HENRY INVESTMENTS
14072375 Canada Inc.

Phase II Environmental Site Assessment
73-79, 83 Ste-Cecile,
Vanier, Ontario

CM3 Project SDC1009

December 20, 2022

CM3 Environmental Inc.
5710 Akins Road Ottawa, Ontario K2S 1B8

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1 INTRODUCTION

CM3 Environmental (CM3) was retained by 14072375 Canada Inc. operating as Henry Investments to conduct a Phase II Environmental Site Assessment (ESA) at 73-79, 83 Ste-Cecile St. Ottawa, Ontario (sites or subject properties). The Phase II ESA was completed to assess the presence of potential contamination as a result of historic and current land use at the site and surrounding properties. The Phase II ESA was undertaken in support of a Site Control Plan Application, and not in support of the filing of a Record of Site Condition (RSC).

1.1 Site Location

The civic addresses for the subject properties are 73-79, 83 Ste-Cecile St. Ottawa, Ontario. The subject properties are in the City of Ottawa and the current site land use designation is Residential Fourth Density Zone R4UA and are currently used for residential purposes. The location of the properties are provided on **Figure 1**.

1.2 Site Description

The subject properties comprised the three civic addresses 73, 79 and 83 Ste-Cecile Street, Ottawa, Ontario. The subject properties are rectangular in shape and bounded by the Ste-Cecile Street to the south, residential properties on Marquette Avenue to the north, and residential properties to the east and west. The total area of the subject properties is approximately 1,112 square metres (0.1 hectares). Buildings at the properties included a south-facing residential building on each lot. 73 and 83 Ste-Cecile were bungalow style single residence buildings. 79 Ste-Cecile was a two-storey multi unit-residential building. There were small sheds in the back yards of 73 and 83 Ste-Cecile.

The area between Ste-Cecile and the residentials building was a concrete sidewalk with grass up to the buildings. Some landscaping and flower gardens were present next to the south wall of the building. A gravel laneway was present on the east side of 73 Ste-Cecile. An asphalt laneway was present on the east of both 79 Ste-Cecile and 83 Ste-Cecile. The 73 property was enclosed by a chain link fence to the north, west and shared the fence with the 79 property to the east. The 79 property was fenced into the north and shared a vinyl fence with the 83 property to the east. Most of the yards to the north were grass covered. All other ground coverings on the remainder of the properties consisted of grass or various types of vegetation.

A site plan is provided as **Figure 2.**

1.3 Historic and Current Site Use

The subject properties and the current and former residential buildings on-site appear to have been developed before 1958, (civic address 79 Ste-Cecile is listed as 1940 construction), and it is suspected that the current and former on-site residential buildings are the first developed use. Prior to development, the subject properties and surrounding areas are assumed to have been agricultural or natural lands.

2 APPLICABLE SITE CONDITION STANDARDS

The analytical results were compared to the Ontario Ministry of Environment, Conservation and Parks Ontario Regulation (O.Reg.) 153/04 “Soil, Ground Water and Sediment standards for Use Under Part XV.1 of the Environmental Protection Act”, dated April 15, 2011. The following site conditions were used in the selection of the appropriate MECP site condition standards (SCS) to assess the soil analytical results:

- The property is more than 30 meters from a body of water;
- Bedrock is more than 2 meters from grade;
- The site and surrounding land use is considered to be residential;
- Water is supplied from a municipal source; and,
- Soils at the site are considered coarse textured.

The MECP Table 5: Stratified Site Condition Standards in a Non-Potable Ground Water Condition for residential property use and coarse textured soils were used for the evaluation of the analytical results, based on the above.

3 BACKGROUND

3.1 Physical Setting

3.1.1 Topography and Drainage

The subject properties are in a flat low-lying area of a small valley that slopes up in all directions with an elevation of approximately 56 m above sea level (m asl). The properties are in an area that was a relatively flat lying small, elongated valley with a slope to the west-north-west and south-east. The Rideau River was approximately 800 m to the south-west of the site. The Ottawa River was approximately two kilometers to the west.

Surface drainage at the subject properties is likely controlled by the surface coverings (asphalt, gravel, grass) and site grading. There were no drainage ditches surrounding the subject properties, and it is likely that the majority of surface drainage is by overland flow to the lower properties to the south. One storm and one sanitary manhole were observed on Ste-Cecile Street on the north side of the street. GeoOttawa indicates that both the storm and sanitary drains are sloped to the west-north-west.

3.1.2 Geology and Hydrogeology

The surficial geology of the area was described as offshore marine deposits of clay and silt. The bedrock geology of the area was described as limestone, dolostone, shale, arkose, and sandstone of the Ottawa Group, Simcoe Group, and Shadow Lake Formation.

The inferred regional groundwater flow direction was south-west towards the Rideau River.

3.2 Previous Environmental Investigations

CM3 reviewed the following report(s) in advance of the Phase II ESA:

- CM3 Environmental Inc. December 16, 2022. Phase I Environmental Site Assessment 73-79, 83 Ste-Cecile, Ottawa, Ontario. CM3 Project SDC1009.

The CM3 Phase I ESA identified one on-site potentially contaminating activities (PCAs). One potentially contaminating activity was identified on an adjacent property or within the Phase I study area. Two areas of potential environmental concern (APECs) were identified based on the evaluation of the PCAs. The APECs and contaminants of concern (COCs) are summarized in the following table.

Areas of Potential Environmental Concern			
APEC	**Location**	**Cause of Concern**	**COCs**
1	Subject property.	PCA 1 – Importation of fill material of unknown quality.	VOCs, PHCs F1-F4 fractions, metals, PAHs
2	South-west of the subject site at 72 Ste-Cecile St.	PCA 2 – Former metal fabrication.	VOCs, metals

PAHs Polycyclic aromatic hydrocarbons
VOCs Volatile organic compounds
PHCs F1-F4 Petroleum hydrocarbons F1 to F4 fractions

The findings of the Phase I ESA identified two areas of potential environmental concern on the subject properties due to historic and current land use at the site. APECs are shown on **Figure 3**. The contaminants of concern were identified as VOCs, PHCs F1-F4 fractions, PAHs and metals, and potentially contaminated media included soil and groundwater. CM3 concluded that the PCAs and APECs could result in adverse environmental conditions at the subject property and a Phase II ESA was required to characterize soil and groundwater conditions and assess the presence of contamination at the APECs.

