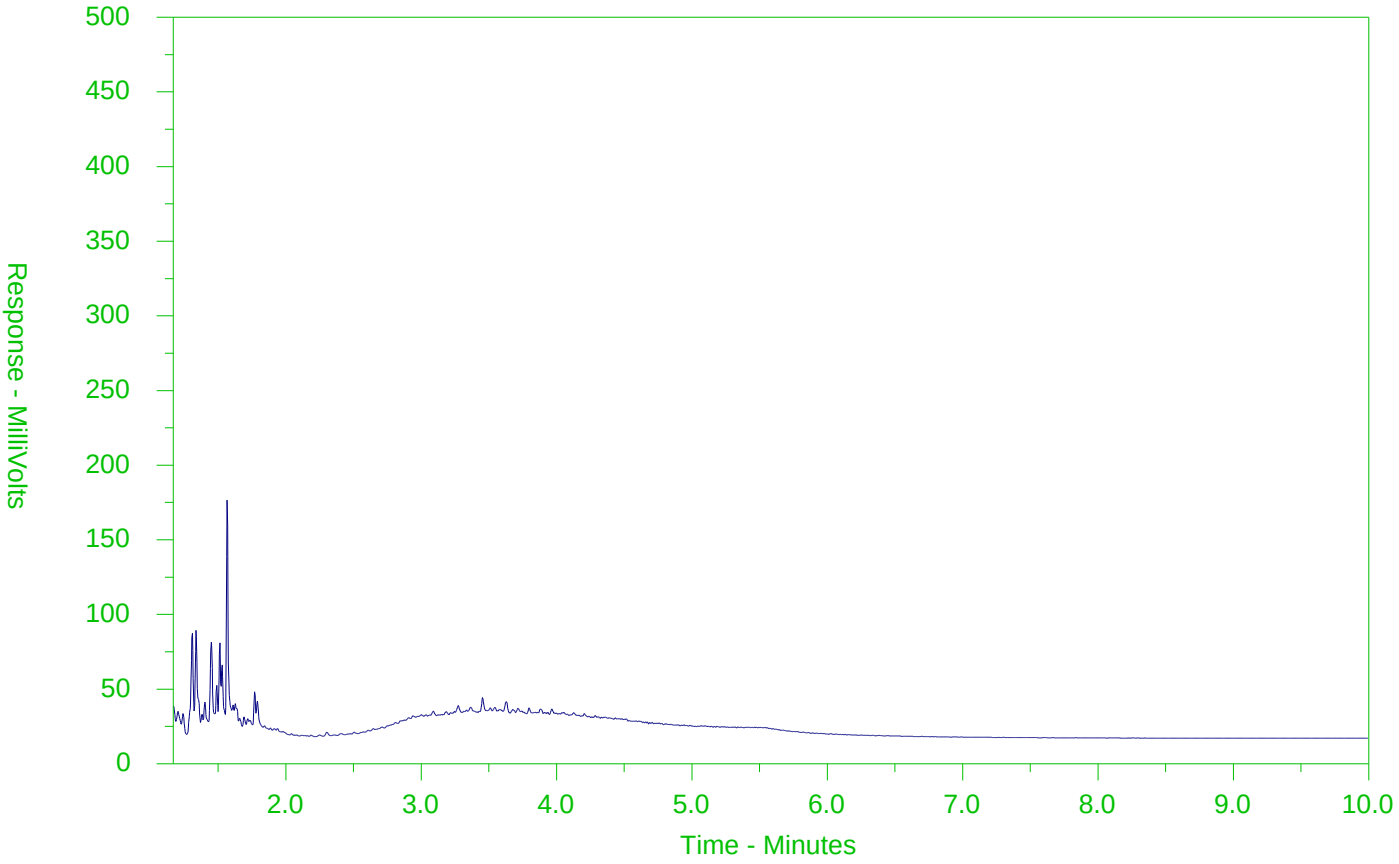
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-10
Client Sample ID: MW16



←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.

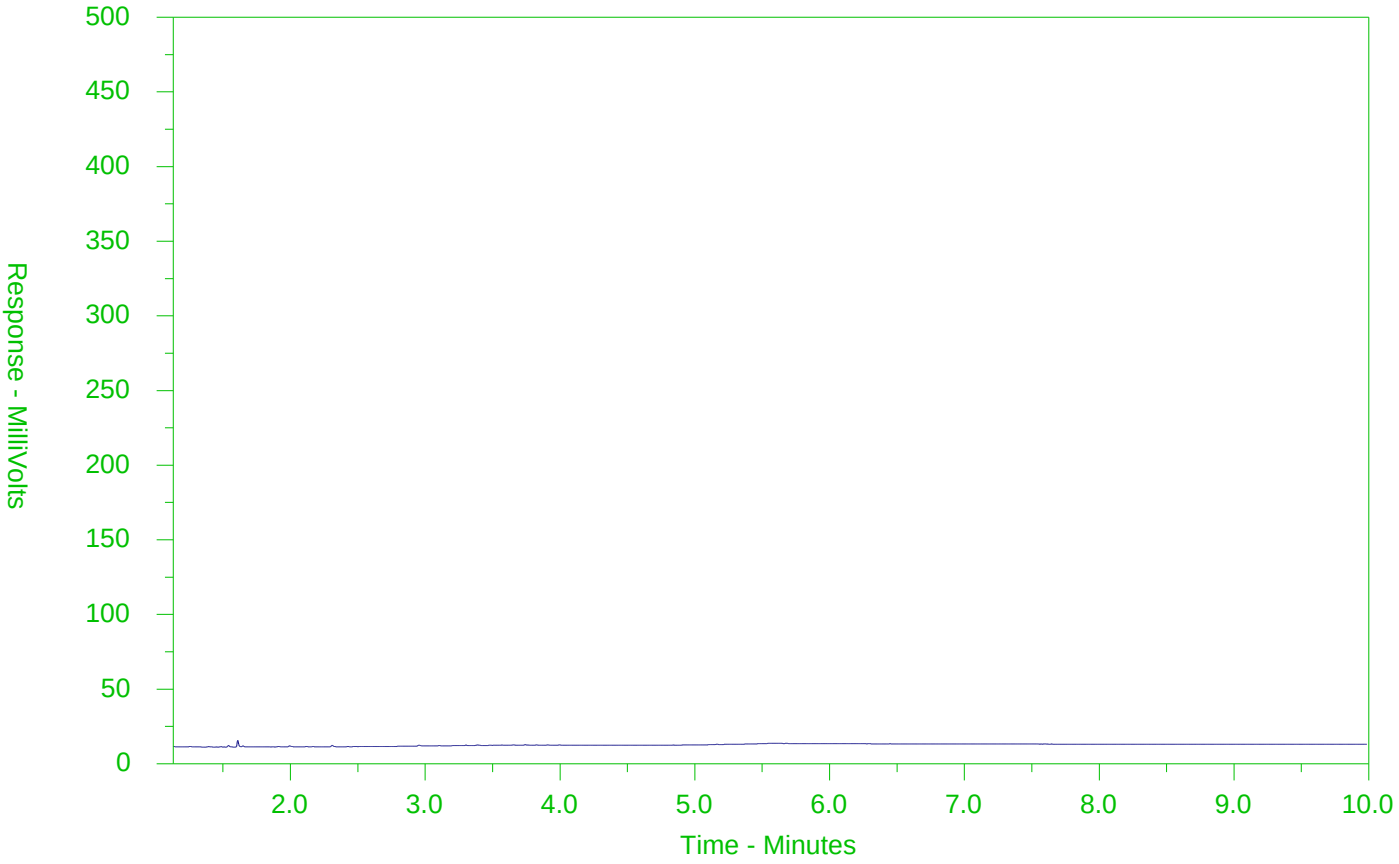
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-11
Client Sample ID: MW17



←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.

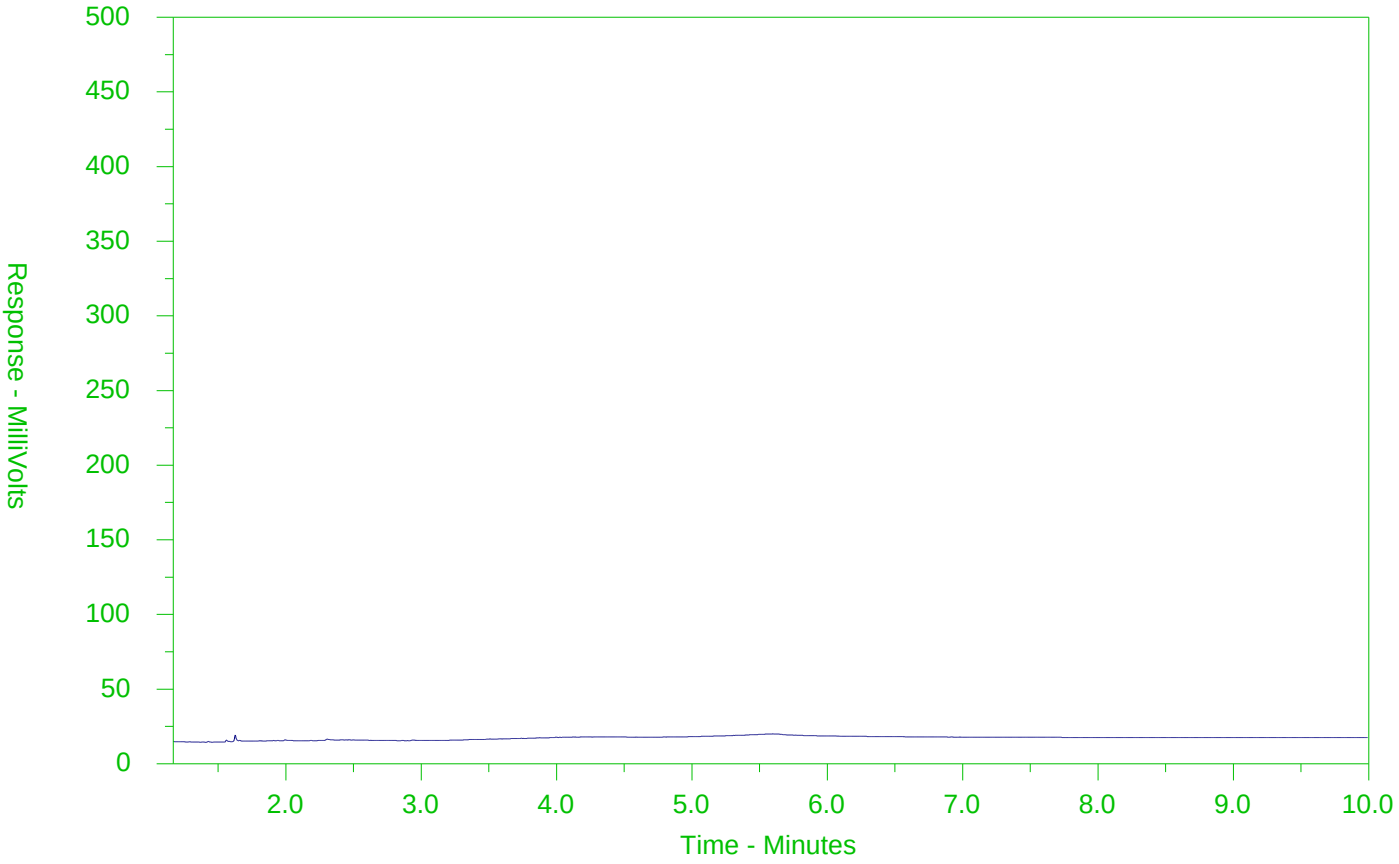
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-12
Client Sample ID: MW19



←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.

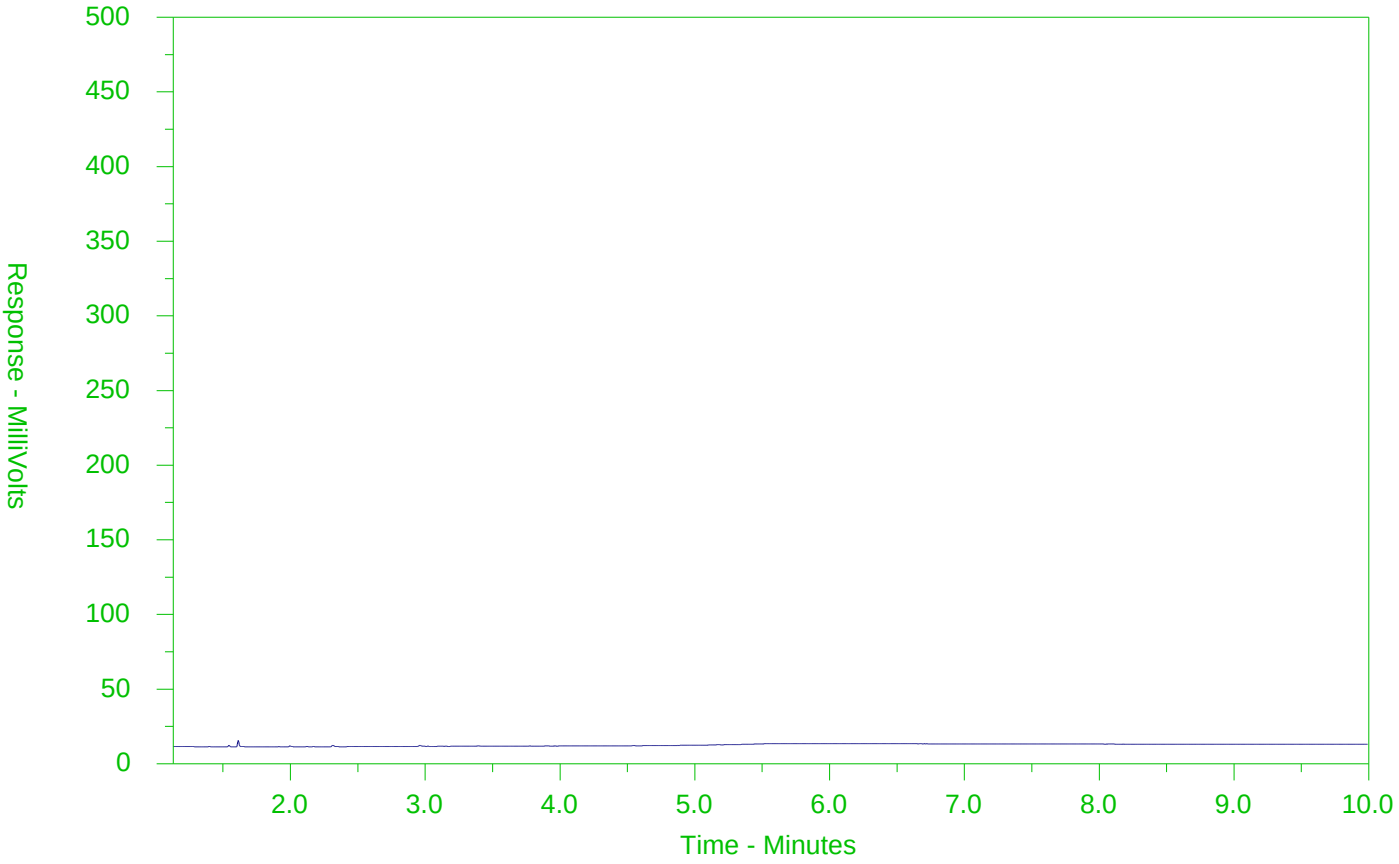
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-13
Client Sample ID: MW23



←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.

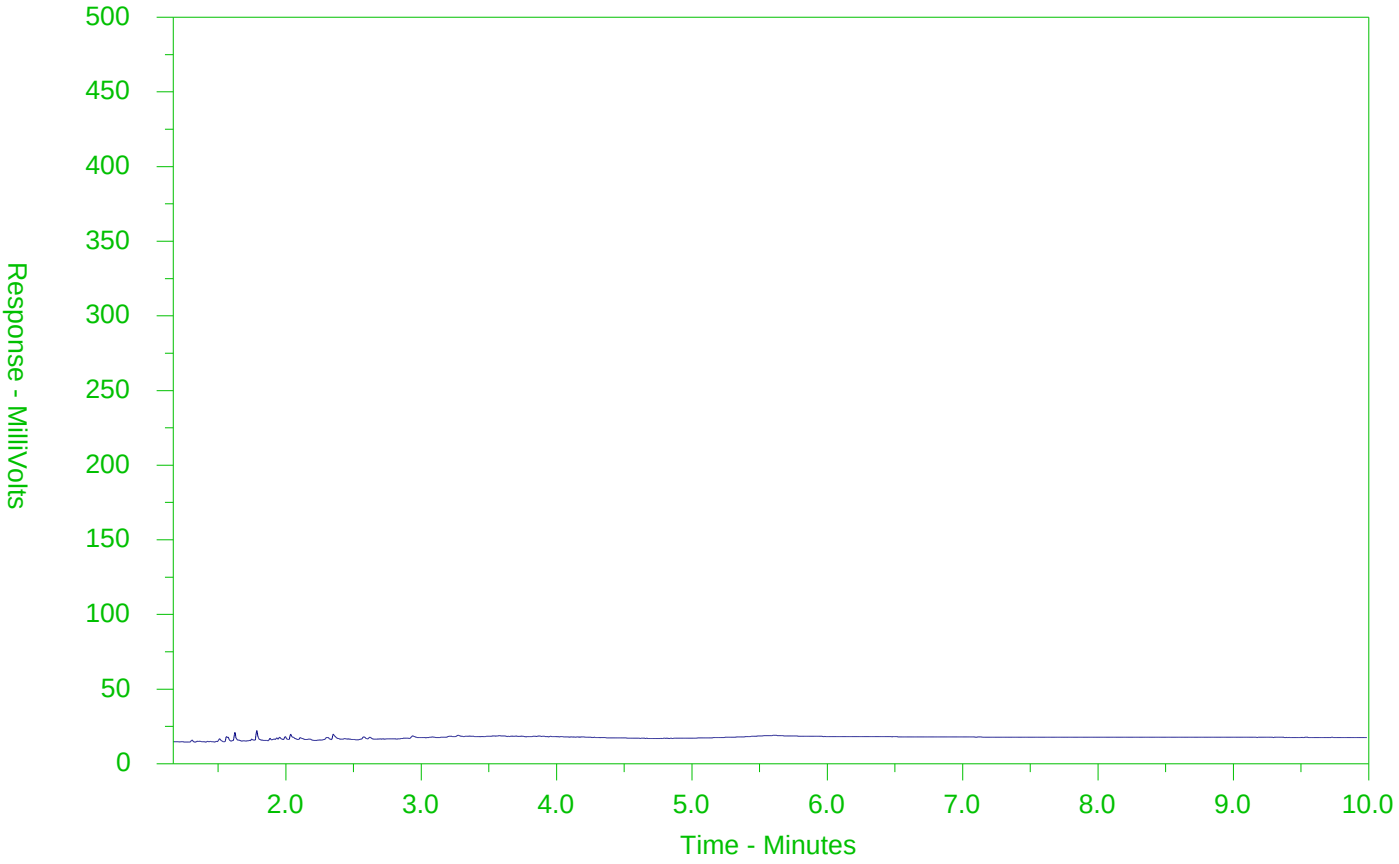
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-14
Client Sample ID: MW25



←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.