4 SCOPE OF THE INVESTIGATION

CM3 completed the Phase II ESA following the requirements of the Canadian Standards Association (CSA) Standard Z769-00 (R2008) and in general accordance with Ontario Regulation (O. Reg.) 153/04. The objective of the Phase II ESA was to determine the presence of soil and/or groundwater contamination at the APECs. The scope of work included:

- The advancement of three overburden boreholes at APECs 1 and 2, completed as monitoring wells in areas cleared of utilities;
- The collection of soil samples during the borehole drilling for logging of the soil conditions, field screening and possible laboratory analysis of contaminants of concern;
- The submission of one soil sample from each borehole location for laboratory analysis of VOCs, PHCs F1-F4 fractions, PAHs and metals;
- The measurement of the depth to liquid phase hydrocarbons (LPH) and groundwater in all monitoring wells;
- The collection of groundwater samples from all monitoring wells for laboratory analysis of VOCs, PHCs F1-F4 fractions, PAHs and metals; and
- A survey of all new borehole/monitoring well locations, including ground surface and well top of pipe elevations.

The delineation of impacts (i.e., concentrations above applicable SCS), if present, was not included in the scope of work.

5 INVESTIGATION METHODOLOGY

5.1 General

The soil investigation was completed on November 25, 2022 and included the advancement of three boreholes. Monitoring wells were installed at three borehole locations and groundwater sampling was completed on December 5, 2022.

5.2 Drilling

5.2.1 Borehole Drilling

A total of three boreholes were advanced under supervision of CM3 personnel and Yuri Mendez Engineering, who was also on site to carry out a geotechnical soil investigation. All boreholes were used to investigate the fill at the site to the native soil. Borehole MW1 was advanced to address the APEC 2 for to the metal manufacturing facility historically located at 72 Ste-Cecile. Boreholes MW1 to MW3 were advanced to address the APEC 1 in regard to fill of unknown quality.

Boreholes were advanced to a maximum depth of 7.6 meters below grade (m bg) using a truck mounted CME drill rig using hollow stem augers and split spoon samplers.

Soil samples were logged at the time of drilling and were split for combustible vapour analysis and possible laboratory analysis, as described in the following section. The sampling equipment was washed and rinsed between each sample interval and borehole location to prevent cross-contamination.

5.3 Soil Sampling

Soil samples collected as part of the ESA were logged at the time of recovery for grain size, colour, moisture content, and visual or olfactory evidence of contamination. Each soil sample was placed into a polyethylene bag for field screening. Samples for laboratory analysis were placed into the appropriate laboratory supplied sample containers following MECP protocols for the requested analyses and were stored in an iced chilled cooler pending submission to the laboratory. The bagged samples were used for field screening of relative combustible vapours.

5.4 Field Soil Vapour Screening

The bagged soil samples were allowed to equilibrate to ambient temperature prior to combustible vapour measurements. The vapour concentrations were measured and recorded from the bag sample headspace using an RKI Eagle combustible vapour meter calibrated to hexane and operated in methane elimination mode. The intake probe of the vapour meter was inserted into the plastic bag and the highest vapour reading from each sample was recorded in parts per million (ppm). A minimum of one soil sample from each borehole location was selected for laboratory analysis based on field observations and the results of the field screening.

5.5 Ground Water Monitoring Well Installation

Boreholes MW1, MW2 and MW3 were completed as monitoring wells. Monitoring well construction consisted of 32 mm or 50 mm outside diameter, flush-threaded schedule 40 PVC well screens and risers. At each borehole, a 10-slot well screen was placed to intercept the water table to allow for the detection of LPH. A silica sand pack was placed around the outside of the well screen in the annular space of the borehole, to a minimum of 0.3 m above the screened interval. A bentonite seal was placed above the sand pack to approximately 0.3 m bg. All monitoring wells were capped with lockable j-plugs and finished at below grade in flush-mounted manhole protective casings set in gravel, asphalt or grass.

5.6 Groundwater Sampling

5.6.1 LPH and Water Level Measurement

CM3 measured the depth to LPH and groundwater in all monitoring wells on December 5, 2022 using a Solinst® electronic oil/water interface meter. The depth to LPH (if present) and water were measured the nearest millimetre from the highest point of the well riser. The interface probe was cleaned and rinsed with distilled water between each well to prevent cross contamination.

5.6.2 Sample Collection

Groundwater samples were collected from monitoring wells MW1, MW2 and MW3 on December 5, 2022. Prior to sampling, each well was purged to remove stagnant water from within the well bore and surrounding annulus to obtain samples that were representative of formation groundwater. Groundwater purging and sampling was conducted using dedicated high density polyethylene tubing installed at each well and a peristaltic pump. Water samples were collected into the appropriate laboratory supplied sample containers for the requested analyses, following MECP sampling protocols.

5.7 Analytical Testing

Soil and groundwater samples selected for analysis were submitted to Paracel Laboratories Limited (Paracel) of Ottawa, Ontario. Samples were submitted on the day of collection for regular turnaround.

A total of three soil and three groundwater samples were submitted to Paracel for analysis of one or more COCs. The analytical testing is summarized in the following table.

Sample ID	VOCs	PHCs F1-F4	PAHs	Metals
Soil MW1 SA7	X	X	X	X
Soil MW2 SA4	X	X	X	X
Soil MW3 SA2	X	X	X	X
Groundwater MW1	X	X	X	X
Groundwater MW2	X	X	X	X
Groundwater MW3	X	X	X	X

5.8 Elevation Surveying

The locations of all newly installed boreholes/monitoring wells were referenced to existing site buildings and structures. The ground surface and monitoring well top of pipe elevations were referenced to an arbitrary site benchmark (top of fire hydrant at southeast corner of the property) of 100 m above reference level (m arl) using a TopCon AT-B4 automatic level. The site survey included all monitoring wells installed during the site investigation and major site features or structures. The ground surface and top of pipe elevations are included in on the borehole logs, **Appendix A**.