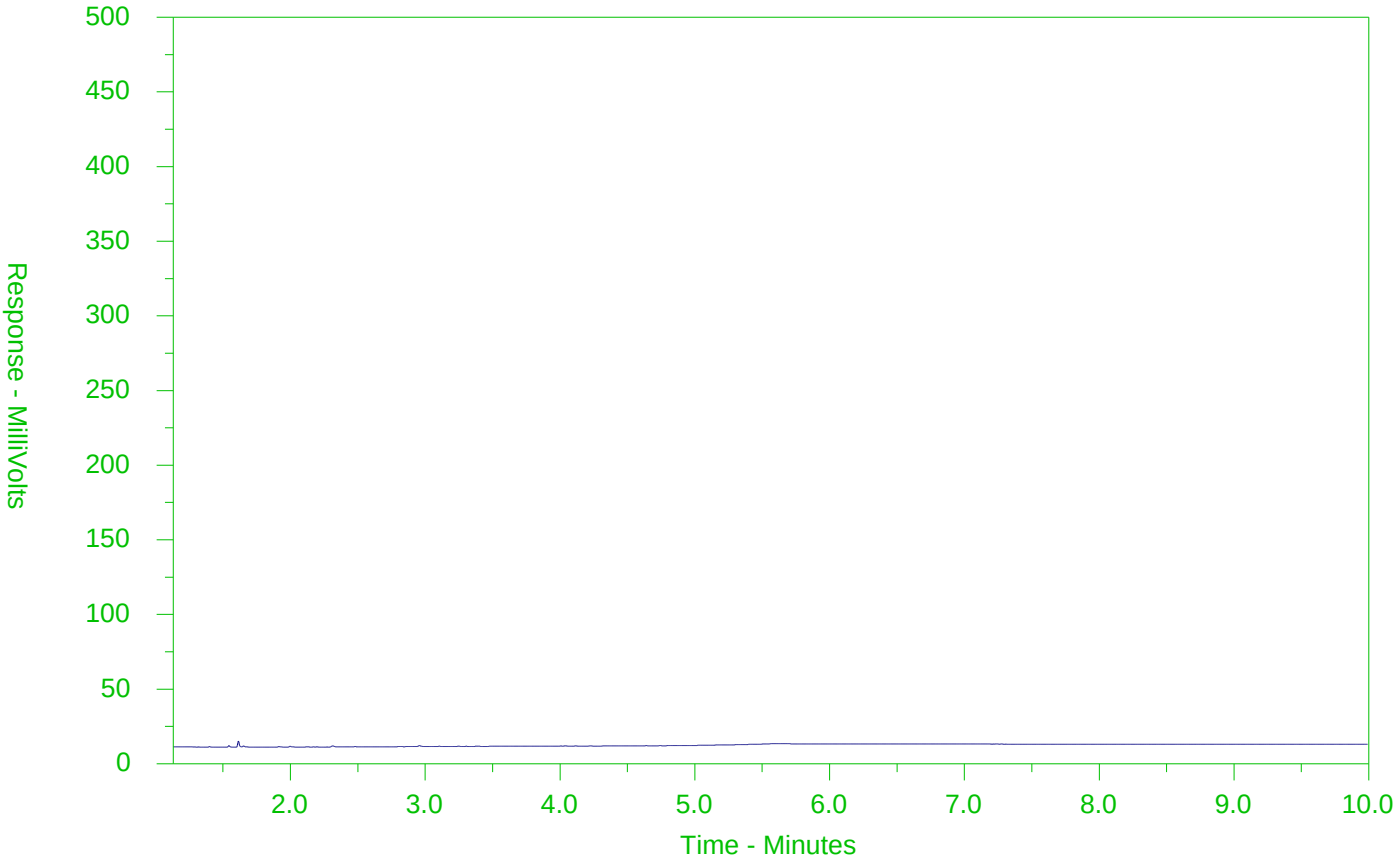
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-15
Client Sample ID: MW26



←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.

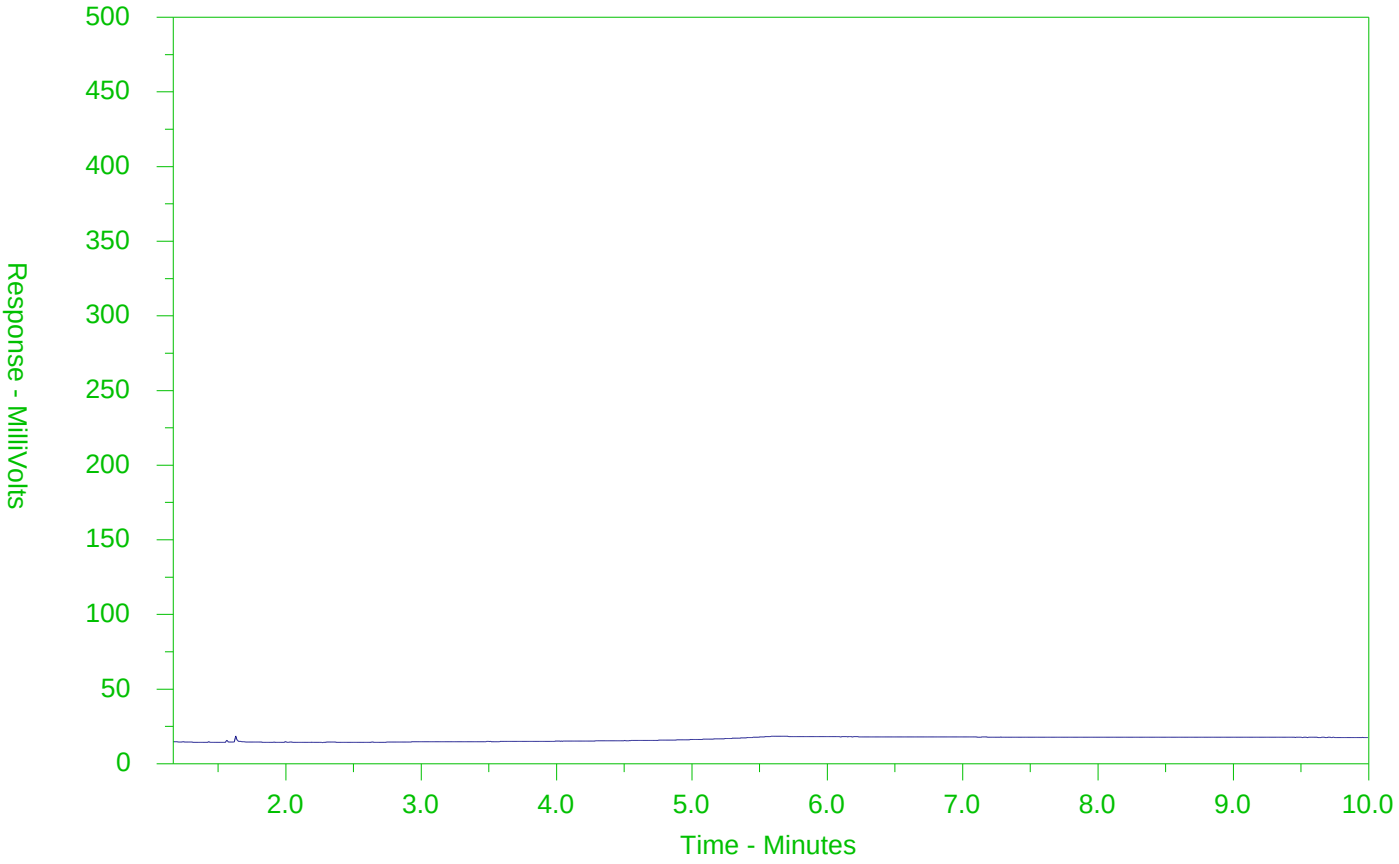
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-16
Client Sample ID: MW27



←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.

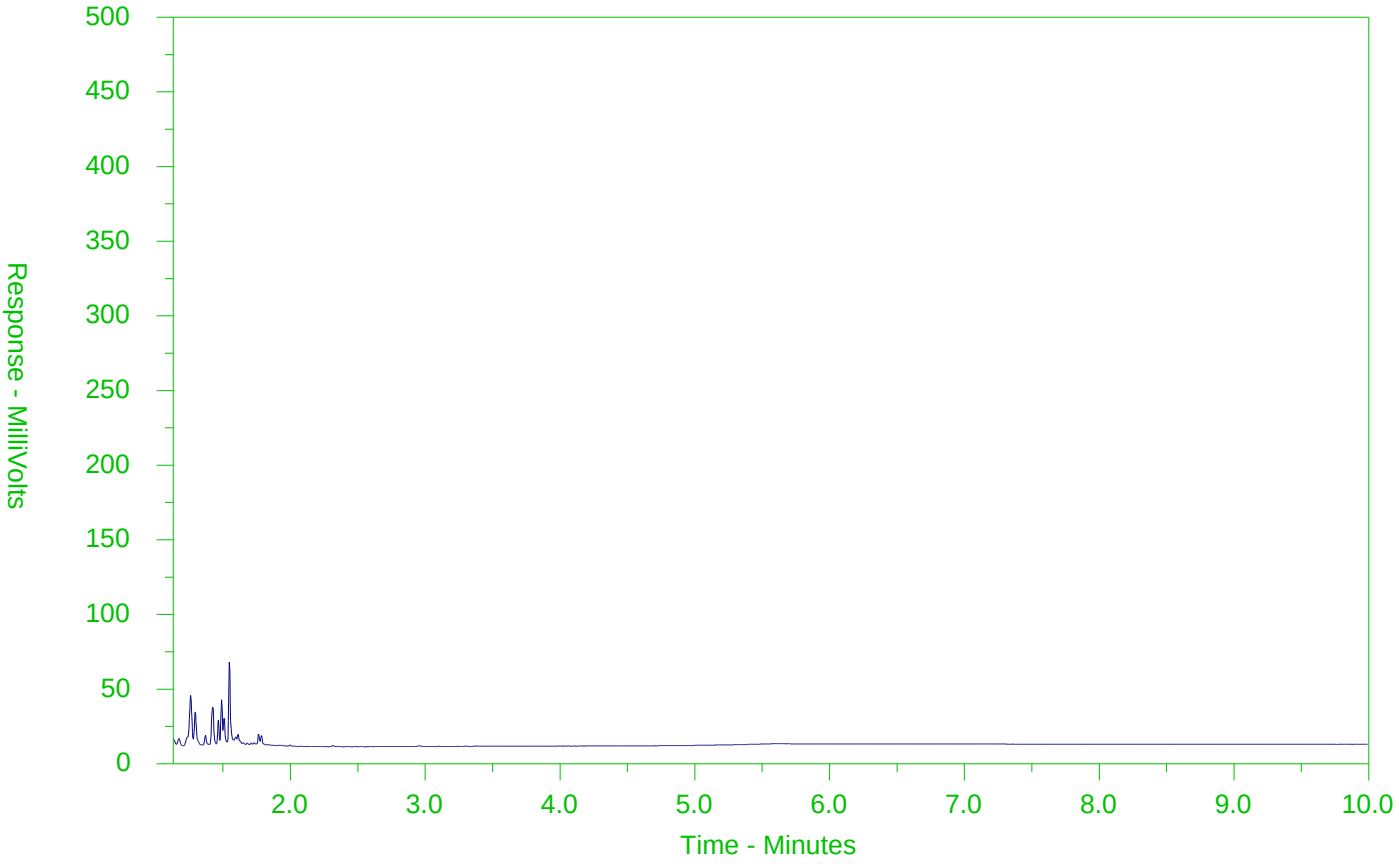
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-17
Client Sample ID: MW28



←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.

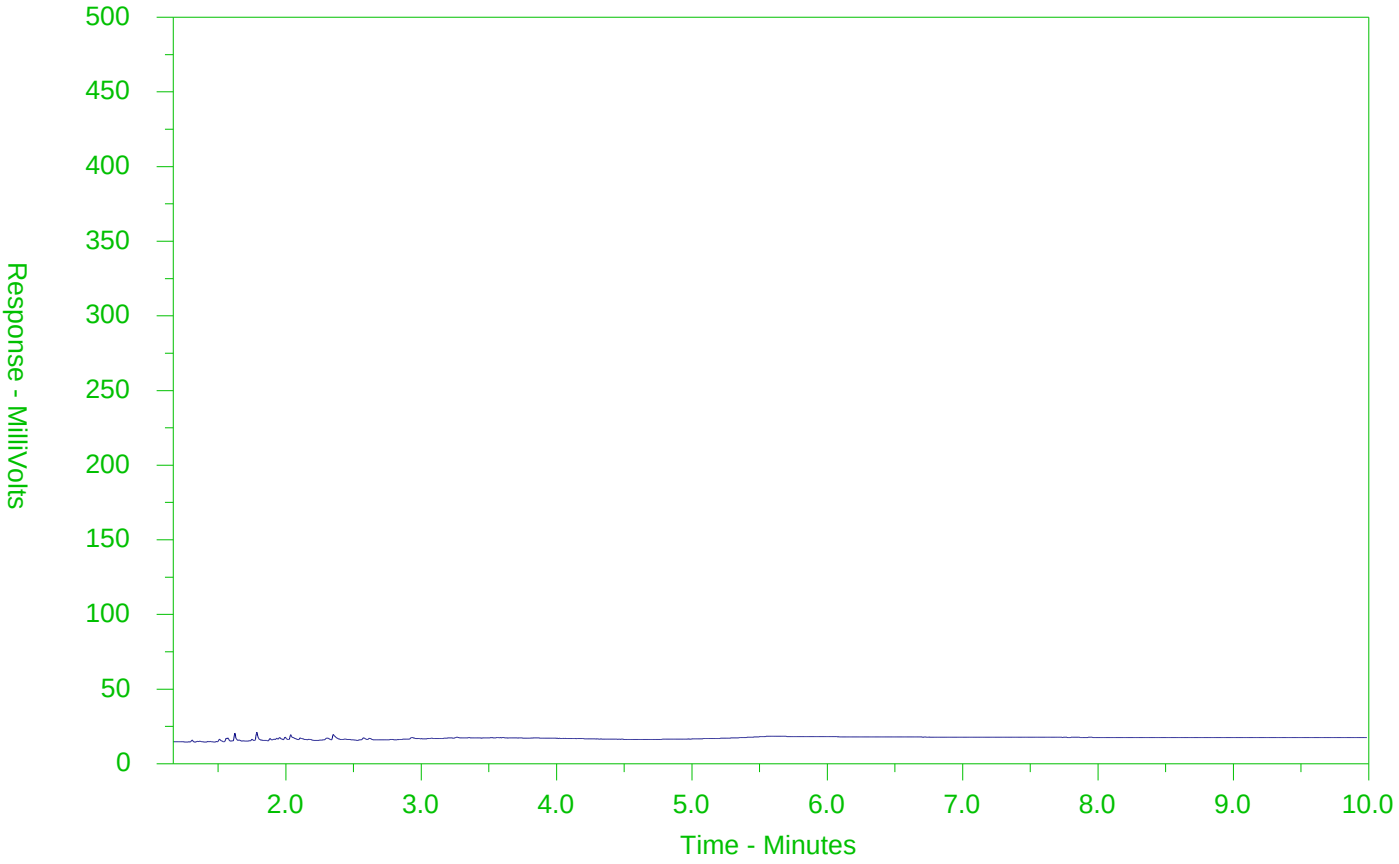
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-18
Client Sample ID: MW30



←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.

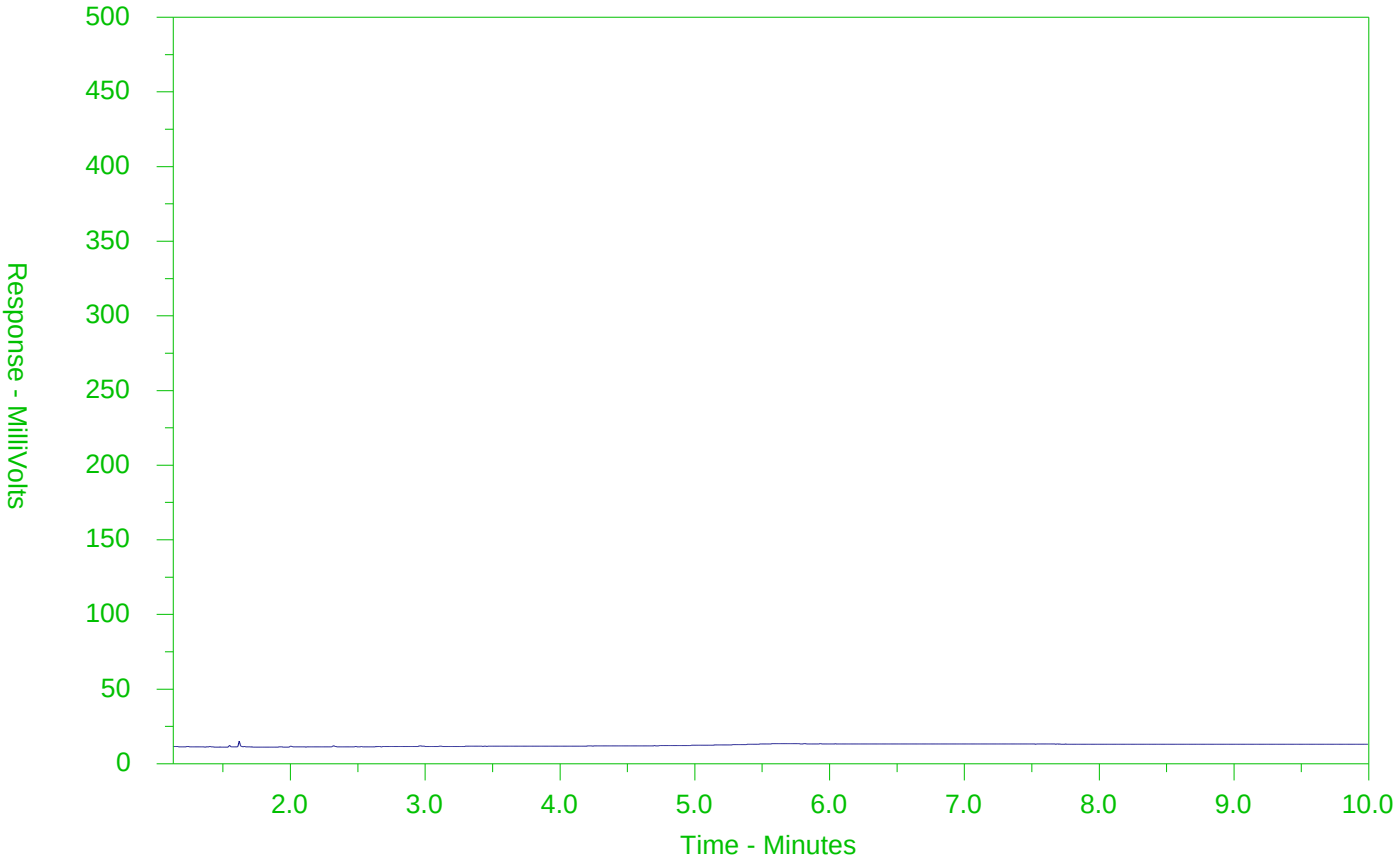
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-19
Client Sample ID: MW32



←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.

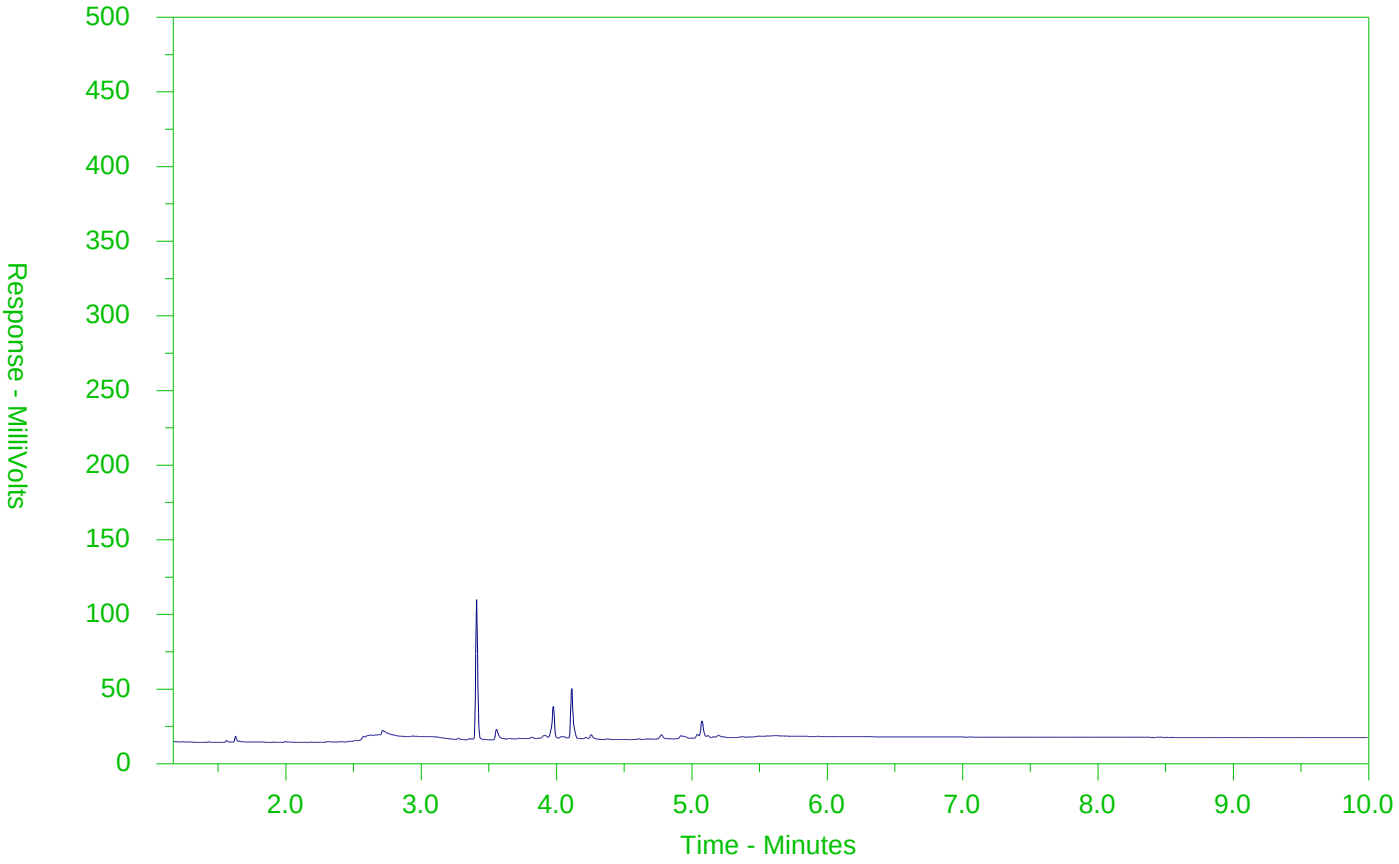
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2434231-20
Client Sample ID: DUP1



←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

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2434231-COFC

COC Number: 17 - 620126

Page 1 of 2

Report To	Contact and company name below will appear on the final report
Company:	JEC
Contact:	MARK JEFFREY
Phone:	
	Company address below will appear on the final report
Street:	
City/Province:	
Postal Code:	

Report Format / Distribution	
Select Report Format:	[X] PDF [X] EXCEL [ ] EDD (DIGITAL)
Quality Control (QC) Report with Report	[X] YES [ ] NO
[ ] Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	mjeffrey@
Email 2	jdwell@
Email 3	

Invoice To		
	Same as Report To	[X] YES [ ] NO
	Copy of Invoice with Report	[ ] YES [ ] NO
Company:		
Contact:		

Invoice Distribution	
Select Invoice Distribution:	[ ] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	
Email 2	

Project Information	
ALS Account # / Quote #:	
Job #:	1227
PO / AFE:	
LSD:	

AFE and Cost Centre / Routing Codes (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (lab use only):

ALS Contact: G.B.

Sampler: J. DIVOLL

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] [ ] | 3 day [P3-25%] [ ] | 2 day [P2-50%] [ ]

EMERGENCY: 1 Business day [E-100%] [ ] | Same Day, Weekend or Statutory holiday [E2-200% (Laboratory opening fees may apply)] [ ]

Date and Time Required for all E&P TATs:

For tests that can not be performed according to the service level selected, you will be contacted.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

PHC F1-F4 | BTEX

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	SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
	MW 3	3-4-20	AM	WATER			
	MW 4						
	MW 5						
	MW 9						
	MW 10						
	MW 11						
	MW 12						
	MW 13						
	MW 14						
	MW 16						
	MW 17						
	MW 19						

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? [ ] YES [X] NO

Are samples for human consumption/ use? [ ] YES [X] NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

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			
				5	5		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date: Apr. 3/20	Time: 150	Received by:	Date:	Time:	Received by:	Date: 3-4-2020	Time: 1400

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JULY 2017 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

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2434231-COFC

COC Number: 17 - 620125

Page 2 of 2

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Turnaround Time (TAT) Below - Contact your AM to confirm all E&P TATs (surcharges may apply)
Company:	JGC	Select Report Format: [X] PDF [X] EXCEL [ ] EDD (DIGITAL)	Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply
Contact:	Mark Jeffrey	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:		[ ] Compare Results to Criteria on Report - provide details below if box checked	EMERGENCY: 1 Business day [E-100%] [ ]; Same Day, Weekend or Statutory holiday [E2-200% (Laboratory opening fees may apply)] [ ]
	Company address below will appear on the final report	Select Distribution: [X] EMAIL [ ] MAIL [ ] FAX	Date and Time Required for all E&P TATs:
Street:		Email 1 or Fax: MjeffGray@	For tests that can not be performed according to the service level selected, you will be contacted.
City/Province:		Email 2: Jdwell@	
Postal Code:		Email 3:	

Invoice To		Invoice Distribution	
	Same as Report To [X] YES [ ] NO	Select Invoice Distribution: [ ] EMAIL [ ] MAIL [ ] FAX	
	Copy of Invoice with Report [ ] YES [ ] NO		
Company:		Email 1 or Fax	
Contact:		Email 2	

Project Information		Please Select Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#:
Job #:	1227	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):		ALS Contact: G.B.	Sampler: J. Dwell

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	PACIFIC-KEY	BTEX	SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
	MW 23	3-4-20	AM	WATER	X	X			
	MW 25				X	X			
	MW 26				X	X			
	MW 27				X	X			
	MW 28				X	X			
	MW 30				X	X			
	MW 32				X	X			
	DUP1				X	X			
	TB					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 [X] NO	
Are samples for human consumption/ use? [ ] YES [X] NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ]	SIF Observations	Yes [ ]	No [ ]		
Ice Packs [ ]	Ice Cubes [X]	Custody seal intact	Yes [ ]	No [ ]	
Cooling Initiated [ ]					

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				5.5			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
	N/A. 3/20	1500					3-4-2020	1400

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JULY 2017 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**.

JEFFREY ENVIRONMENTAL
ATTN: MARK JEFFREY
616 BLUENOSE COURT
WATERLOO ON N2K 4C5

Date Received: 26-OCT-20
Report Date: 30-OCT-20 15:07 (MT)
Version: FINAL

Client Phone: 519-747-3570

Certificate of Analysis

Lab Work Order #: L2521410

Project P.O. #: NOT SUBMITTED
Job Reference: 1227
C of C Numbers: 17-794402, 17-794404
Legal Site Desc:

Gayle Braun
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-1 MW3 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.5		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	100.0		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	88.3		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	94.3		60-140	%		28-OCT-20	R5269917
L2521410-2 MW4 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.9		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.9		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	96.1		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	96.1		60-140	%		28-OCT-20	R5269917
L2521410-3 MW5 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-3 MW5 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.2		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.1		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	94.3		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	97.4		60-140	%		28-OCT-20	R5269917
L2521410-4 MW9 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.3		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.3		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	89.5		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	85.5		60-140	%		28-OCT-20	R5269917
L2521410-5 MW10 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-5 MW10 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50		0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50		0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30		0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40		0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.0		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.3		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	92.1		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	91.6		60-140	%		28-OCT-20	R5269917
L2521410-6 MW11 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	0.51	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.5		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.1		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	91.2		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	94.6		60-140	%		28-OCT-20	R5269917
L2521410-7 MW12 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-7 MW12 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.4		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.1		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	92.2		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	89.8		60-140	%		28-OCT-20	R5269917
L2521410-8 MW13 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	4.47	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	2.22	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	0.92	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	0.92		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.9		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.4		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	26	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	93.2		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	98.9		60-140	%		28-OCT-20	R5269917
L2521410-9 MW14 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-9 MW14 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	94.5		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	98.5		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	440		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	380		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	820		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	92.0		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	92.4		60-140	%		28-OCT-20	R5269917
L2521410-10 MW16 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	26.0	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	451	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	10.5	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	155	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	1470	DLHC	4.0	ug/L		29-OCT-20	R5270729
Xylenes (Total)	1630		4.0	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	100.8		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	92.5		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	5240	DLHC	250	ug/L		29-OCT-20	R5270729
F1-BTEX	3120		790	ug/L		29-OCT-20	
F2 (C10-C16)	760		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	6000		440	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	101.9		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	102.8		60-140	%		29-OCT-20	R5270729
Report Remarks : 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.							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-11 MW17 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	3.64	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40		0.40	ug/L		29-OCT-20	R5270729
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.9		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.2		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	93.3		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	89.8		60-140	%		28-OCT-20	R5269917
L2521410-12 MW19 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.1		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.2		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	90.8		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	88.5		60-140	%		28-OCT-20	R5269917
L2521410-13 MW23 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-13 MW23 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Ethylbenzene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
Toluene	<0.50	OWP	0.50	ug/L		28-OCT-20	R5269917
o-Xylene	<0.30	OWP	0.30	ug/L		28-OCT-20	R5269917
m+p-Xylenes	<0.40	OWP	0.40	ug/L		28-OCT-20	R5269917
Xylenes (Total)	<0.50		0.50	ug/L		28-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.3		70-130	%		28-OCT-20	R5269917
Surrogate: 1,4-Difluorobenzene	99.3		70-130	%		28-OCT-20	R5269917
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		28-OCT-20	R5269917
F1-BTEX	<25		25	ug/L		28-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		28-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	92.6		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	97.3		60-140	%		28-OCT-20	R5269917
L2521410-14 MW25 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.6		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	99.8		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	95.8		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	92.7		60-140	%		29-OCT-20	R5270712
L2521410-15 MW26 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-15 MW26 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.4		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	99.5		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	89.2		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	90.8		60-140	%		29-OCT-20	R5270712
L2521410-16 MW28 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.95	DLVH	0.95	ug/L		29-OCT-20	R5270712
Ethylbenzene	319	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	11.2	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	21.8	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	352	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	374		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.3		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	91.4		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	2450	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	1750		25	ug/L		29-OCT-20	
F2 (C10-C16)	310		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	2760		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	97.4		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	90.2		60-140	%		29-OCT-20	R5270712
L2521410-17 MW30 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-17 MW30 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.1		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	99.2		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	410		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	340		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	750		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	98.3		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	81.6		60-140	%		29-OCT-20	R5270712
L2521410-18 MW32 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.8		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	99.0		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	86.9		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	89.9		60-140	%		29-OCT-20	R5270712
L2521410-19 MW27 Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-19 MW27 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	94.8		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	98.5		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	89.2		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	74.6		60-140	%		29-OCT-20	R5270712
L2521410-20 DUP 1 Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50	OWP	0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30	OWP	0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40	OWP	0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	94.8		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	100.2		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25	OWP	25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270092
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270092
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270092
Surrogate: 2-Bromobenzotrifluoride	89.4		60-140	%	27-OCT-20	28-OCT-20	R5270092
Surrogate: 3,4-Dichlorotoluene	72.8		60-140	%		29-OCT-20	R5270712
L2521410-21 TB Sampled By: J.DIVELL on 26-OCT-20							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521410-21 TB Sampled By: J.DIVELL on 26-OCT-20 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50		0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50		0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30		0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40		0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	96.0		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	99.2		70-130	%		29-OCT-20	R5270712

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
DLHC	Detection Limit Raised: Dilution required due to high concentration of test analyte(s).
DLVH	Detection Limit raised due to interference from Volatile Hydrocarbons on VOC method. Chromatographic elution of interfering peaks in the same region as test analytes prevents a determination of whether VOC analyte is present or absent (above/below regular detection limits).
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.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
BTX-511-HS-WT	Water	BTEX by Headspace	SW846 8260 (511)

BTX is determined by analyzing by headspace-GC/MS.

F1-F4-511-CALC-WT	Water	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Water	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS

Fraction F1 is determined by analyzing by headspace-GC/FID.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F2-F4-511-WT	Water	F2-F4-O.Reg 153/04 (July 2011)	EPA 3511/CCME Tier 1

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

XYLENES-SUM-CALC-WT	Water	Sum of Xylene Isomer Concentrations	CALCULATION

Total xylenes represents the sum of o-xylene and m&p-xylene.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

17-794402 17-794404

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Workorder: L2521410 Report Date: 30-OCT-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTX-511-HS-WT	**Water**							
Batch R5269917								
WG3433515-4 DUP		**WG3433515-3**						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	28-OCT-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	28-OCT-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	28-OCT-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	28-OCT-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	28-OCT-20
WG3433515-1 LCS								
Benzene			104.2		%		70-130	28-OCT-20
Ethylbenzene			98.0		%		70-130	28-OCT-20
m+p-Xylenes			94.4		%		70-130	28-OCT-20
o-Xylene			96.8		%		70-130	28-OCT-20
Toluene			98.2		%		70-130	28-OCT-20
WG3433515-2 MB								
Benzene			<0.50		ug/L		0.5	28-OCT-20
Ethylbenzene			<0.50		ug/L		0.5	28-OCT-20
m+p-Xylenes			<0.40		ug/L		0.4	28-OCT-20
o-Xylene			<0.30		ug/L		0.3	28-OCT-20
Toluene			<0.50		ug/L		0.5	28-OCT-20
Surrogate: 1,4-Difluorobenzene			99.6		%		70-130	28-OCT-20
Surrogate: 4-Bromofluorobenzene			96.4		%		70-130	28-OCT-20
WG3433515-5 MS		**WG3433515-3**						
Benzene			104.8		%		50-140	28-OCT-20
Ethylbenzene			97.7		%		50-140	28-OCT-20
m+p-Xylenes			95.2		%		50-140	28-OCT-20
o-Xylene			96.7		%		50-140	28-OCT-20
Toluene			98.0		%		50-140	28-OCT-20
Batch R5270712								
WG3433665-4 DUP		**WG3433665-3**						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-OCT-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-OCT-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	29-OCT-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	29-OCT-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-OCT-20
WG3433665-1 LCS								
Benzene			98.0		%		70-130	28-OCT-20

Quality Control Report

Workorder: L2521410 Report Date: 30-OCT-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTX-511-HS-WT	**Water**							
Batch R5270712								
WG3433665-1 LCS								
Ethylbenzene			94.9		%		70-130	28-OCT-20
m+p-Xylenes			93.4		%		70-130	28-OCT-20
o-Xylene			93.6		%		70-130	28-OCT-20
Toluene			94.6		%		70-130	28-OCT-20
WG3433665-2 MB								
Benzene			<0.50		ug/L		0.5	29-OCT-20
Ethylbenzene			<0.50		ug/L		0.5	29-OCT-20
m+p-Xylenes			<0.40		ug/L		0.4	29-OCT-20
o-Xylene			<0.30		ug/L		0.3	29-OCT-20
Toluene			<0.50		ug/L		0.5	29-OCT-20
Surrogate: 1,4-Difluorobenzene			98.5		%		70-130	29-OCT-20
Surrogate: 4-Bromofluorobenzene			95.8		%		70-130	29-OCT-20
WG3433665-5 MS		**WG3433665-3**						
Benzene			99.4		%		50-140	29-OCT-20
Ethylbenzene			93.3		%		50-140	29-OCT-20
m+p-Xylenes			92.1		%		50-140	29-OCT-20
o-Xylene			92.1		%		50-140	29-OCT-20
Toluene			94.3		%		50-140	29-OCT-20
Batch R5270729								
WG3433673-4 DUP		**WG3433673-3**						
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	29-OCT-20
WG3433673-1 LCS								
m+p-Xylenes			97.6		%		70-130	28-OCT-20
WG3433673-2 MB								
m+p-Xylenes			<0.40		ug/L		0.4	29-OCT-20
WG3433673-5 MS		**WG3433673-3**						
m+p-Xylenes			94.8		%		50-140	29-OCT-20
F1-HS-511-WT	**Water**							
Batch R5269917								
WG3433515-4 DUP		**WG3433515-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	28-OCT-20
WG3433515-1 LCS								
F1 (C6-C10)			100.6		%		80-120	28-OCT-20
WG3433515-2 MB								
F1 (C6-C10)			<25		ug/L		25	28-OCT-20

Quality Control Report

Workorder: L2521410 Report Date: 30-OCT-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5

Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT	**Water**							
Batch R5269917								
WG3433515-2 MB								
Surrogate: 3,4-Dichlorotoluene			106.9		%		60-140	28-OCT-20
WG3433515-5 MS		**WG3433515-3**						
F1 (C6-C10)			89.8		%		60-140	28-OCT-20
Batch R5270712								
WG3433665-4 DUP		**WG3433665-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	29-OCT-20
WG3433665-1 LCS								
F1 (C6-C10)			95.7		%		80-120	28-OCT-20
WG3433665-2 MB								
F1 (C6-C10)			<25		ug/L		25	29-OCT-20
Surrogate: 3,4-Dichlorotoluene			85.9		%		60-140	29-OCT-20
WG3433665-5 MS		**WG3433665-3**						
F1 (C6-C10)			89.8		%		60-140	29-OCT-20
Batch R5270729								
WG3433673-4 DUP		**WG3433673-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	29-OCT-20
WG3433673-1 LCS								
F1 (C6-C10)			98.6		%		80-120	28-OCT-20
WG3433673-2 MB								
F1 (C6-C10)			<25		ug/L		25	29-OCT-20
Surrogate: 3,4-Dichlorotoluene			96.9		%		60-140	29-OCT-20
WG3433673-5 MS		**WG3433673-3**						
F1 (C6-C10)			85.2		%		60-140	29-OCT-20
F2-F4-511-WT	**Water**							
Batch R5270092								
WG3432736-2 LCS								
F2 (C10-C16)			105.9		%		70-130	28-OCT-20
F3 (C16-C34)			112.7		%		70-130	28-OCT-20
F4 (C34-C50)			117.1		%		70-130	28-OCT-20
WG3432736-1 MB								
F2 (C10-C16)			<100		ug/L		100	28-OCT-20
F3 (C16-C34)			<250		ug/L		250	28-OCT-20
F4 (C34-C50)			<250		ug/L		250	28-OCT-20
Surrogate: 2-Bromobenzotrifluoride			36.1	MBS	%		60-140	28-OCT-20

Quality Control Report

Workorder: L2521410 Report Date: 30-OCT-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MBS	Surrogate recovery in Method Blank was outside ALS DQO. Moderately low-biased results in the MB do not significantly affect its purpose.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

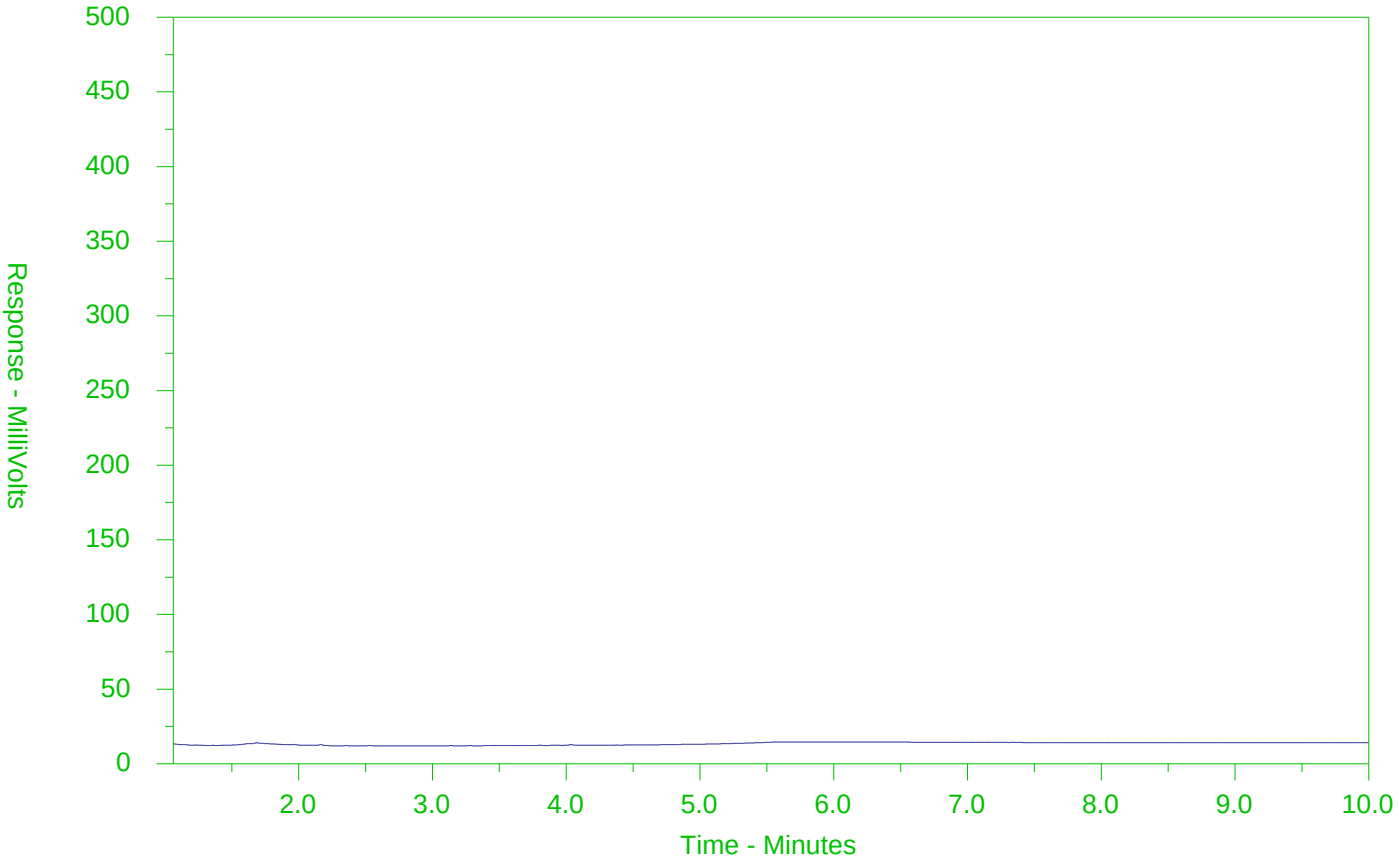
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L2521410-1
Client Sample ID: MW3



←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.