6 REVIEW AND EVALUATION

6.1 Geology

The site stratigraphy was determined based on the borehole drilling. Surface covering consisted of mainly grass with asphalt or gravelled driveways and minor landscaping. The surface coverings were underlain by a silty sand to sand fill to depths up to 6.1 m bg. A peat fill was encountered in MW1 and MW2 to depths up to 5.2 m bg and a second fill layer with dimensional lumber debris was encountered below the peat at depths ranging from 5.8 to 6.2 m bg. A native silty sand to sandy gravel was noted to be present below the deeper fill layer to depths of 6.9 to 7.6 m bg. Bedrock was not encountered during the borehole drilling. The site stratigraphy is provided on the borehole logs, **Appendix A**.

6.2 Ground Water Elevations and Flow Direction

The depth to LPH (if present) and groundwater was measured in all monitoring wells on December 5, 2022. The December 5, 2022 water levels were at a relative elevation of 97.22 m arl to 97.33 m arl, and the average groundwater elevation was 97.26 m arl (2.74 m bg). The depth to LPH and water level measurements are provided in **Table 1**.

The groundwater flow direction was determined to be south-west based on the groundwater data. The groundwater elevations, contours and flow direction are provided on **Figure 5**.

6.3 Soil Field Screening

A total of 18 soil samples were collected from boreholes MW1, MW2 and MW3 for field screening and combustible vapour analysis. The vapour concentrations in borehole MW1 varied at depth and were between 40 ppm to 100 ppm. Vapour concentrations in borehole MW2 were between 35 to 110 ppm and vapour concentrations in MW3 were between 30 to 60 ppm. The borehole locations are provided on **Figure 4** and the vapour concentrations and field observations are included on the borehole logs, **Appendix A**.

6.4 Soil Quality

A total of three soil samples were analysed for one or more of the COCs, including VOCs, PHCs F1-F4 fractions, PAHs and metals. The soil sample analytical results are summarized in **Table 2**. The borehole soil sample locations and soil quality are provided on **Figure 6**. The soil sample laboratory reports are provided in **Appendix B**.

Borehole samples MW1 SA7, MW2 SA4, and MW3 SA2 were analysed for VOCs, PAHs, PHCs F1-F4 fractions and metals.

VOCs and PHCs F1-F4 Fractions

The analytical results showed the presence of one or more PHCs F1-F4 fraction in MW1 SA7 and MW3 SA2. PHCs F1-F4 fractions were not detected in sample MW2 SA4. The concentration of

PHCs F1-F4 fractions detected in samples MW1 SA7 and MW3 SA2 met the Table 5 SCS. VOCs were not detected in any of the analysed samples, meeting the Table 5 SCS.

PAHs

The PAHs fluoranthene, phenanthrene, and pyrene were detected in the soil sample MW2 SA4 at concentrations that comply with the Table 5 SCS. PAHs were not detected in any of the other analysed samples, meeting the MECP Table 5 SCS.

Metals

Metals were detected in all three borehole soil samples MW1 SA7, MW2 SA4 and MW3 SA2 at concentrations that comply with the Table 5 SCS.

6.5 Ground Water Quality

Groundwater samples MW1, MW2 and MW3 were analysed for VOCs, PHCs F1-F4 fractions, PAHs and metals. The groundwater sample analytical results are summarized in **Table 3**. The monitoring well locations and groundwater quality are provided on **Figure 7**. The groundwater sample laboratory reports are provided in **Appendix B**.

VOCs and PHCs F1-F4 Fractions

VOCs and PHCs F1-F4 fractions were not detected in any of the groundwater samples, meeting the MECP Table 5 SCS.

PAHs

PAHs were not detected in samples MW1 and MW3, meeting the MECP Table 5 SCS. Several PAHs were detected in sample MW2 at concentrations that met the MECP Table 5 SCS.

Metals

Several metals were detected in all three samples, at concentrations below the MECP Table 5 SCS.

7 SUMMARY AND CONCLUSIONS

CM3 Environmental was retained by 14072375 Canada Inc. operating as Henry Investments to conduct a Phase II ESA at 73-79, 83 Ste-Cecile St. Ottawa, Ontario. The Phase II ESA was completed to assess the presence of potential contamination as a result of historic and current land use at the site and surrounding properties. The Phase II ESA was undertaken in support of a Site Control Plan Application, and not in support of the filing of a Record of Site Condition (RSC). The Phase II ESA included the advancement of three boreholes (completed as monitoring well) for the collection of soil and groundwater samples, summarized as follows:

Site Characterization

- The soil at the site consisted of sand or peat fill to depths up to 6 m bg overlying a silty sand fill with dimensional lumber debris at 5.8 to 6.9 m bg. Native silty sand to sandy gravel was encountered below the second fill layer to depths ranging from 6.9 to 7.6 m bg.;
- Bedrock was not encountered;
- LPH was not present in any of the monitoring wells;
- the average groundwater elevation was 97.257 m arl (2.74 m bg);

Soil Impacts

- Three soil samples from the boreholes were analysed for VOCs, PHCs F1-F4 fractions, PAHs and metals;
- The results for the above samples were either not detected or were present at concentrations below the Table 5 SCS;

Groundwater Impacts

- Three groundwater samples were analysed for VOCs, PHCs F1-F4 fractions, PAHs and metals;
- The COCs in all analysed samples were either not detected or were present at concentrations below the Table 5 SCS;

The Phase II ESA identified the presence of metals and PHCs in soil at the site at concentrations that met with the MECP Table 5. Metals and PAHs were also present in groundwater, at concentrations that met the applicable SCS. CM3 provides the following conclusions with respect to the APECs.