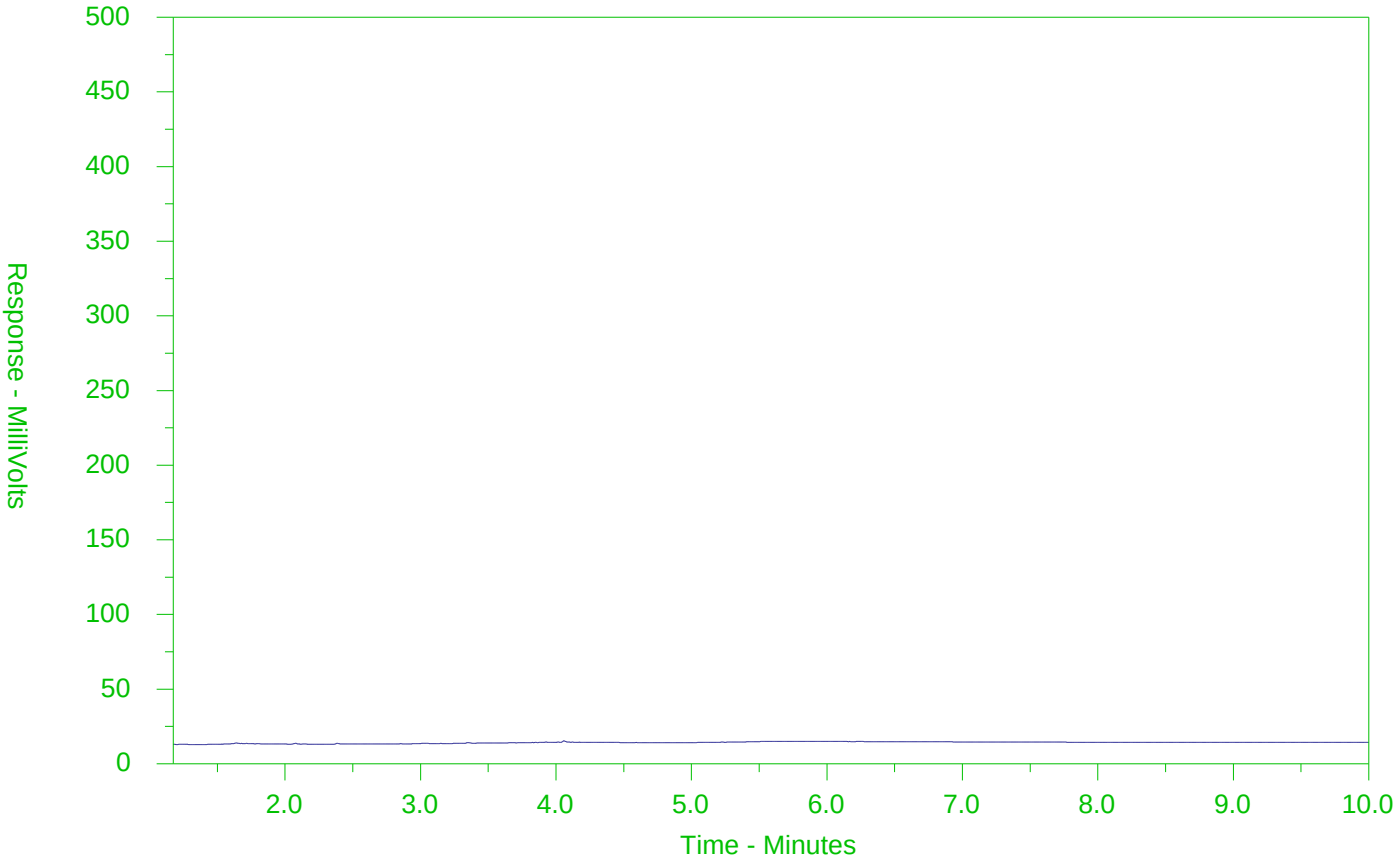
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-2
Client Sample ID: MW4



←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.

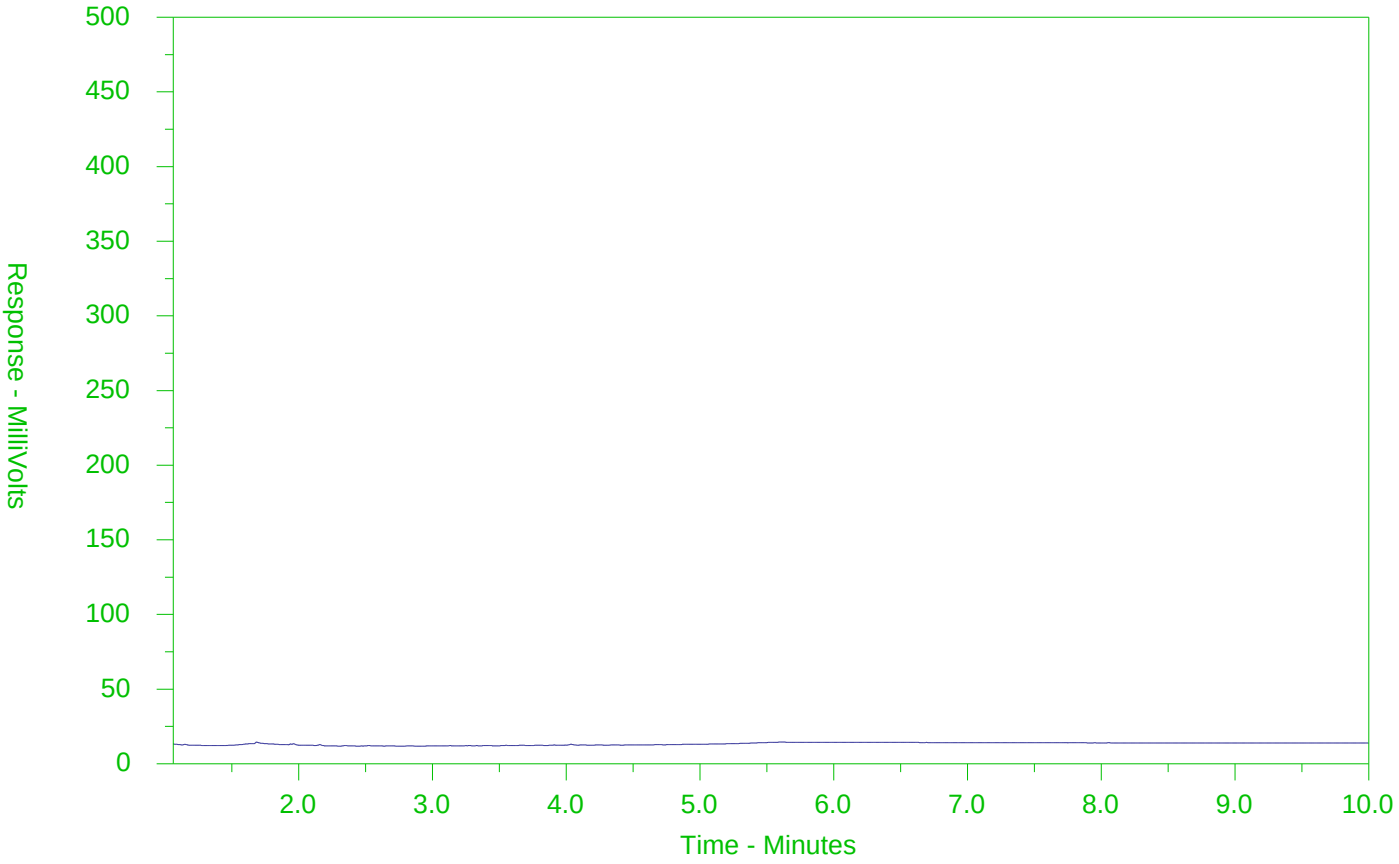
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-3
Client Sample ID: MW5



←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.

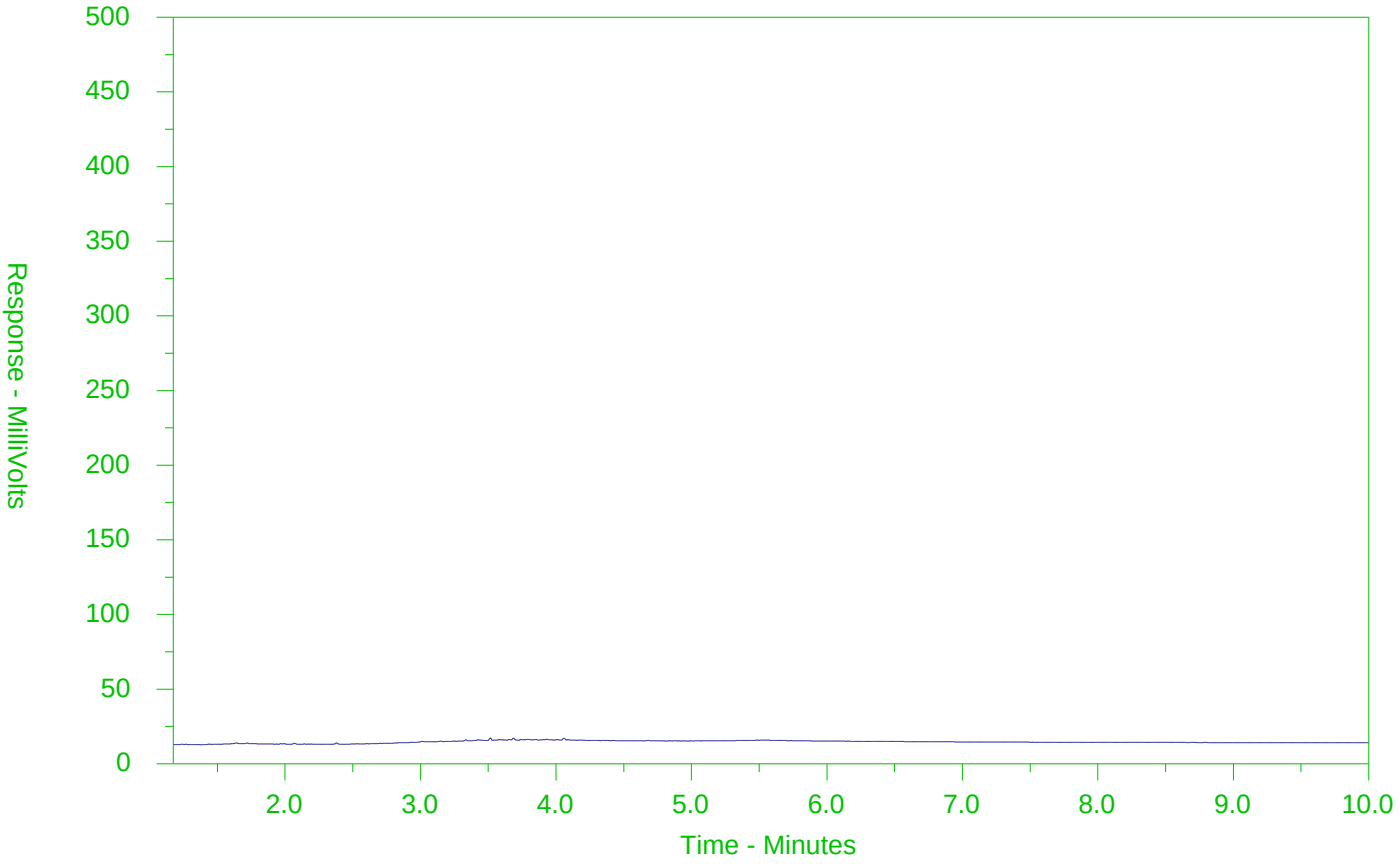
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-4
Client Sample ID: MW9



←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.

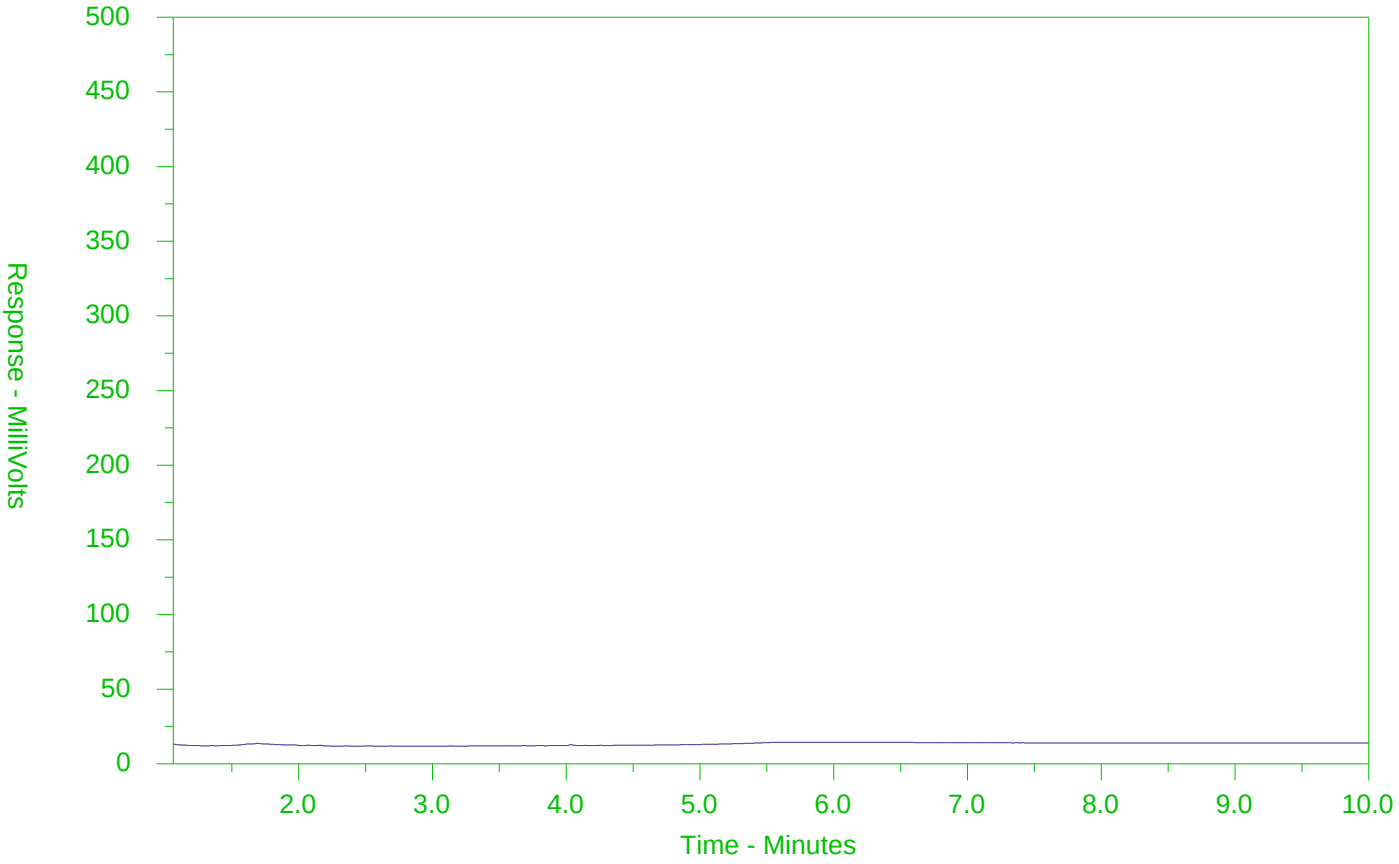
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-5
Client Sample ID: MW10



←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.

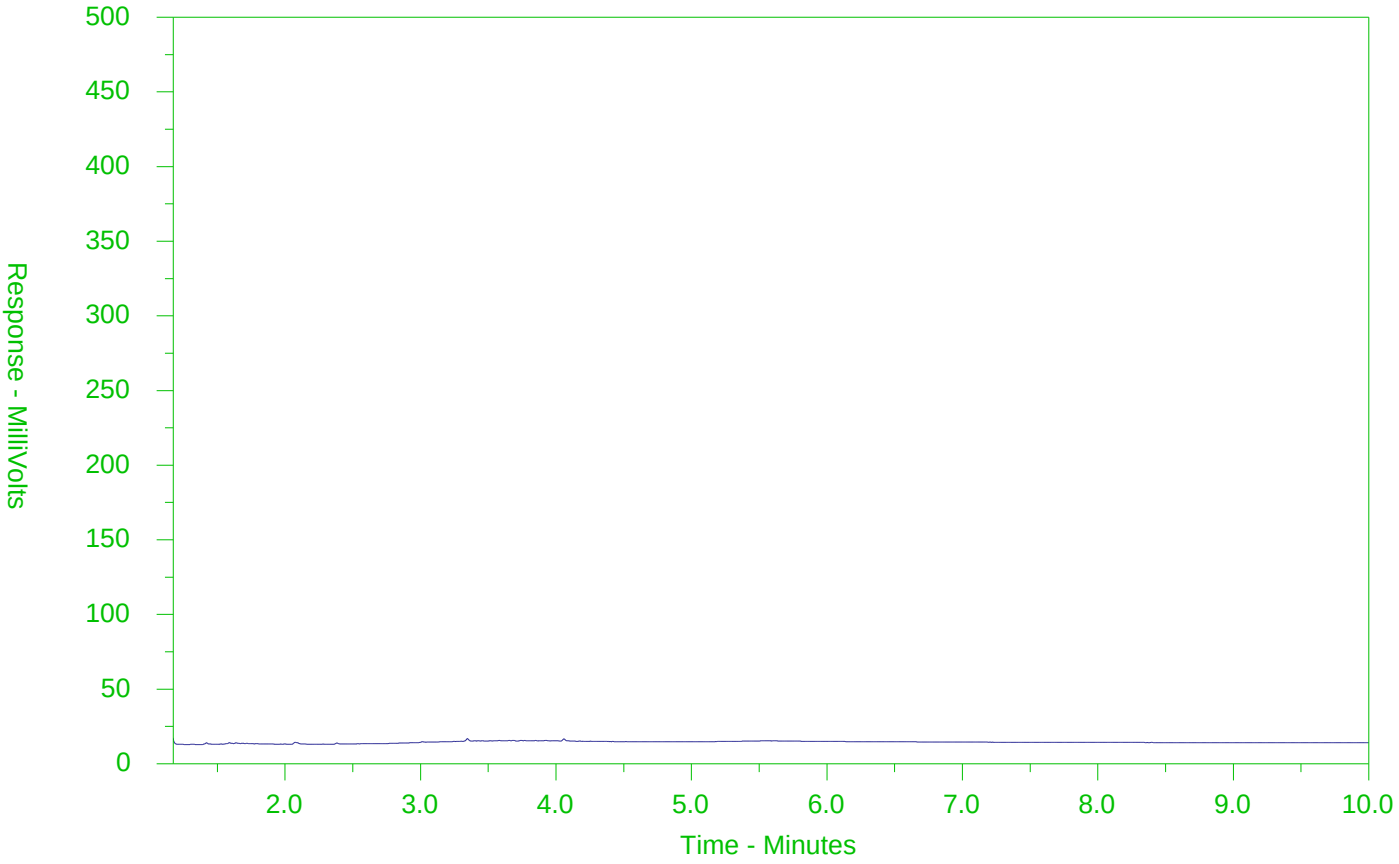
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-6
Client Sample ID: MW11



←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.

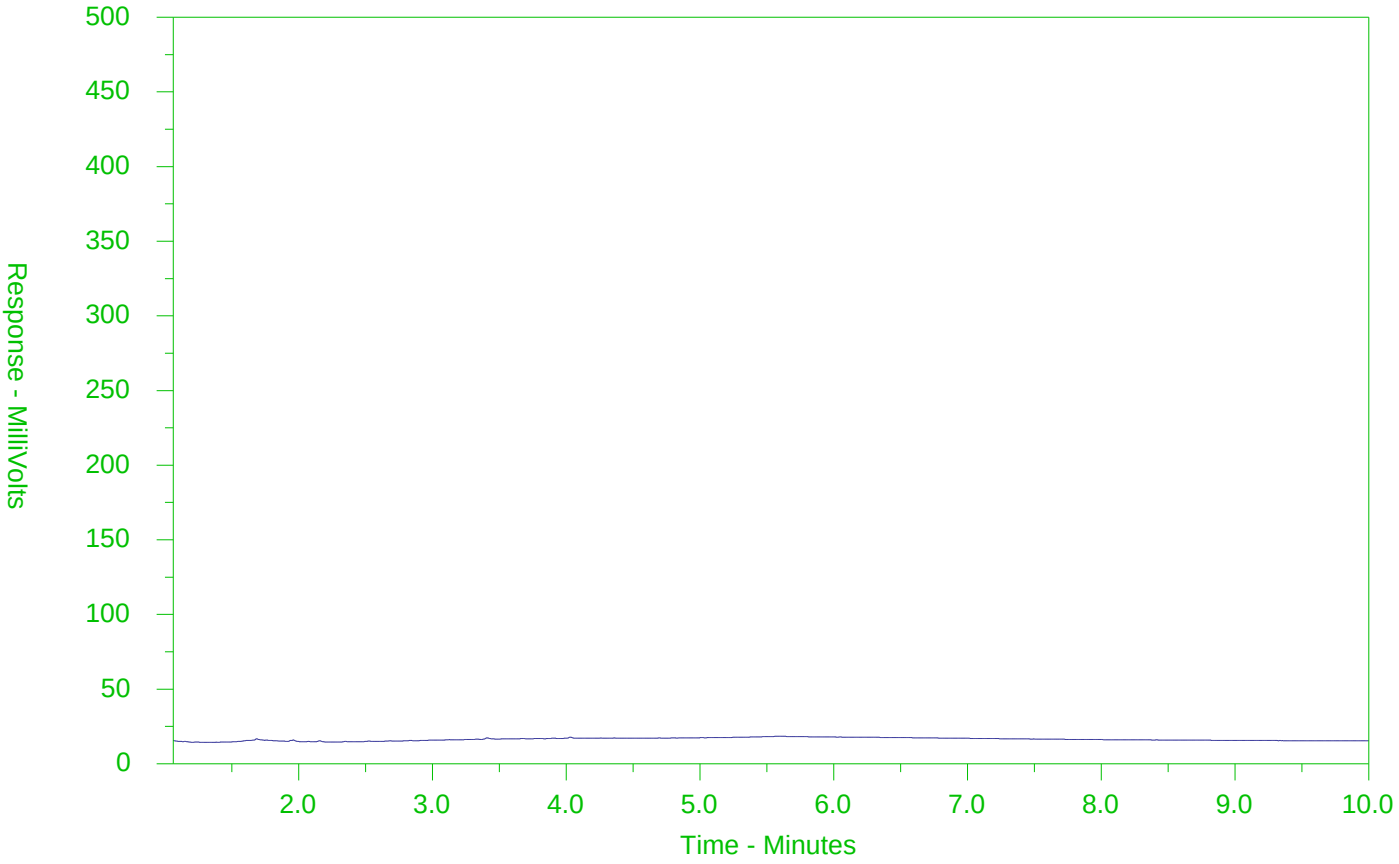
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-7
Client Sample ID: MW12



←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.

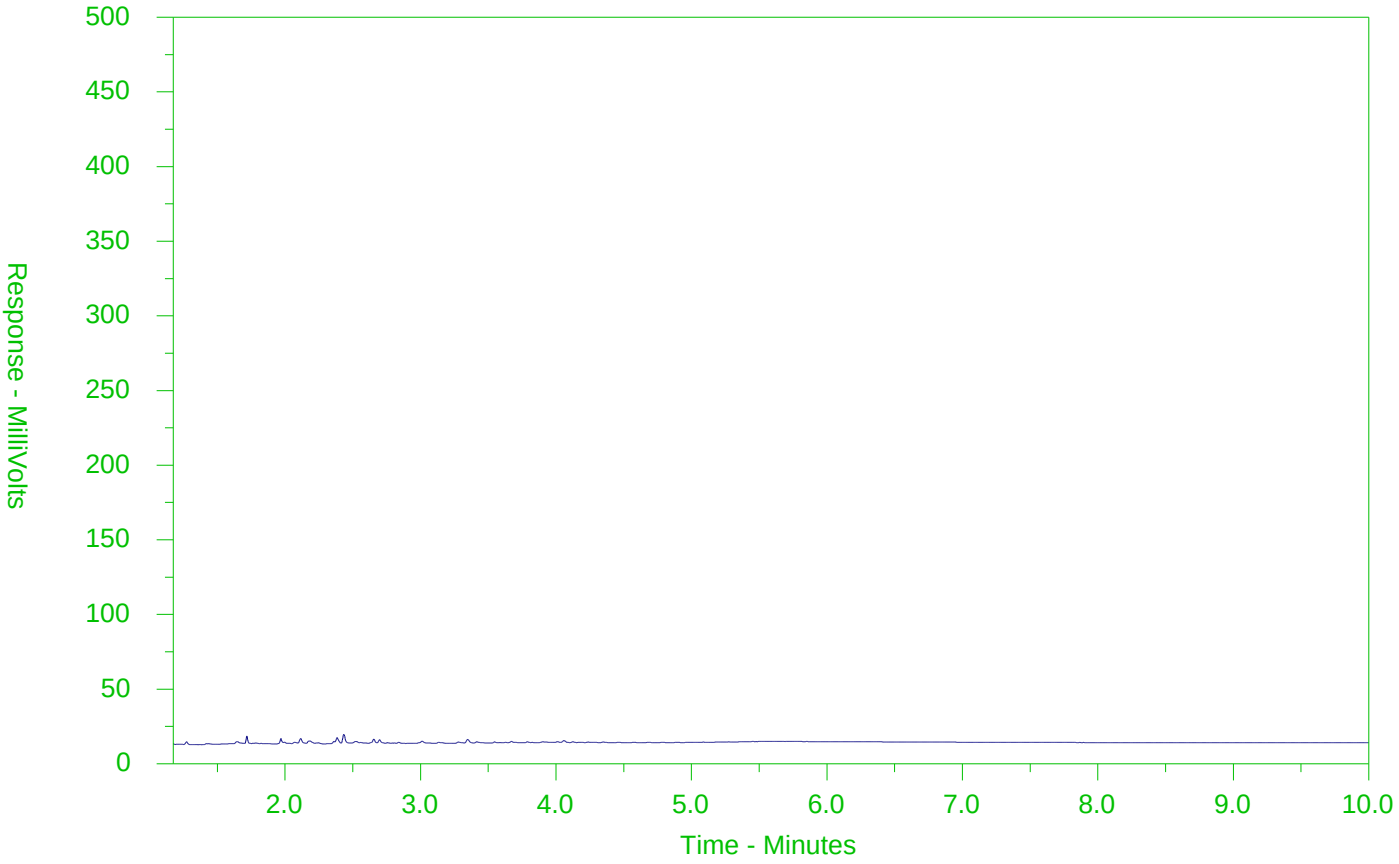
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-8
Client Sample ID: MW13



←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.

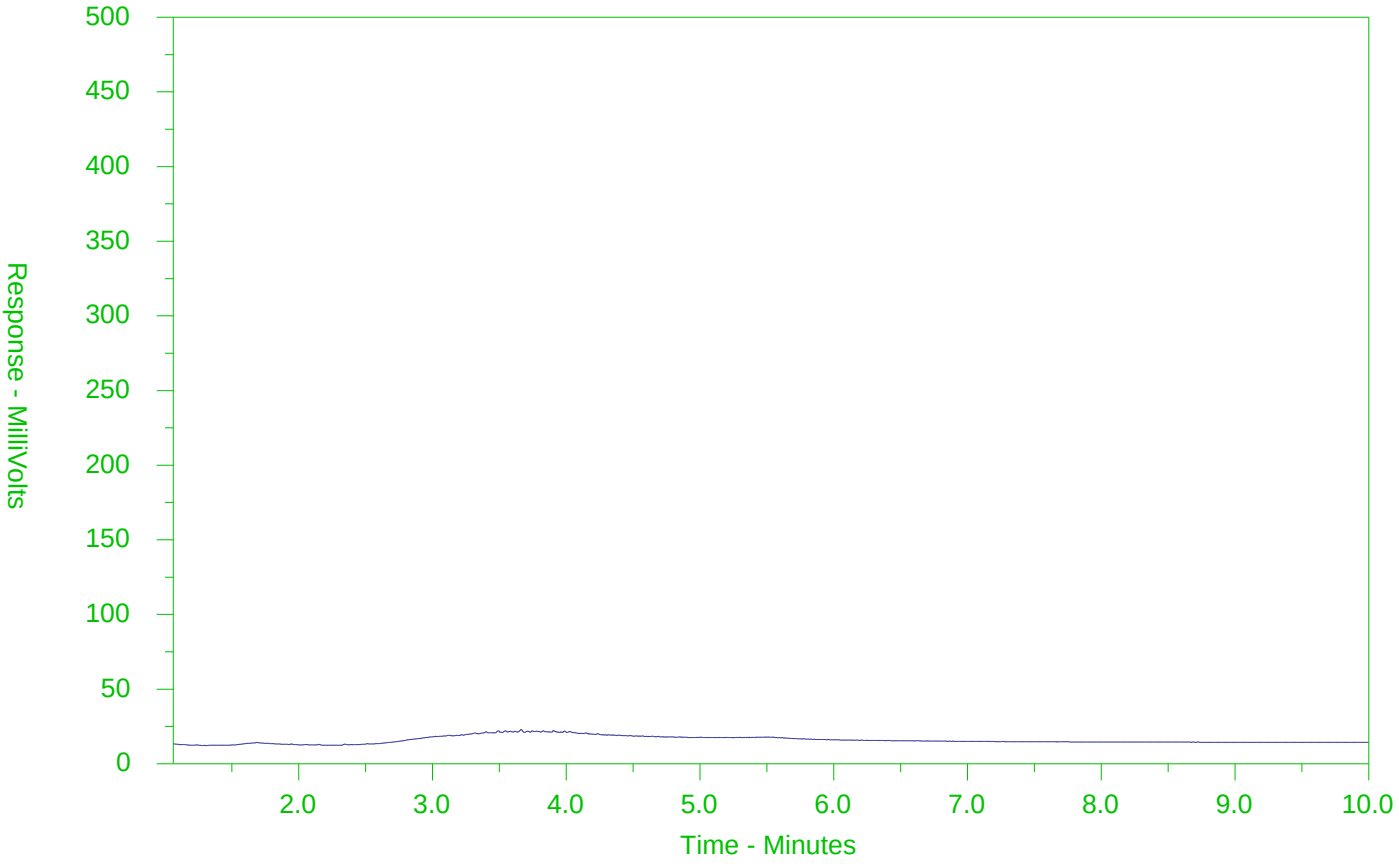
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-9
Client Sample ID: MW14



←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.

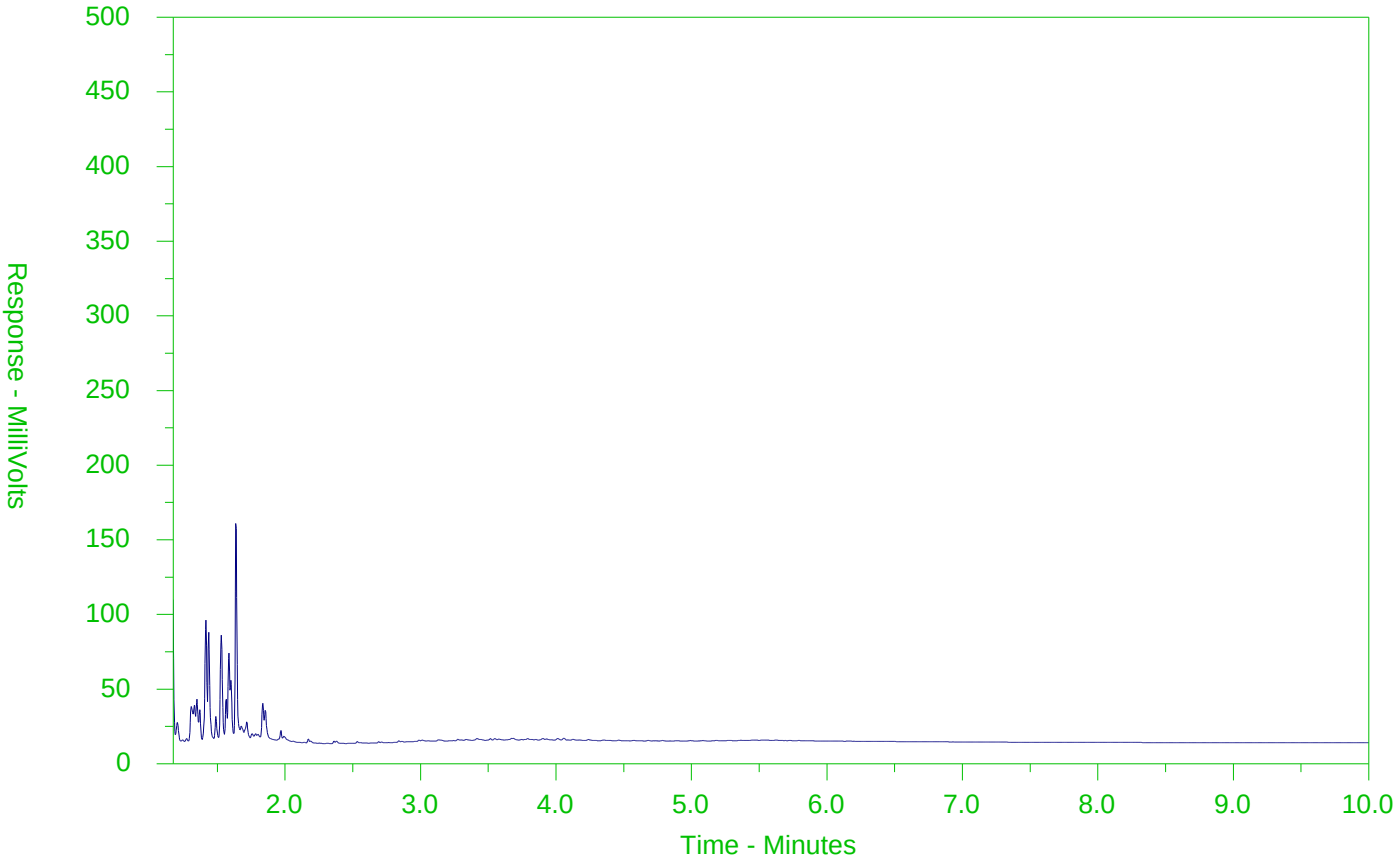
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-10
Client Sample ID: MW16



←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.

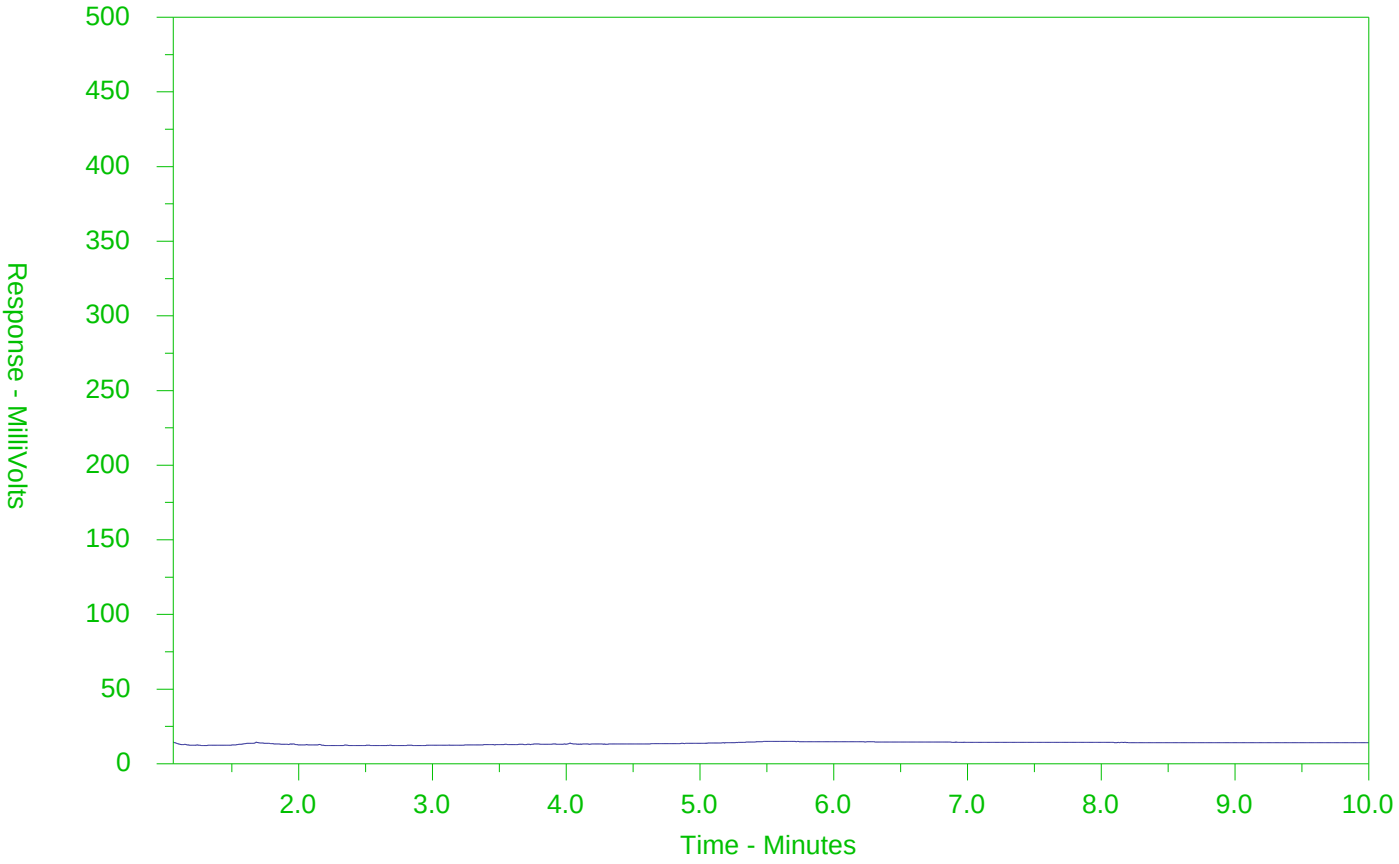
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-11
Client Sample ID: MW17



←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.

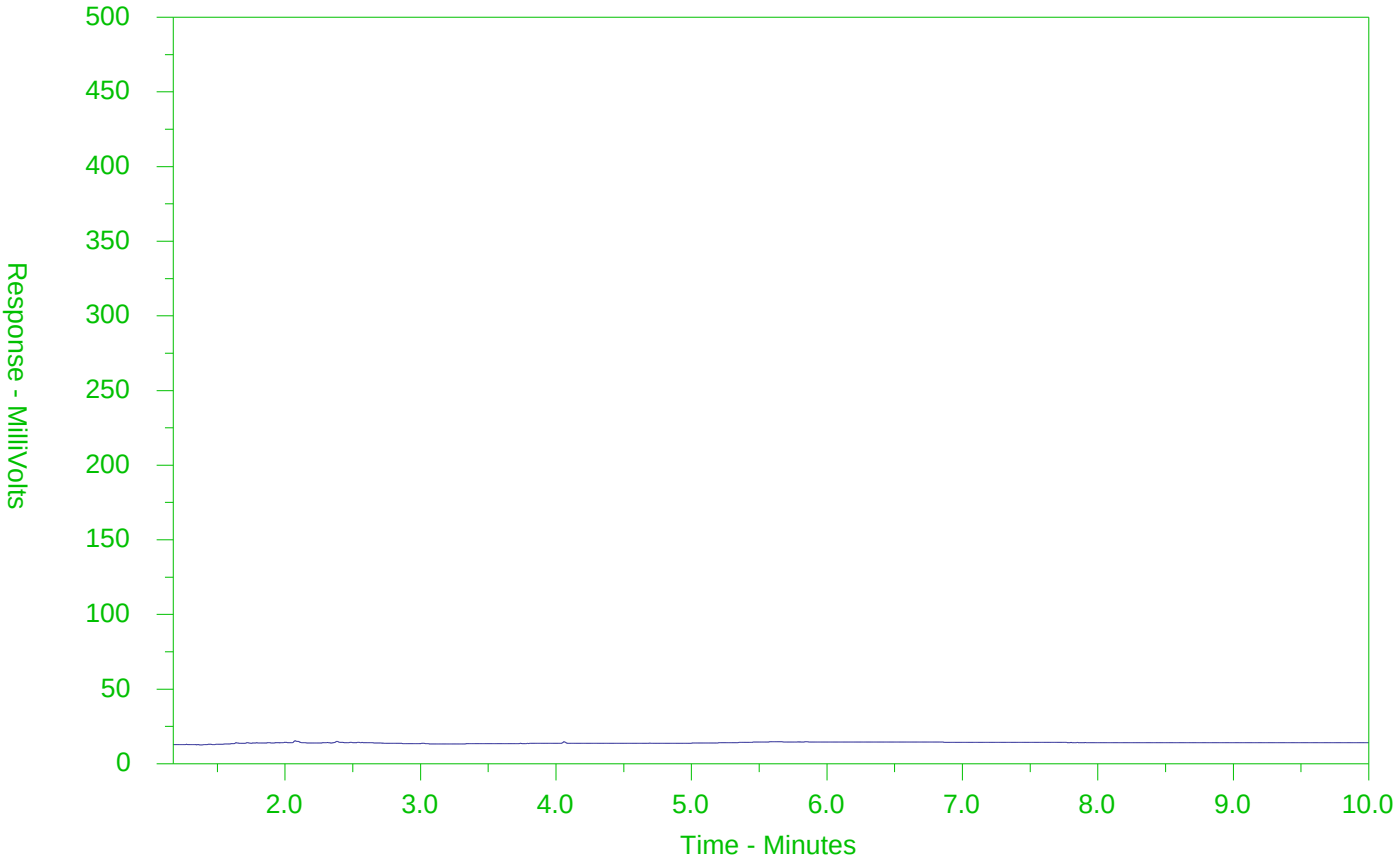
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-12
Client Sample ID: MW19



←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.