APEC 1: Unknown Fill Quality

Soil samples from all borehole and all groundwater samples at all locations were used to evaluate the fill quality at the site. The results identified the presence of metals, PHCs and PAHs in at concentrations that were not detectable or well below the Table 5 SCS. VOCs were not detected in soil or groundwater. In general, the concentrations in subsurface soil samples met the MECP Table 5 SCS, suggesting that the fill material is not contaminated or contaminating groundwater.

APEC 2: Former Metal Fabrication Shop

Borehole soil sample MW1 SA7 and groundwater sample MW1 were collected to identify any possible impacts due to the historic presence of a metal fabrication shop located across the street from the subject property. The results identified the presence of metals and PHCs in soil and metal impacts in groundwater that comply with the SCS. Groundwater flow analysis also confirmed that the former metal fabrication facility is downgradient of the subject sites, making the possibility of contamination unlikely.

8 RECOMMENDATIONS

The results of the Phase II ESA did not identify impacts at any of the investigated APECs. No further environmental assessment is recommended, and the existing groundwater monitoring wells should be decommissioned prior to site development, as per Ontario regulation 903.

9 LIMITATIONS

This report has been prepared and the work described in this report has been undertaken by CM3 Environmental Inc. (CM3) for Henry Investments Inc. It is intended for the sole and exclusive use of Henry Investments Inc. and their authorized agents for the purpose(s) set out in this report. Any use of, reliance on, or decision made based on this report by any person other than Henry Investments Inc. for any purpose, or by Henry Investments Inc. for a purpose other than the purpose(s) set out in this report, is the sole responsibility of such person, or Henry Investments Inc. CM3, Henry Investments Inc. make no representation or warranty to any other person with regard to this report and the work referred to in this report and they accept no duty of care to any other person or any liability or responsibility whatsoever for any losses, expense, damages, fines, penalties or other harm that may be suffered or incurred by any other person as a result of the use of, reliance on, any decision made or any action taken based on this report or the work referred to in this report.

Nothing in this report is intended to constitute or provide a legal opinion. In addition, revisions to the regulatory standards referred to in this report may be expected over time. As a result, modifications to the findings, conclusions and recommendations in this report may be necessary.

The work undertaken by CM3 for this report and any conclusions or recommendations made in this report reflect CM3's judgement based on the site conditions observed at the time of the site inspection on the date(s) set out in this report, on information available at the time of preparation of this report, on the interpretation of data collected from the field investigation and on the results of laboratory analyses, which were limited to the quantification in select samples of those substances specifically identified in the report. Unless otherwise stated, the findings cannot be extended to previous or future site conditions, portions of the site which were unavailable for direct investigation, subsurface locations which were not investigated directly, or chemical parameters, materials or analysis which were not addressed. Substances other than those addressed by the investigation described in this report may exist within the site; substances addressed by the investigation may exist in areas of the site not investigated and concentrations of substances addressed which are different than those reported may exist in areas other than the locations from which samples were taken. CM3 expresses no warranty with respect to the accuracy of the analytical results by the laboratory. Actual concentrations of the substances identified in the samples submitted may vary according to the extraction and testing procedures used.

As the evaluation and conclusions reported herein do not preclude the existence of other chemical compounds and/or that variations of conditions within the site may be possible, this report should be used for informational purposes only and should absolutely not be construed as a comprehensive hydrogeological or chemical characterization of the site. If site conditions change or if any additional information becomes available at a future date, modifications to the findings, conclusions and recommendations in this report may be necessary.

Other than by Henry Investments Inc. as set out herein, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without

the express written permission of CM3. Nothing in this report is intended to constitute or provide a legal opinion.

We trust that the above is satisfactory for your purposes at this time. Please feel free to contact the undersigned if you have any questions.

Yours sincerely,

CM3 Environmental Inc.

Prepared by

Spencer Cochrane
Environmental Technician

Reviewed by

Bruce Cochrane, P Geo. EP QP
Principal

FIGURES

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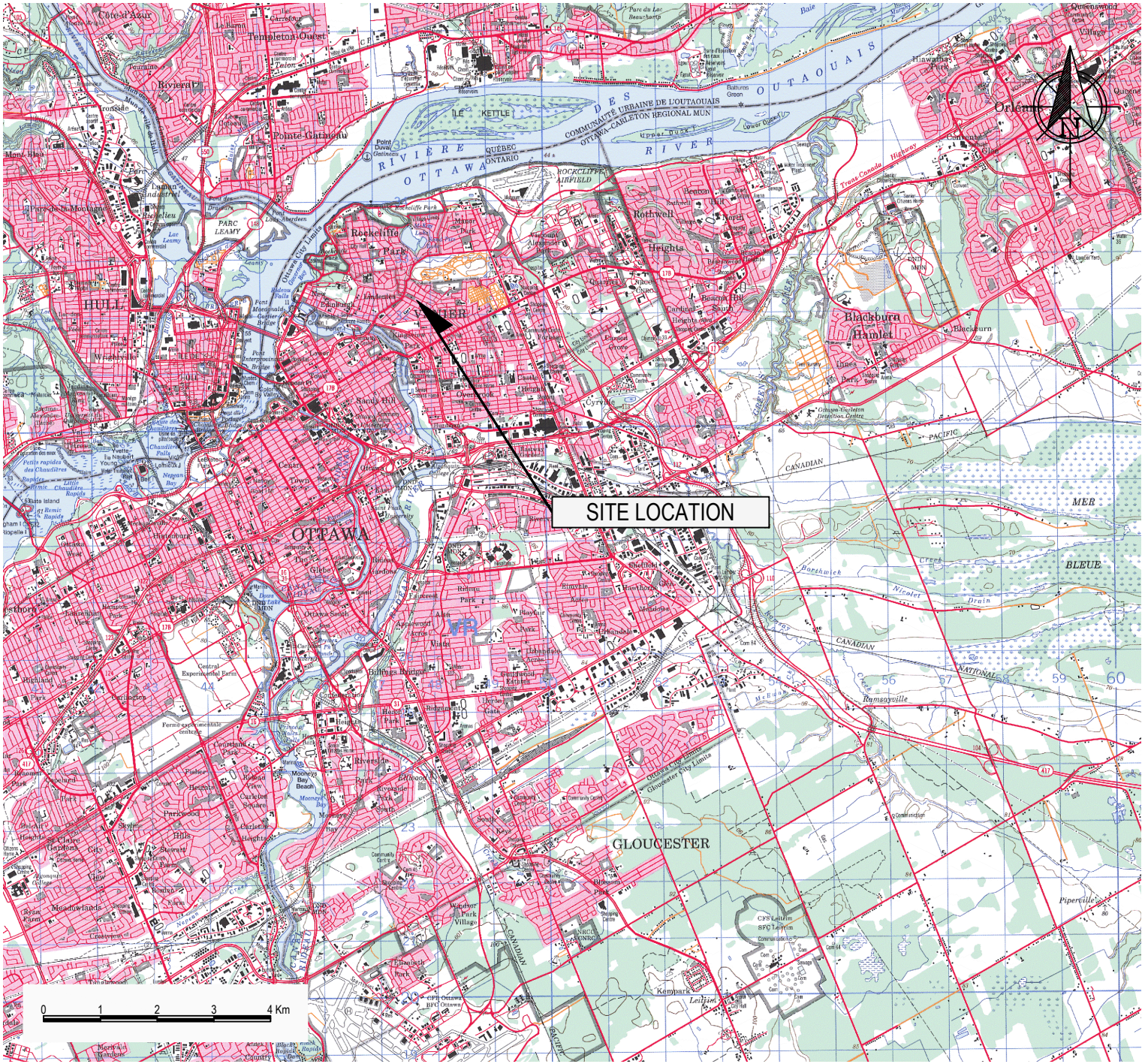
14072375 Canada Inc.