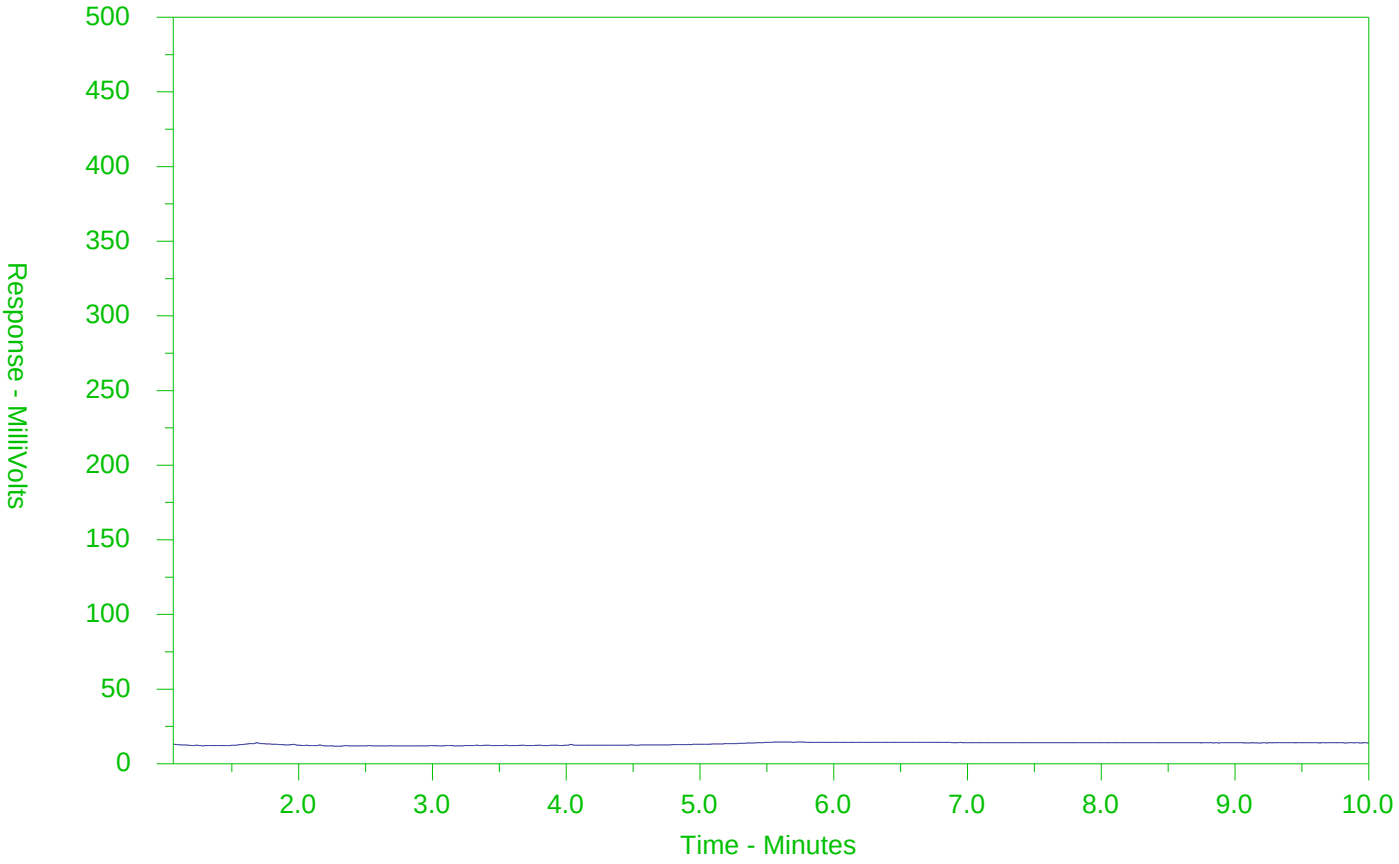
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-13
Client Sample ID: MW23



←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.

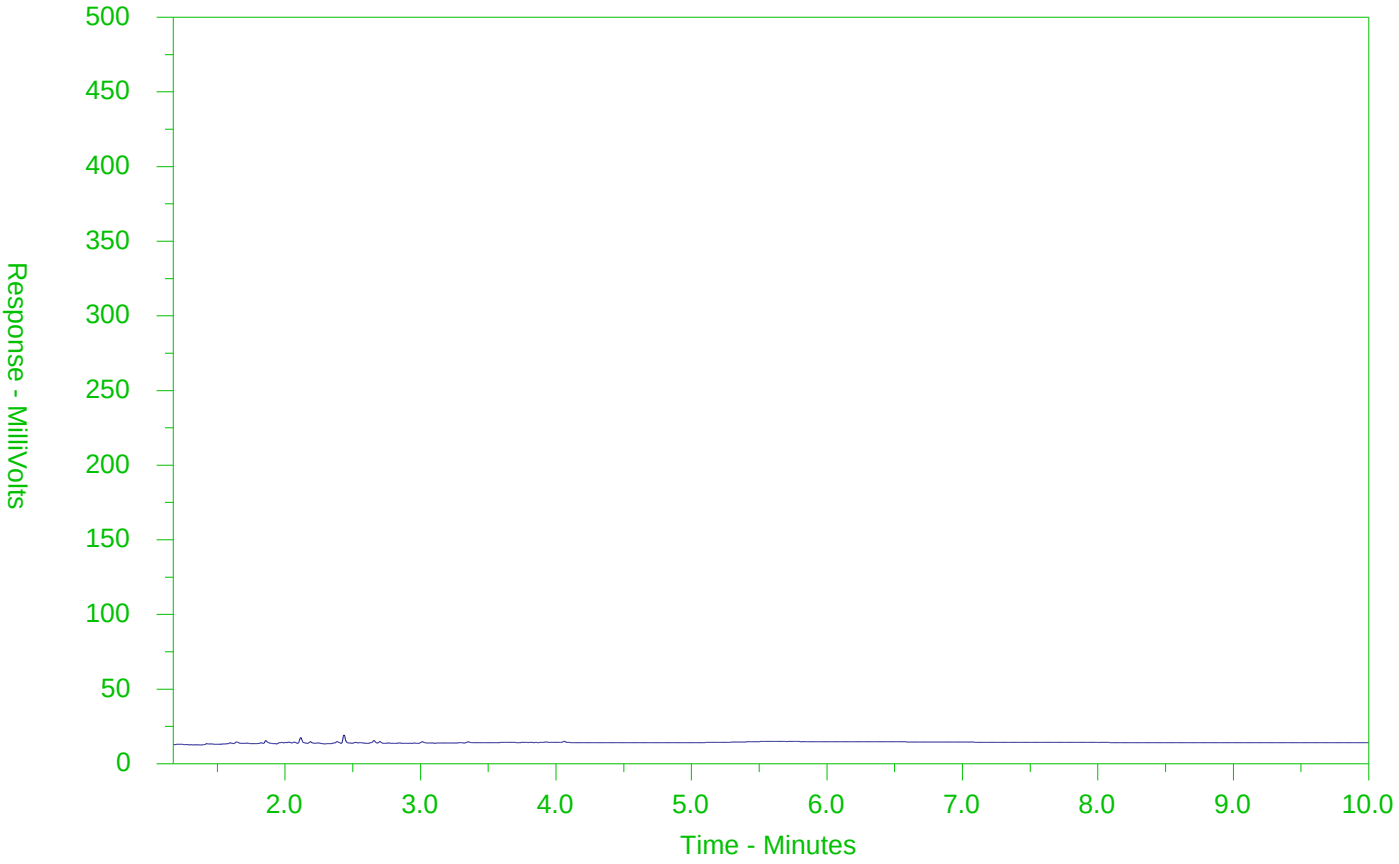
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-14
Client Sample ID: MW25



←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.

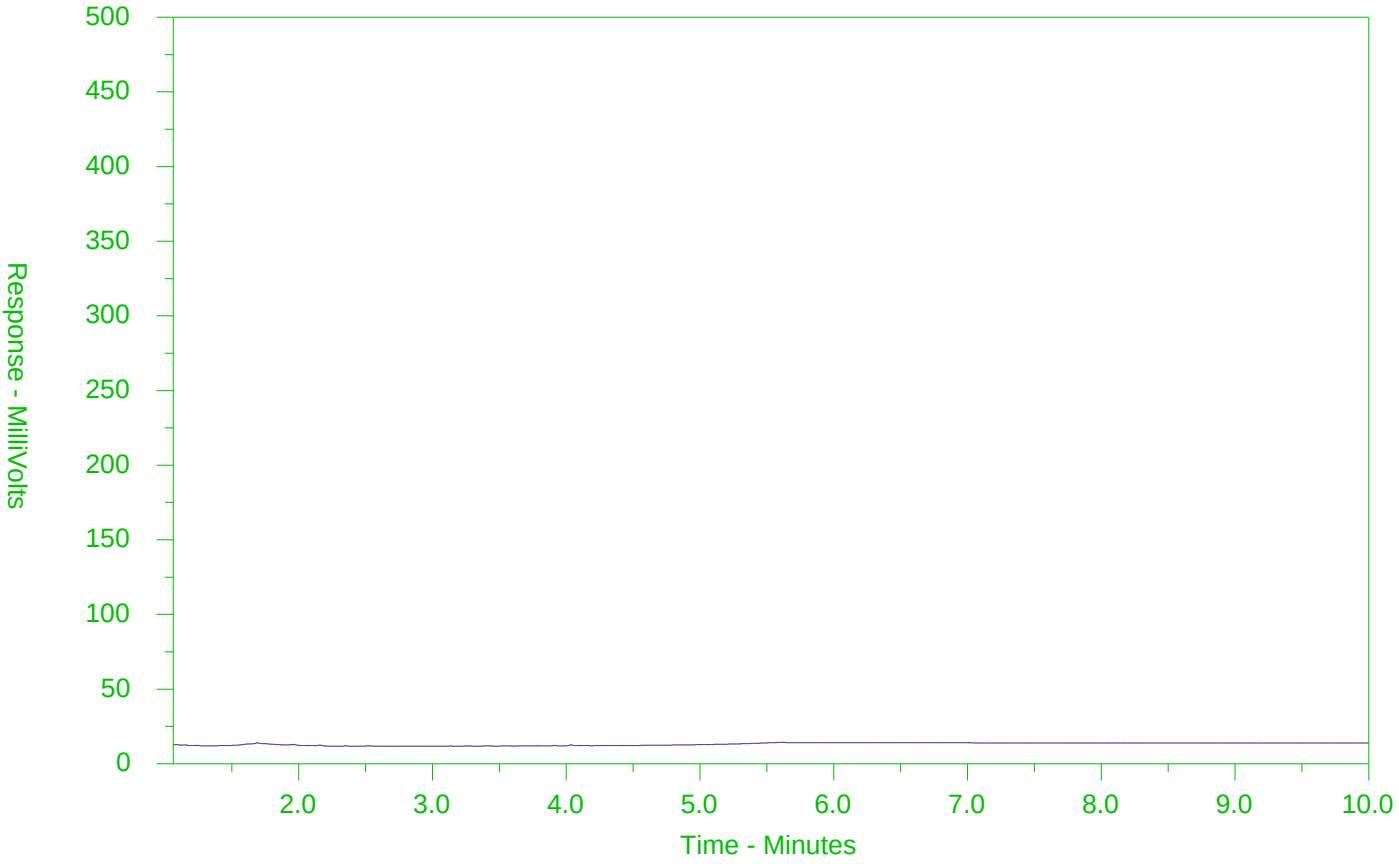
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-15
Client Sample ID: MW26



←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.

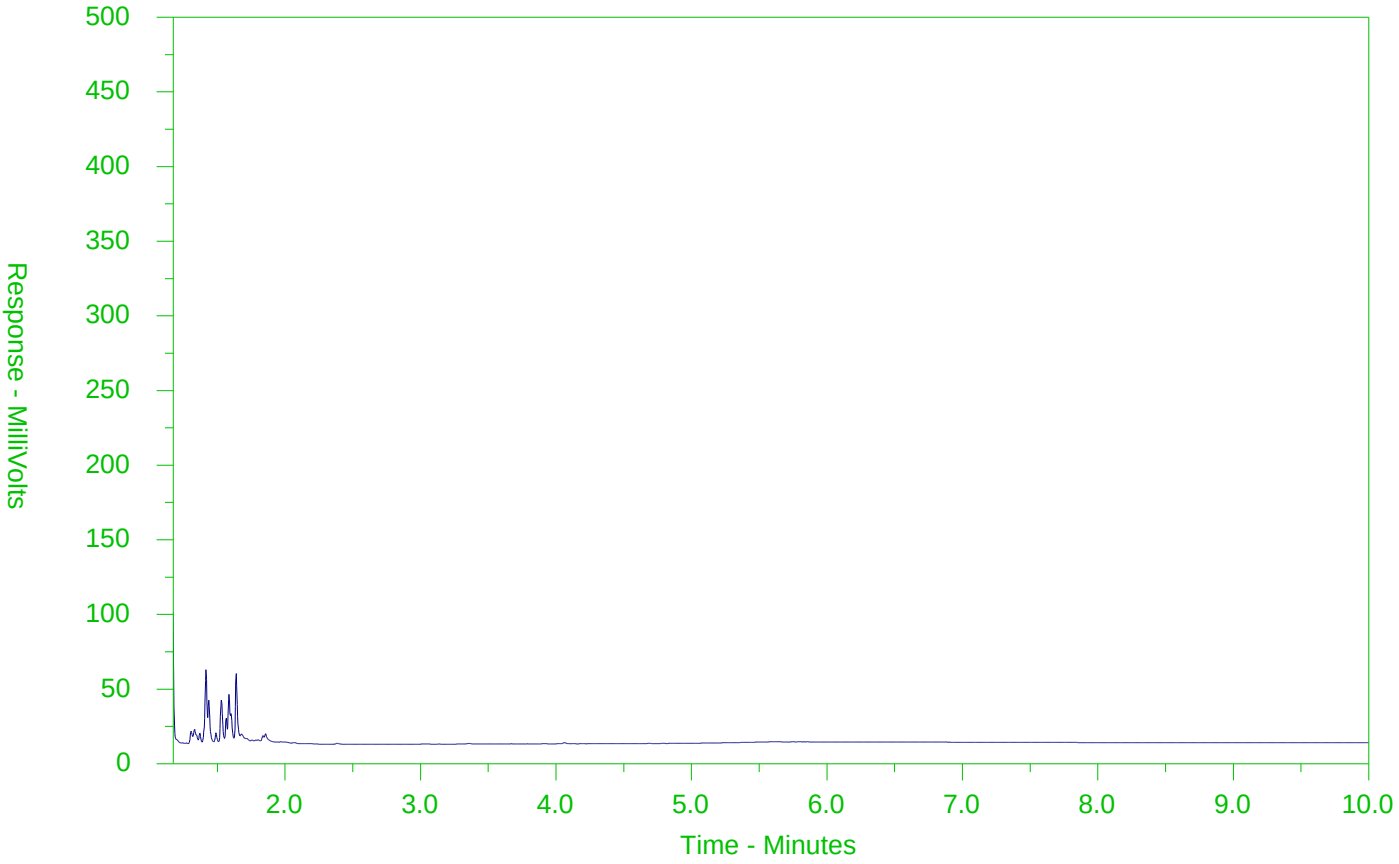
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-16
Client Sample ID: MW28



←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.

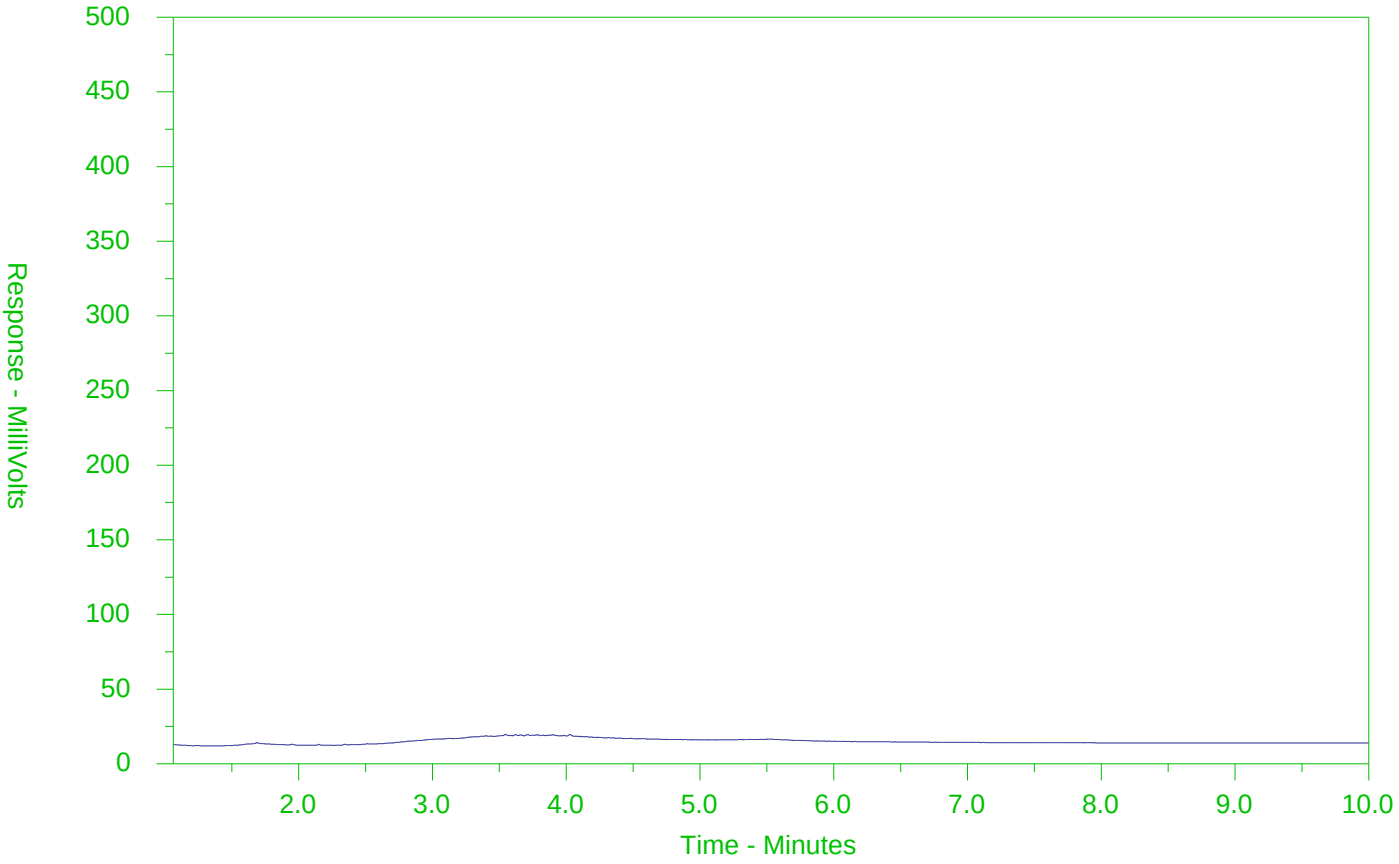
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-17
Client Sample ID: MW30



←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.

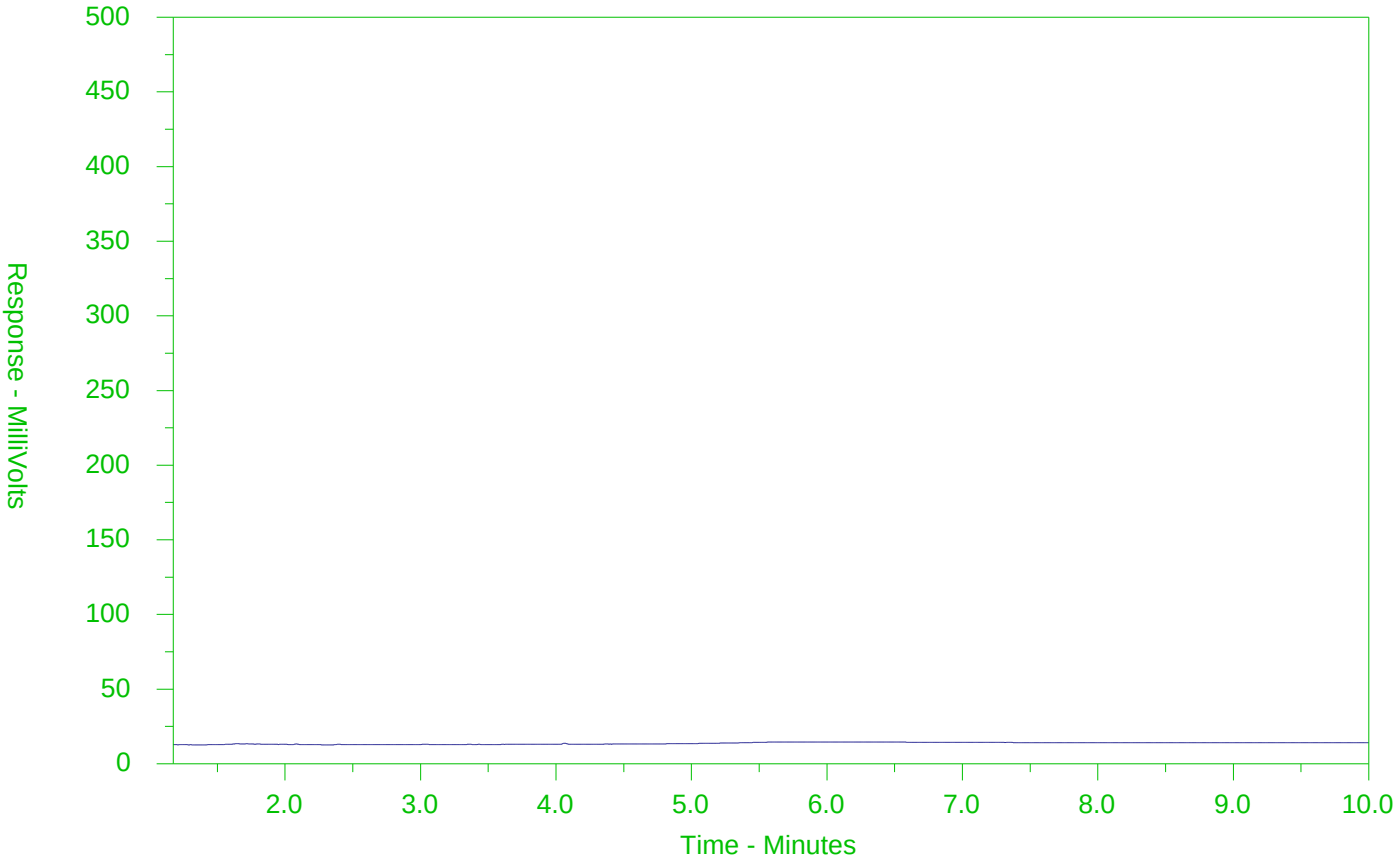
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-18
Client Sample ID: MW32



←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.

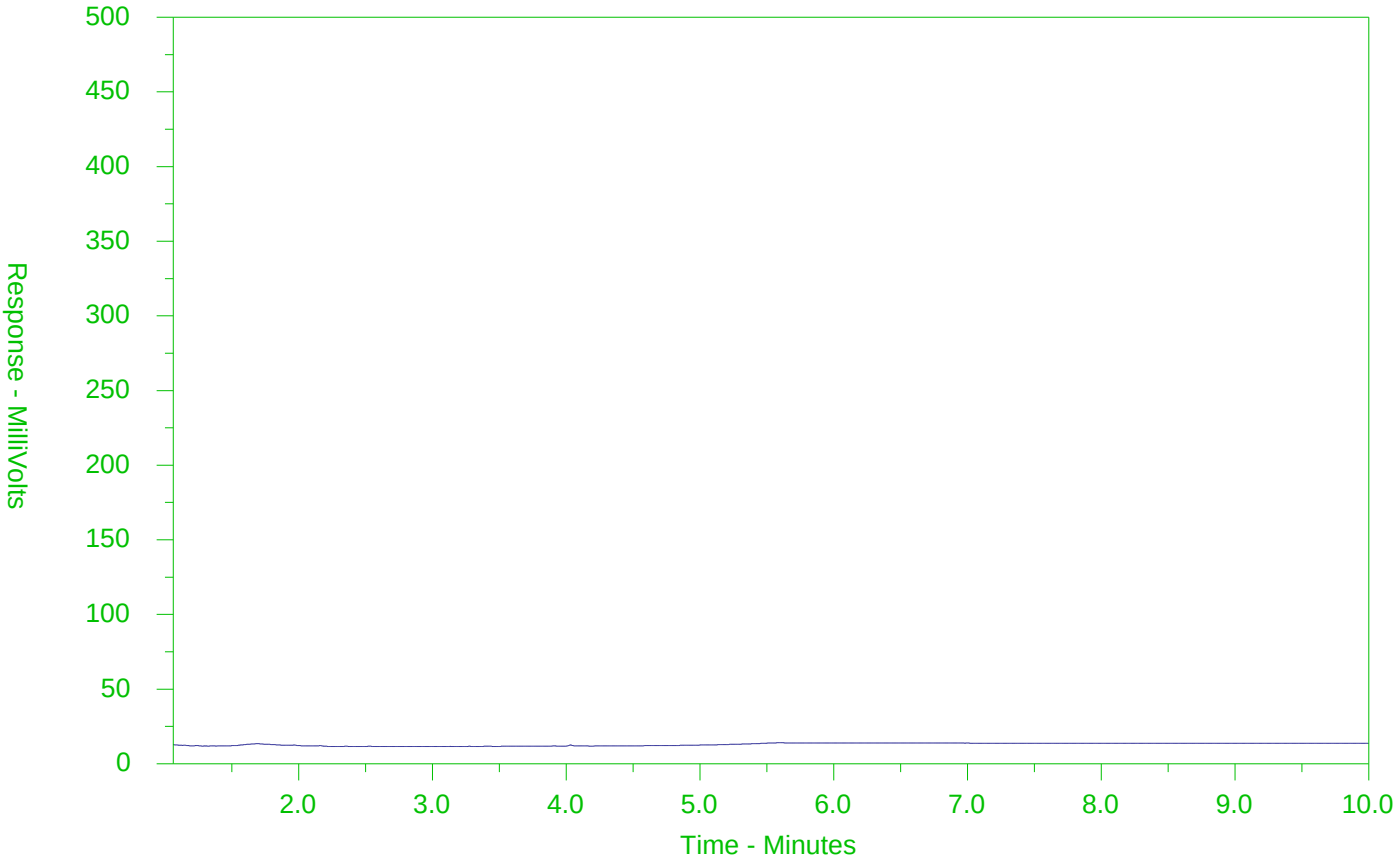
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-19
Client Sample ID: MW27



←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.

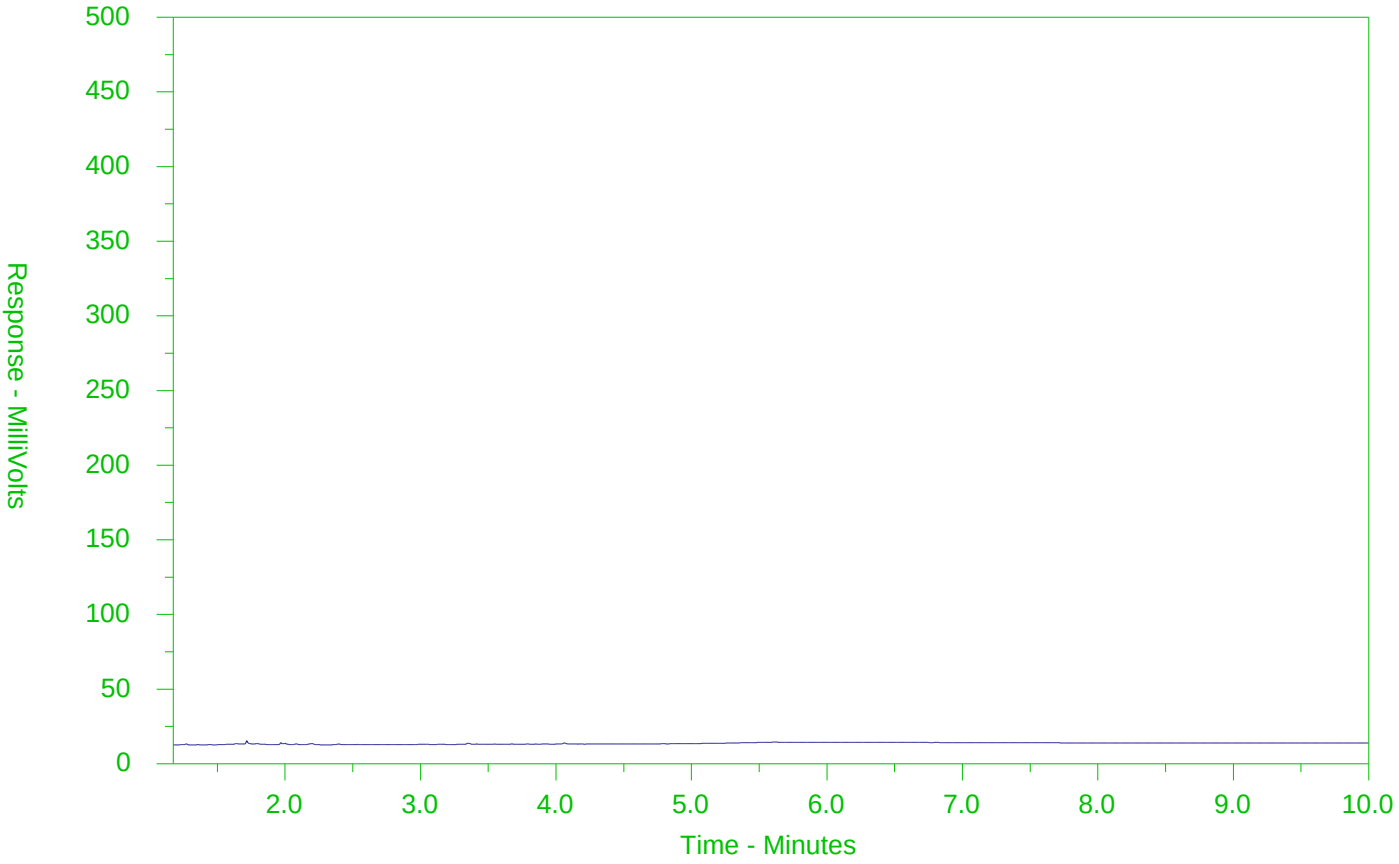
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521410-20
Client Sample ID: DUP 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.

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2521410-COFC

COC Number: 17 - 794404

Page 1 of 2

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:	JTEC	Select Report Format: [X] PDF [X] EXCEL [ ] EDD (DIGITAL)	Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply
Contact:	MARK JEFFREY	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:		[ ] Compare Results to Criteria on Report - provide details below if box checked	EMERGENCY: 1 Business day [E - 100%] [ ]; Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] [ ]
Company address below will appear on the final report		Select Distribution: [X] EMAIL [ ] MAIL [ ] FAX	Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm
Street:		Email 1 or Fax mjeffrey@	For tests that can not be performed according to the service level selected, you will be contacted.
City/Province:		Email 2 jdwell@	
Postal Code:		Email 3	

Invoice To		Invoice Distribution
	Same as Report To [X] YES [ ] NO	Select Invoice Distribution: [ ] EMAIL [ ] MAIL [ ] FAX
	Copy of Invoice with Report [ ] YES [ ] NO	
Company:		Email 1 or Fax
Contact:		Email 2

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#
Job #:	1227	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	

ALS Lab Work Order # (lab use only): L2521410

ALS Contact: G.B. Sampler: J.DWELL

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: PHC F1-F4	BTEX	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	MW 3	26-10-20	AM	WATER	4	X	X		
	MW 4					X	X		
	MW 5					X	X		
	MW 9					X	X		
	MW 10					X	X		
	MW 11					X	X		
	MW12					X	X		
	MW 13					X	X		
	MW 14					X	X		
	MW 16					X	X		
	MW 17					X	X		
	MW 19					X	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 [X] NO	
Are samples for human consumption/ use? [ ] YES [X] NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ] SIF Observations Yes [ ] No [ ]

Ice Packs [ ] Ice Cubes [X] Custody seal intact Yes [ ] No [ ]

Cooling Initiated [ ]

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				9.3			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
	OCT. 26/20	1:20				SY	Oct 26	1:25pm

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**.

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2521410-COFC

COC Number: 17 - 794402

Page 2 of 2

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:	JDE	Select Report Format: [X] PDF [X] EXCEL [ ] EDD (DIGITAL)	Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply
Contact:	MARK JEFFREY	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:		[ ] Compare Results to Criteria on Report - provide details below if box checked	EMERGENCY: 1 Business day [E - 100%] [ ]; Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] [ ]
	Company address below will appear on the final report	Select Distribution: [X] EMAIL [ ] MAIL [ ] FAX	Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm
Street:		Email 1 or Fax mjeffrey@	For tests that can not be performed according to the service level selected, you will be contacted.
City/Province:		Email 2 jdivell@	
Postal Code:		Email 3	

Invoice To		Invoice Distribution	
	Same as Report To [X] YES [ ] NO	Select Invoice Distribution: [ ] EMAIL [ ] MAIL [ ] FAX	
	Copy of Invoice with Report [ ] YES [ ] NO		
Company:		Email 1 or Fax	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:		AFE/Cost Center:	PO#
Job #:	1227	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):	L2521410	ALS Contact: C.B.	Sampler: J. Divell

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	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below: PHC F1-F4	BTEX	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	MW 23	26-10-20	AM	WATER	4	X	X		
	MW 25					X	X		
	MW 26					X	X		
	MW 28					X	X		
	MW 30					X	X		
	MW 32					X	X		
	MW 27					X	X		
	Dup 1					X	X		
	TB				2		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 [X] NO	
Are samples for human consumption/ use? [ ] YES [X] NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ] SIF Observations Yes [ ] No [ ]

Ice Packs [ ] Ice Cubes [X] Custody seal intact Yes [ ] No [ ]

Cooling Initiated [ ]

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				9.3			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
	Oct. 26/20	120				SY	Oct 26	1:25 pm

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**.

JEFFREY ENVIRONMENTAL
ATTN: MARK JEFFREY
616 BLUENOSE COURT
WATERLOO ON N2K 4C5

Date Received: 26-OCT-20
Report Date: 30-OCT-20 15:16 (MT)
Version: FINAL

Client Phone: 519-747-3570

Certificate of Analysis

Lab Work Order #: L2521417

Project P.O. #: NOT SUBMITTED
Job Reference: 1227
C of C Numbers: 17-868598
Legal Site Desc:

Gayle Braun
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2521417-1 PW1 Sampled By: J.DIVELL on 26-OCT-20 @ 12:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50		0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50		0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30		0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40		0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	94.4		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	100.3		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270051
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270051
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270051
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270051
Surrogate: 2-Bromobenzotrifluoride	90.4		60-140	%	27-OCT-20	28-OCT-20	R5270051
Surrogate: 3,4-Dichlorotoluene	72.0		60-140	%		29-OCT-20	R5270712
L2521417-2 PW2 Sampled By: J.DIVELL on 26-OCT-20 @ 12:00 Matrix: WATER							
Volatile Organic Compounds							
Benzene	<0.50		0.50	ug/L		29-OCT-20	R5270712
Ethylbenzene	<0.50		0.50	ug/L		29-OCT-20	R5270712
Toluene	<0.50		0.50	ug/L		29-OCT-20	R5270712
o-Xylene	<0.30		0.30	ug/L		29-OCT-20	R5270712
m+p-Xylenes	<0.40		0.40	ug/L		29-OCT-20	R5270712
Xylenes (Total)	<0.50		0.50	ug/L		29-OCT-20	
Surrogate: 4-Bromofluorobenzene	95.0		70-130	%		29-OCT-20	R5270712
Surrogate: 1,4-Difluorobenzene	100.6		70-130	%		29-OCT-20	R5270712
Hydrocarbons							
F1 (C6-C10)	<25		25	ug/L		29-OCT-20	R5270712
F1-BTEX	<25		25	ug/L		29-OCT-20	
F2 (C10-C16)	<100		100	ug/L	27-OCT-20	28-OCT-20	R5270051
F3 (C16-C34)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270051
F4 (C34-C50)	<250		250	ug/L	27-OCT-20	28-OCT-20	R5270051
Total Hydrocarbons (C6-C50)	<370		370	ug/L		29-OCT-20	
Chrom. to baseline at nC50	YES				27-OCT-20	28-OCT-20	R5270051
Surrogate: 2-Bromobenzotrifluoride	88.8		60-140	%	27-OCT-20	28-OCT-20	R5270051
Surrogate: 3,4-Dichlorotoluene	76.4		60-140	%		29-OCT-20	R5270712

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
BTX-511-HS-WT	Water	BTEX by Headspace	SW846 8260 (511)

BTX is determined by analyzing by headspace-GC/MS.

F1-F4-511-CALC-WT	Water	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Water	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS

Fraction F1 is determined by analyzing by headspace-GC/FID.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F2-F4-511-WT	Water	F2-F4-O.Reg 153/04 (July 2011)	EPA 3511/CCME Tier 1

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.

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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

XYLENES-SUM-CALC-WT	Water	Sum of Xylene Isomer Concentrations	CALCULATION

Total xylenes represents the sum of o-xylene and m&p-xylene.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

17-868598

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Workorder: L2521417 Report Date: 30-OCT-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTX-511-HS-WT	**Water**							
Batch R5270712								
WG3433665-4 DUP		**WG3433665-3**						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-OCT-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-OCT-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	29-OCT-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	29-OCT-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-OCT-20
WG3433665-1 LCS								
Benzene			98.0		%		70-130	28-OCT-20
Ethylbenzene			94.9		%		70-130	28-OCT-20
m+p-Xylenes			93.4		%		70-130	28-OCT-20
o-Xylene			93.6		%		70-130	28-OCT-20
Toluene			94.6		%		70-130	28-OCT-20
WG3433665-2 MB								
Benzene			<0.50		ug/L		0.5	29-OCT-20
Ethylbenzene			<0.50		ug/L		0.5	29-OCT-20
m+p-Xylenes			<0.40		ug/L		0.4	29-OCT-20
o-Xylene			<0.30		ug/L		0.3	29-OCT-20
Toluene			<0.50		ug/L		0.5	29-OCT-20
Surrogate: 1,4-Difluorobenzene			98.5		%		70-130	29-OCT-20
Surrogate: 4-Bromofluorobenzene			95.8		%		70-130	29-OCT-20
WG3433665-5 MS		**WG3433665-3**						
Benzene			99.4		%		50-140	29-OCT-20
Ethylbenzene			93.3		%		50-140	29-OCT-20
m+p-Xylenes			92.1		%		50-140	29-OCT-20
o-Xylene			92.1		%		50-140	29-OCT-20
Toluene			94.3		%		50-140	29-OCT-20
F1-HS-511-WT	**Water**							
Batch R5270712								
WG3433665-4 DUP		**WG3433665-3**						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	29-OCT-20
WG3433665-1 LCS								
F1 (C6-C10)			95.7		%		80-120	28-OCT-20
WG3433665-2 MB								
F1 (C6-C10)			<25		ug/L		25	29-OCT-20
Surrogate: 3,4-Dichlorotoluene			85.9		%		60-140	29-OCT-20
WG3433665-5 MS		**WG3433665-3**						

Quality Control Report

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT	**Water**							
Batch R5270712								
WG3433665-5 MS		**WG3433665-3**						
F1 (C6-C10)			89.8		%		60-140	29-OCT-20
F2-F4-511-WT	**Water**							
Batch R5270051								
WG3432738-2 LCS								
F2 (C10-C16)			96.0		%		70-130	28-OCT-20
F3 (C16-C34)			103.9		%		70-130	28-OCT-20
F4 (C34-C50)			99.4		%		70-130	28-OCT-20
WG3432738-1 MB								
F2 (C10-C16)			<100		ug/L		100	28-OCT-20
F3 (C16-C34)			<250		ug/L		250	28-OCT-20
F4 (C34-C50)			<250		ug/L		250	28-OCT-20
Surrogate: 2-Bromobenzotrifluoride			88.0		%		60-140	28-OCT-20