Phase II Environmental Site Assessment

73-79, 83 Ste-Cecile,

Vanier, Ontario SDC1009



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PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

SITE LOCATION

Project:	Drawn By:
SDC1009	SDC
Date:	Reviewed By:
DEC 2022	BDC
Scale:	Figure:
AS SHOWN	1

LEGEND

- PROPERTY BOUNDARY
- SITE
- BUILDING
- GAS — NATURAL GAS
- OH — OVERHEAD ELECTRICAL

Scale 1:250

0 2 4 6 8 m

(Approx. When plotted 11x17)

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PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

SITE PLAN

Project: SDC1009	Drawn By: SDC
Date: DEC 2022	Reviewed By: BDC
Scale: 1:250	Figure: 2

LEGEND

- PROPERTY BOUNDARY
- SITE
- BUILDING
- GAS — NATURAL GAS
- OH — OVERHEAD ELECTRICAL
- 1 — APEC 1 - UNKOWN QUALITY OF IMPORTED FILL 73, 79 AND 83 STE. CECILE ST. (PCA 1)
- APEC 2 - METAL FABRICATION OFF-SITE (PCA 2)

Scale 1:250

0 2 4 6 8 m

(Approx. When plotted 11x17)

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PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Project: SDC1009	Drawn By: SDC
Date: DEC 2022	Reviewed By: BDC
Scale: 1:250	Figure: 3

LEGEND

- PROPERTY BOUNDARY
- SITE
- BUILDING
- GAS — NATURAL GAS
- OH — OVERHEAD ELECTRICAL
- MONITORING WELL
- 1 — APEC 1 - UNKOWN QUALITY OF IMPORTED FILL 73, 79 AND 83 STE. CECILE ST. (PCA 1)
- APEC 2 - METAL FABRICATION OFF-SITE (PCA 2)

Scale 1:250

0 2 4 6 8 m

(Approx. When plotted 11x17)

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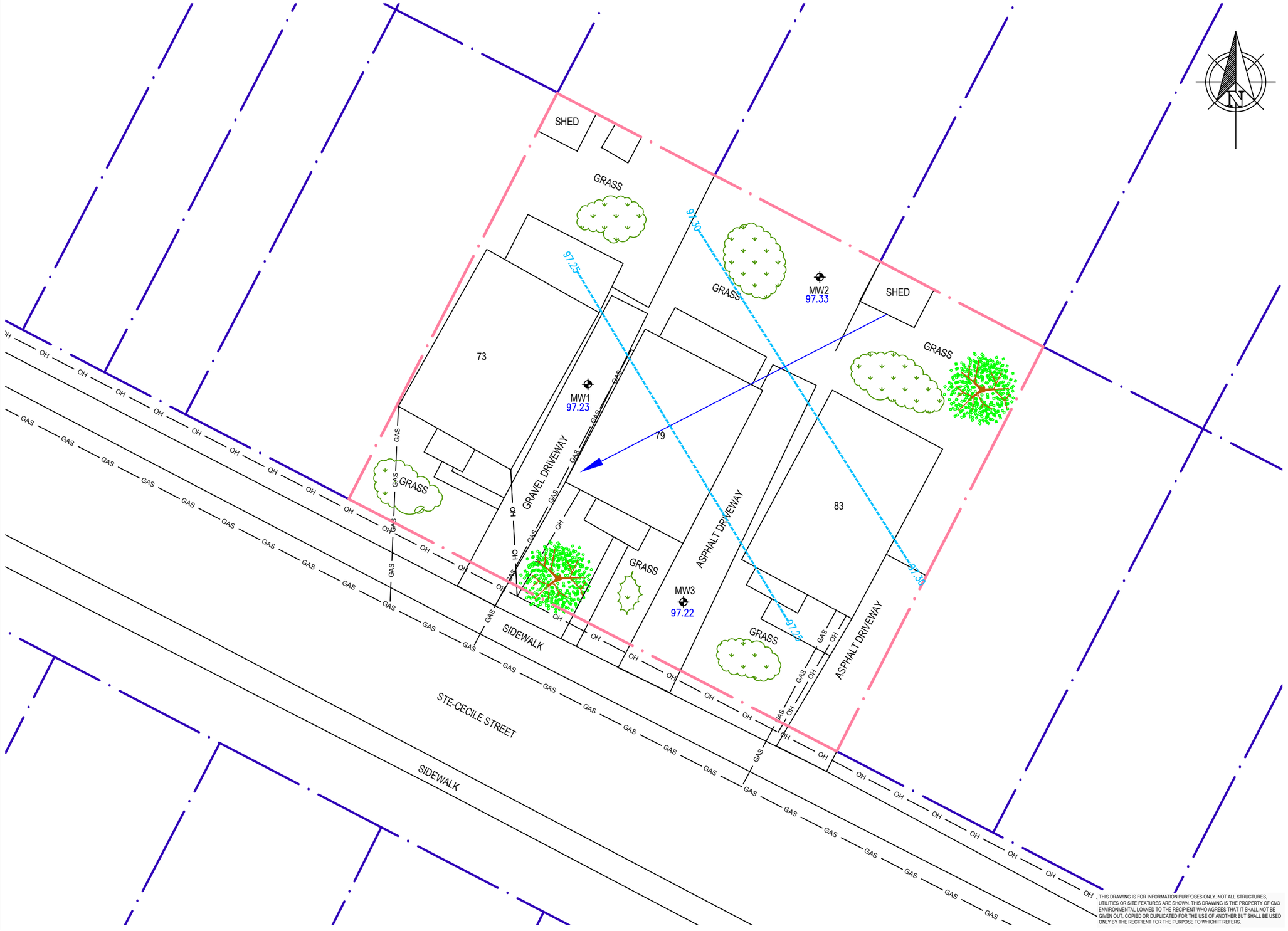
PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