Quality Control Report

Workorder: L2521417 Report Date: 30-OCT-20

Client: JEFFREY ENVIRONMENTAL
616 BLUENOSE COURT
WATERLOO ON N2K 4C5
Contact: MARK JEFFREY

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

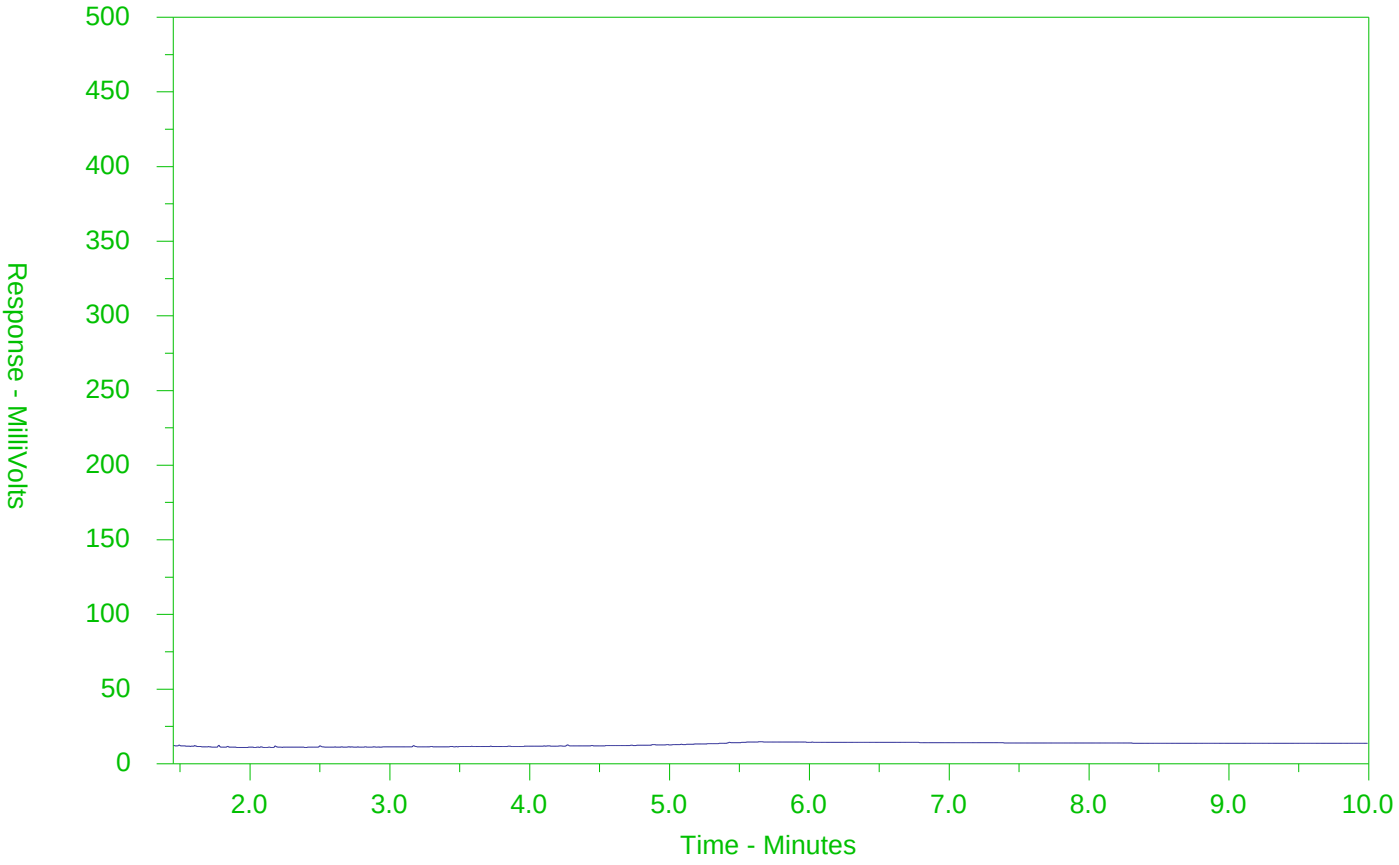
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: L2521417-1
Client Sample ID: PW1



←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.

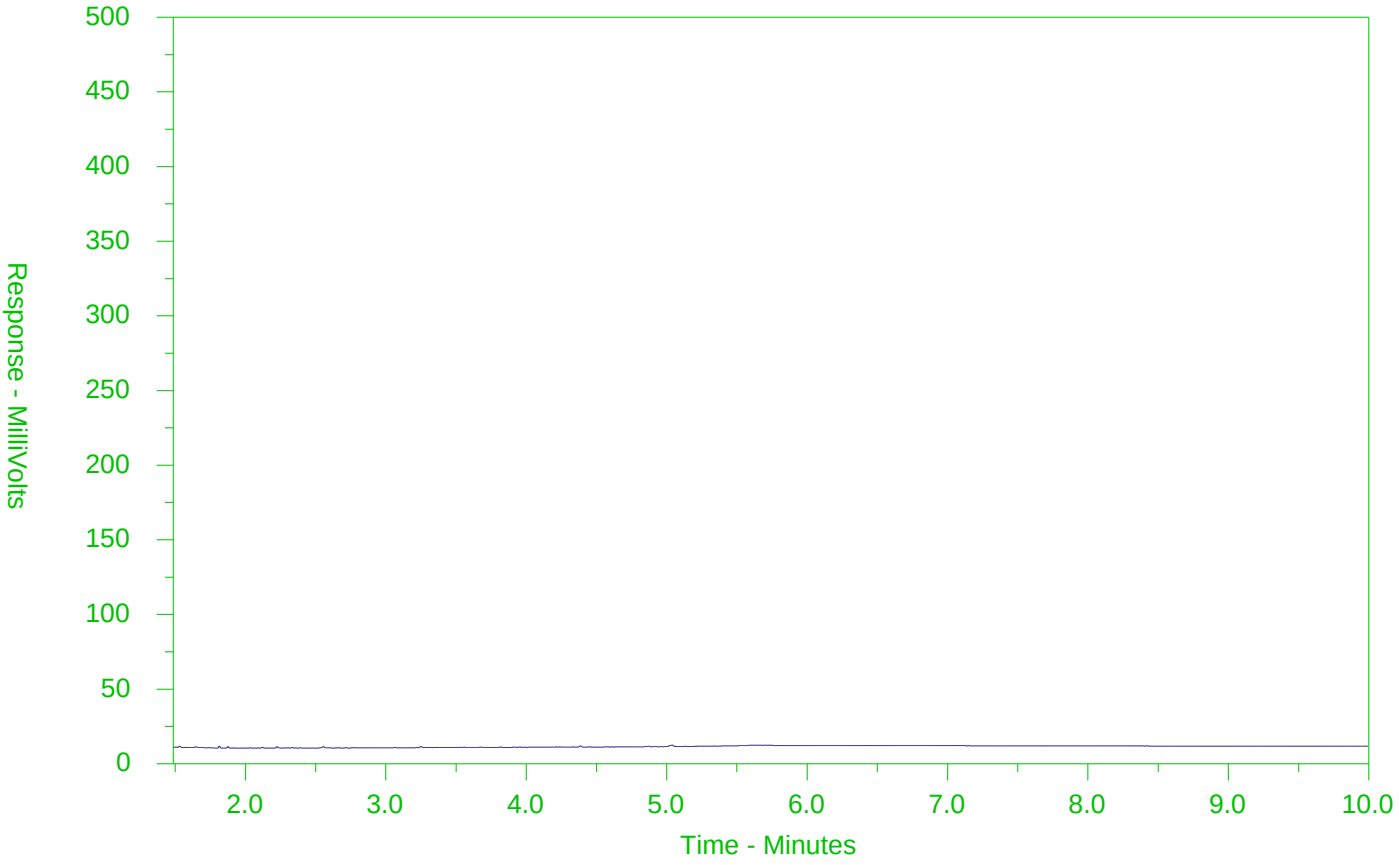
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2521417-2
Client Sample ID: PW2



←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

L2521417-COFC

COC Number: 17 - 868598

Page 1 of 1

Report To	Contact and company name below will appear on the final report
Company:	Tice
Contact:	MARK JEFFREY
Phone:	
	Company address below will appear on the final report
Street:	
City/Province:	
Postal Code:	

Report Format / Dis	
Select Report Format:	[X] PDF [X] EXCEL [ ] EDD (DIGITAL)
Quality Control (QC) Report with Report	[X] YES [ ] NO
[ ] Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	[X] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	Mjeffrey@
Email 2	jdivell@
Email 3	

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] [X] Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] [ ] | 3 day [P3-25%] [ ] | 2 day [P2-50%] [ ]

EMERGENCY: 1 Business day [E - 100%] [ ] | Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] [ ]

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Invoice To	Same as Report To [X] YES [ ] NO
	Copy of Invoice with Report [ ] YES [ ] NO
Company:	
Contact:	

Invoice Distribution	
Select Invoice Distribution:	[ ] EMAIL [ ] MAIL [ ] FAX
Email 1 or Fax	
Email 2	

Project Information	
ALS Account # / Quote #:	
Job #:	1227
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): L2521417

ALS Contact: G.B. Sampler: J. DIVELL

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 F1-F4	BTEX	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	PW 1	26/10/20	PM	WATER	4	X	X		
	PW 2	"	"	"	4	X	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? [X] YES [ ] NO	
Are samples for human consumption/ use? [X] YES [ ] NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen [ ] SIF Observations Yes [ ] No [ ]

Ice Packs [ ] Ice Cubes [X] Custody seal intact Yes [ ] No [ ]

Cooling Initiated [ ]

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				4.1			

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
	Oct. 26/20	1200					10/26/20	1375

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

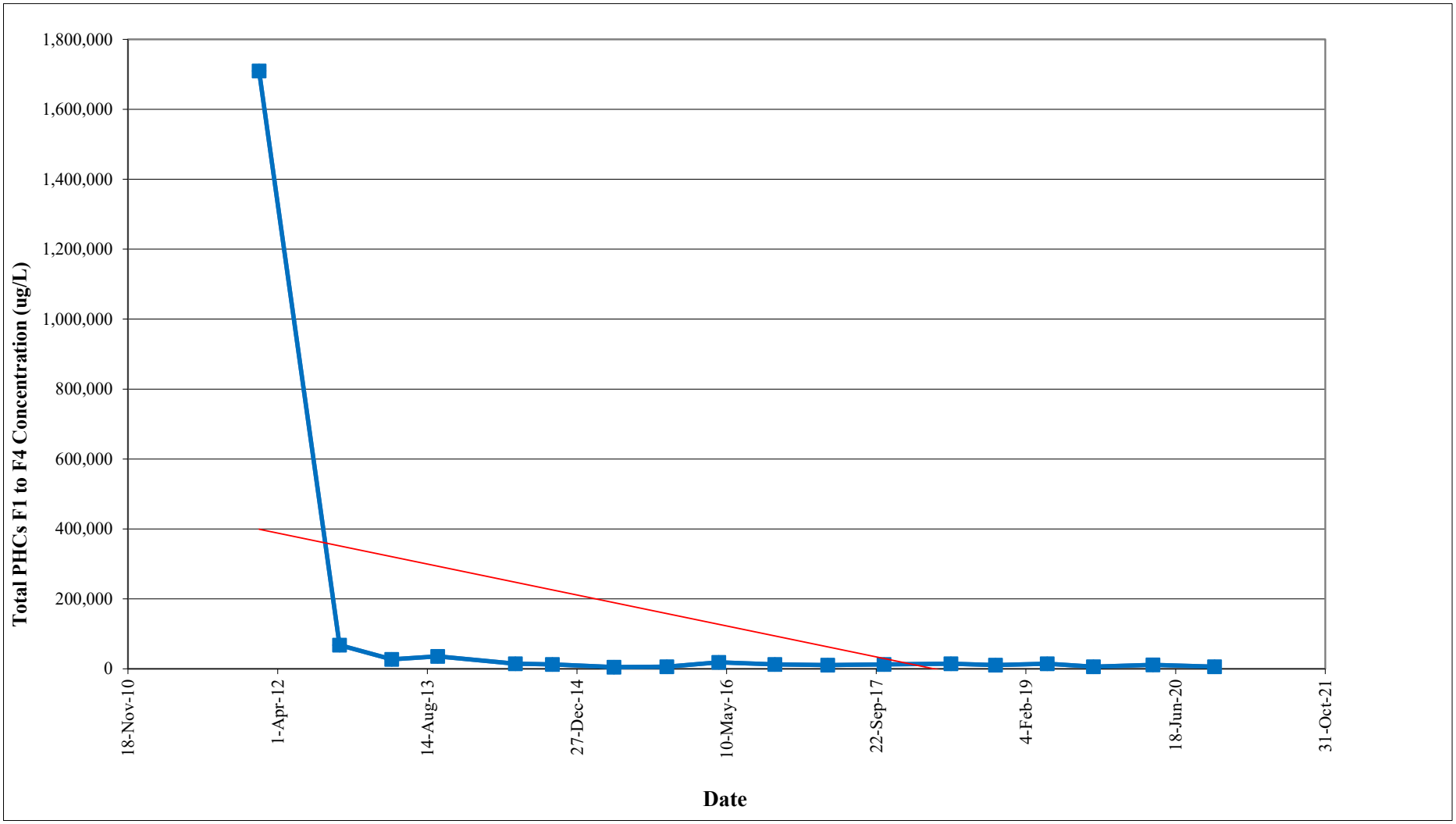
WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JUNE 2018 FRONT

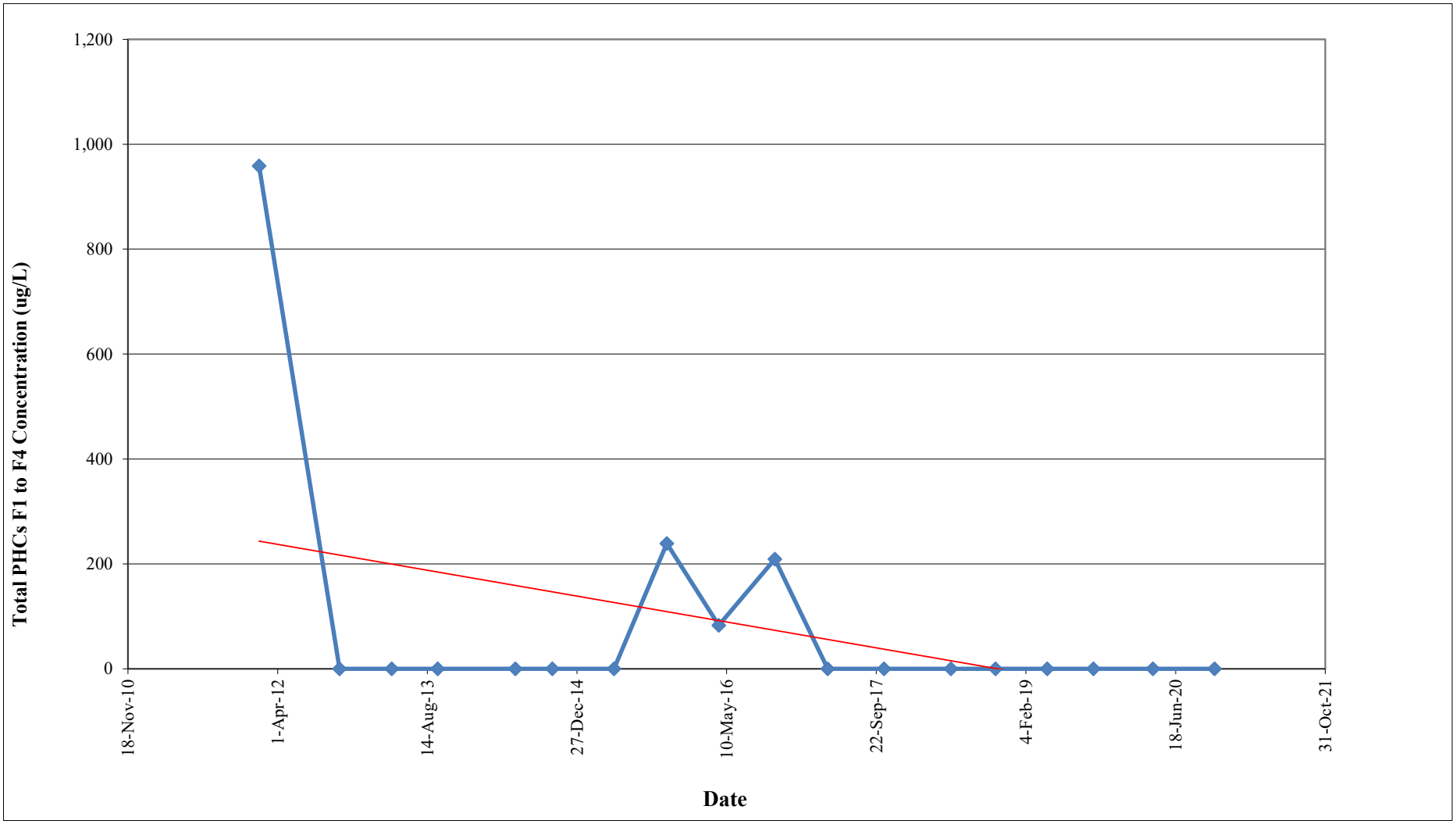
1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

APPENDIX B

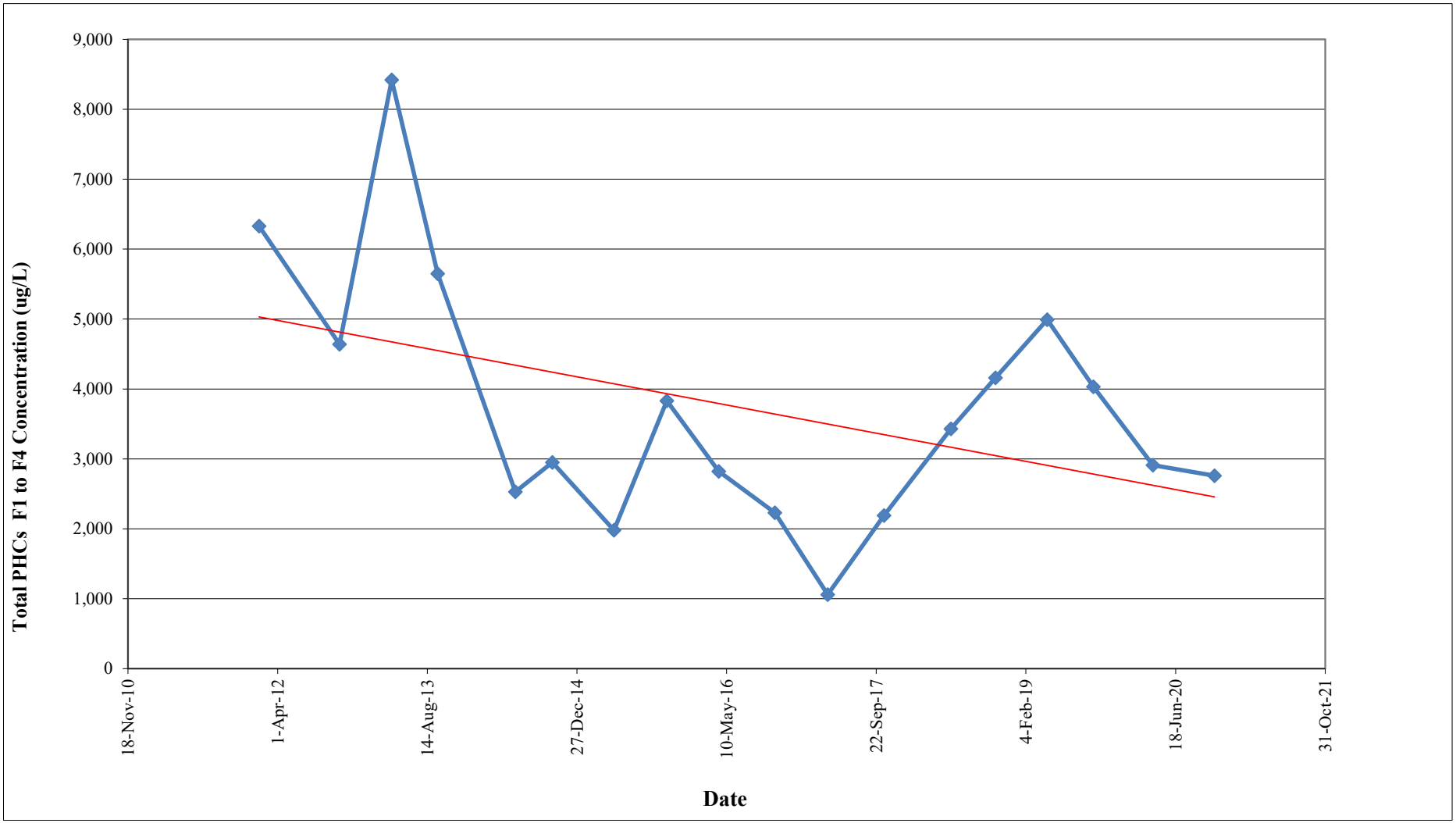
CONCENTRATION TREND GRAPHS



TOTAL PETROLEUM HYDROCARBONS CONCENTRATION TRENDS - MW-16
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO



TOTAL PETROLEUM HYDROCARBONS CONCENTRATION TRENDS - MW-17
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO



TOTAL PETROLEUM HYDROCARBONS CONCENTRATION TRENDS - MW-28
2020 ANNUAL GROUNDWATER MONITORING REPORT
76 HURON STREET
RIPLEY, ONTARIO