MONITORING WELL LOCATIONS

Project: SDC1009	Drawn By: SDC
Date: DEC 2022	Reviewed By: BDC
Scale: 1:250	Figure: 4



LEGEND

- PROPERTY BOUNDARY
- SITE
- BUILDING
- GAS — NATURAL GAS
- OH — OVERHEAD ELECTRICAL
- MONITORING WELL
- 94.66 GROUNDWATER ELEVATION (m.a.r.l)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION

Scale 1:250

0 2 4 6 8 m

(Approx. When plotted 11x17)

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PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

GROUNDWATER FLOW
DECEMBER 2022

Project: SDC1009	Drawn By: SDC
Date: DEC 2022	Reviewed By: BDC
Scale: 1:250	Figure: 5

LEGEND

- PROPERTY BOUNDARY
- SITE
- BUILDING
- GAS — NATURAL GAS
- OH — OVERHEAD ELECTRICAL
- MONITORING WELL
- 5 — SOIL COMBUSTIBLE VAPOUR CONCENTRATION (ppm)

SOIL SAMPLES ANALYSED*:

- ANALYSED PARAMETERS NOT DETECTED
- ANALYSED PARAMETERS <MECP TABLE 3 SCS
- ANALYSED PARAMETERS >MECP TABLE 3 SCS

* - REFER TO TABLE 1 FOR SAMPLING DATES AND FULL RESULTS

Scale 1:250

0 2 4 6 8 m

(Approx. When plotted 11x17)

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5710 AKINS ROAD, OTTAWA, ON
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PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

SOIL QUALITY

Project: SDC1009	Drawn By: SDC
Date: DEC 2022	Reviewed By: BDC
Scale: 1:250	Figure: 6

LEGEND

- PROPERTY BOUNDARY
- SITE
- BUILDING
- GAS — NATURAL GAS
- OH — OVERHEAD ELECTRICAL
- MONITORING WELL

SOIL SAMPLES ANALYSED*:

- ANALYSED PARAMETERS NOT DETECTED
- ANALYSED PARAMETERS <MECP TABLE 5 SCS
- ANALYSED PARAMETERS >MECP TABLE 5 SCS

* - REFER TO TABLE 2 FOR SAMPLING DATES AND FULL RESULTS

Scale 1:250

0 2 4 6 8 m

(Approx. When plotted 11x17)

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HENRY INVESTMENTS

PHASE II
ENVIRONMENTAL SITE ASSESSMENT
73-79, 83 STE. CECILE ST. VANIER, ONTARIO

GROUNDWATER QUALITY

Project: SDC1009	Drawn By: SDC
Date: DEC 2022	Reviewed By: BDC
Scale: 1:250	Figure: 7

TABLES

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14072375 Canada Inc.

Phase II Environmental Site Assessment

73-79, 83 Ste-Cecile,

Vanier, Ontario

SDC1009

TABLE 1:
LPH and Groundwater Level Measurements
PHASE II Environmental Site Assessment
73-79, 83 Ste. Cecile Street, Ottawa, Ontario
SDC1009

Well ID	Date	TOC (marl)	Grade (marl)	Depth to		Elevation		Comments
				LPH (mbtoc)	GW (mbtoc)	LPH (marl)	GW (marl)	
MW1	5-Dec-22	100.000	100.036	NV	2.772	--	97.228	
MW2	5-Dec-22	99.589	99.704	NV	2.262	--	97.327	
MW3	5-Dec-22	99.821	99.837	NV	2.603	--	97.218	

Notes:
TOC - top of casing
marl - metres above reference level
mbtoc - metres below top of casing
LPH - liquid phase hydrocarbons
GW - groundwater
NM - not measured
NV / -- - no value/LPH not present

TABLE 2:
Summary of Soil Analytical Results
PHASE II Environmental Site Assessment
73-79, 83 Ste. Cecile Street, Ottawa, Ontario
SDC1009

Parameter / Sample ID >	MDL	MECP Table 5 SCS	MW1 SA7	MW2 SA4	MW3 SA2
Depth (m bg) >			4.5 to 5.3	5.3 to 6.1	4.5 to 5.3
HSVL (ppm) >			70	35	60
Sample Date >			Nov-24-22	Nov-24-22	Nov-24-22
Metals					
Antimony	1	**63**	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	1	**18**	4.4	1.6	2.2
Barium	1	**7700**	67.2	41.1	23.9
Beryllium	0.5	**60**	ND (0.5)	0.5	ND (0.5)
Boron	5	**5000**	7.2	6	ND (5.0)
Cadmium	0.5	**7.9**	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	5	**11000**	15.4	16.1	11.9
Cobalt	1	**250**	6	7.1	3.8
Copper	5	**5600**	17.9	22.7	8.6
Lead	1	**1000**	6	7.4	3.2
Molybdenum	1	**1200**	7.1	1.4	ND (1.0)
Nickel	5	**510**	18.6	13	10.2
Selenium	1	**1200**	ND (1.0)	ND (1.0)	ND (1.0)
Silver	0.3	**490**	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	1	**3.3**	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	1	**300**	2.1	1.1	ND (1.0)
Vanadium	10	**160**	24.2	21.3	20.4
Zinc	20	**15000**	27.5	40.8	ND (20.0)
Volatiles					
Acetone	0.5	**16**	ND (0.50)	ND (0.50)	ND (0.50)
Benzene	0.02	**0.21**	ND (0.02)	ND (0.02)	ND (0.02)
Bromodichloromethane	0.05	**18**	ND (0.05)	ND (0.05)	ND (0.05)
Bromoform	0.05	**0.27**	ND (0.05)	ND (0.05)	ND (0.05)
Bromomethane	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Carbon Tetrachloride	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Chlorobenzene	0.05	**2.4**	ND (0.05)	ND (0.05)	ND (0.05)
Chloroform	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Dibromochloromethane	0.05	**13**	ND (0.05)	ND (0.05)	ND (0.05)
Dichlorodifluoromethane	0.05	**16**	ND (0.05)	ND (0.05)	ND (0.05)
1,2-Dichlorobenzene	0.05	**34**	ND (0.05)	ND (0.05)	ND (0.05)
1,3-Dichlorobenzene	0.05	**59**	ND (0.05)	ND (0.05)	ND (0.05)
1,4-Dichlorobenzene	0.05	**0.083**	ND (0.05)	ND (0.05)	ND (0.05)
1,1-Dichloroethane	0.05	**3.5**	ND (0.05)	ND (0.05)	ND (0.05)
1,2-Dichloroethane	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
1,1-Dichloroethylene	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
cis-1,2-Dichloroethylene	0.05	**3.4**	ND (0.05)	ND (0.05)	ND (0.05)
trans-1,2-Dichloroethylene	0.05	**0.084**	ND (0.05)	ND (0.05)	ND (0.05)
1,2-Dichloropropane	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
cis-1,3-Dichloropropylene	0.05	**NV**	ND (0.05)	ND (0.05)	ND (0.05)
trans-1,3-Dichloropropylene	0.05	**NV**	ND (0.05)	ND (0.05)	ND (0.05)
1,3-Dichloropropene, total	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Ethylbenzene	0.05	**2**	ND (0.05)	ND (0.05)	ND (0.05)
Ethylene dibromide (dibromoethane, 1,2-)	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Hexane	0.05	**2.8**	ND (0.05)	ND (0.05)	ND (0.05)
Methyl Ethyl Ketone (2-Butanone)	0.5	**16**	ND (0.50)	ND (0.50)	ND (0.50)
Methyl Isobutyl Ketone	0.5	**6.6**	ND (0.50)	ND (0.50)	ND (0.50)
Methyl tert-butyl ether	0.05	**0.75**	ND (0.05)	ND (0.05)	ND (0.05)
Methylene Chloride	0.05	**0.1**	ND (0.05)	ND (0.05)	ND (0.05)
Styrene	0.05	**16**	ND (0.05)	ND (0.05)	ND (0.05)
1,1,1,2-Tetrachloroethane	0.05	**0.058**	ND (0.05)	ND (0.05)	ND (0.05)
1,1,2,2-Tetrachloroethane	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Tetrachloroethylene	0.05	**0.28**	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	0.05	**6.2**	ND (0.05)	ND (0.05)	ND (0.05)
1,1,1-Trichloroethane	0.05	**0.38**	ND (0.05)	ND (0.05)	ND (0.05)
1,1,2-Trichloroethane	0.05	**0.05**	ND (0.05)	ND (0.05)	ND (0.05)
Trichloroethylene	0.05	**0.061**	ND (0.05)	ND (0.05)	ND (0.05)
Trichlorofluoromethane	0.05	**4**	ND (0.05)	ND (0.05)	ND (0.05)
Vinyl Chloride	0.02	**0.02**	ND (0.02)	ND (0.02)	ND (0.02)
m/p-Xylene	0.05	**NV**	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	0.05	**NV**	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	0.05	**3.1**	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons					
F1 PHCs (C6-C10)	7	**55**	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	4	**98**	17	ND (4)	ND (4)
F3 PHCs (C16-C34)	8	**5800**	37	ND (8)	10
F4 PHCs (C34-C50)	6	**6900**	9	ND (6)	30
Semi-Volatiles					
Acenaphthene	0.02	**7.9**	ND (0.02)	ND (0.02)	ND (0.02)
Acenaphthylene	0.02	**0.15**	ND (0.02)	ND (0.02)	ND (0.02)
Anthracene	0.02	**0.67**	ND (0.02)	ND (0.02)	ND (0.02)
Benzo[a]anthracene	0.02	**0.96**	ND (0.02)	ND (0.02)	ND (0.02)
Benzo[a]pyrene	0.02	**0.3**	ND (0.02)	ND (0.02)	ND (0.02)
Benzo[b]fluoranthene	0.02	**0.96**	ND (0.02)	ND (0.02)	ND (0.02)
Benzo[g,h,i]perylene	0.02	**9.6**	ND (0.02)	ND (0.02)	ND (0.02)
Benzo[k]fluoranthene	0.02	**0.96**	ND (0.02)	ND (0.02)	ND (0.02)
Chrysene	0.02	**9.6**	ND (0.02)	ND (0.02)	ND (0.02)
Dibenzo[a,h]anthracene	0.02	**0.1**	ND (0.02)	ND (0.02)	ND (0.02)
Fluoranthene	0.02	**9.6**	ND (0.02)	0.04	ND (0.02)
Fluorene	0.02	**62**	ND (0.02)	ND (0.02)	ND (0.02)
Indeno [1,2,3-cd] pyrene	0.02	**0.38**	ND (0.02)	ND (0.02)	ND (0.02)
1-Methylnaphthalene	0.02	**34**	ND (0.02)	ND (0.02)	ND (0.02)
2-Methylnaphthalene	0.02	**34**	ND (0.02)	ND (0.02)	ND (0.02)
Methylnaphthalene (1&2)	0.04	**34**	ND (0.04)	ND (0.04)	ND (0.04)
Naphthalene	0.01	**0.65**	ND (0.01)	ND (0.01)	ND (0.01)
Phenanthrene	0.02	**270**	ND (0.02)	0.03	ND (0.02)
Pyrene	0.02	**96**	ND (0.02)	0.03	ND (0.02)

Notes:

mg/kg - all concentrations provided in parts per million (milligrams per kilogram)
MDL - reported analytical method detection limit
HSVL - headspace vapour level (combustible vapour meter, calibrated to hexane)
m bg - metres below grade
ppm - parts per million
NV - no standard listed
"<" or "ND ( )" - less than detection limits indicated (refer to laboratory report)
NA - not applicable
MECP Table 5 SCS - Ontario Ministry of Environment, Conservation and Parks (MECP) Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act. April, 2011.
Stratified Site Condition Standards in a Non-Potable Ground Water Condition, Subsurface soil, residential land use, coarse textured soil.
Bold / Italic - indicates concentration above applicable MECP Table 5 SCS
0.5 - MDL above applicable MECP Table 5 SCS (refer to laboratory reports)

TABLE 3:
Summary of Groundwater Analytical Results
PHASE II Environmental Site Assessment
73-79, 83 Ste. Cecile Street, Ottawa, Ontario
SDC1009

Parameter / Sample ID > / Sample Date >	MDL	MECP Table 5 SCS	MW1 5-Dec-22	MW2 5-Dec-22	MW3 5-Dec-22
Metals					
Antimony	0.5	20000	ND (0.5)	ND (0.5)	ND (0.5)
Arsenic	1	1900	6	1	3
Barium	1	29000	487	595	582
Beryllium	0.5	67	ND (0.5)	ND (0.5)	ND (0.5)
Boron	10	45000	72	41	61
Cadmium	0.1	2.7	ND (0.1)	ND (0.1)	ND (0.1)
Chromium	1	810	ND (1)	ND (1)	ND (1)
Cobalt	0.5	66	ND (0.5)	ND (0.5)	1.0
Copper	0.5	87	ND (0.5)	ND (0.5)	1.9
Lead	0.1	25	ND (0.1)	ND (0.1)	0.2
Molybdenum	0.5	9200	37.9	2.7	13.1
Nickel	1	490	ND (1)	ND (1)	2
Selenium	1	63	ND (1)	ND (1)	ND (1)
Silver	0.1	1.5	ND (0.1)	ND (0.1)	ND (0.1)
Sodium	200	2300000	160000	71100	143000
Thallium	0.1	510	ND (0.1)	ND (0.1)	ND (0.1)
Uranium	0.1	420	8.0	0.6	3.7
Vanadium	0.5	250	0.7	2.9	0.7
Zinc	5	1100	ND (5)	ND (5)	7
Volatiles					
Acetone	5.0	130000	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	0.5	44	ND (0.5)	ND (0.5)	ND (0.5)
Bromodichloromethane	0.5	85000	ND (0.5)	ND (0.5)	ND (0.5)
Bromoform	0.5	380	ND (0.5)	ND (0.5)	ND (0.5)
Bromomethane	0.5	5.6	ND (0.5)	ND (0.5)	ND (0.5)
Carbon Tetrachloride	0.2	0.79	ND (0.2)	ND (0.2)	ND (0.2)
Chlorobenzene	0.5	630	ND (0.5)	ND (0.5)	ND (0.5)
Chloroform	0.5	2.4	ND (0.5)	ND (0.5)	ND (0.5)
Dibromochloromethane	0.5	82000	ND (0.5)	ND (0.5)	ND (0.5)
Dichlorodifluoromethane	1.0	4400	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichlorobenzene	0.5	4600	ND (0.5)	ND (0.5)	ND (0.5)
1,3-Dichlorobenzene	0.5	9600	ND (0.5)	ND (0.5)	ND (0.5)
1,4-Dichlorobenzene	0.5	8	ND (0.5)	ND (0.5)	ND (0.5)
1,1-Dichloroethane	0.5	320	ND (0.5)	ND (0.5)	ND (0.5)
1,2-Dichloroethane	0.5	1.6	ND (0.5)	ND (0.5)	ND (0.5)
1,1-Dichloroethylene	0.5	1.6	ND (0.5)	ND (0.5)	ND (0.5)
cis-1,2-Dichloroethylene	0.5	1.6	ND (0.5)	ND (0.5)	ND (0.5)
trans-1,2-Dichloroethylene	0.5	1.6	ND (0.5)	ND (0.5)	ND (0.5)
1,2-Dichloropropane	0.5	16	ND (0.5)	ND (0.5)	ND (0.5)
cis-1,3-Dichloropropylene	0.5		ND (0.5)	ND (0.5)	ND (0.5)
trans-1,3-Dichloropropylene	0.5		ND (0.5)	ND (0.5)	ND (0.5)
1,3-Dichloropropene, total	0.5	5.2	ND (0.5)	ND (0.5)	ND (0.5)
Ethylbenzene	0.5	2300	ND (0.5)	ND (0.5)	ND (0.5)
Ethylene dibromide (dibromoethane, 1,2-)	0.2	0.25	ND (0.2)	ND (0.2)	ND (0.2)
Hexane	1.0	51	ND (1.0)	ND (1.0)	ND (1.0)
Methyl Ethyl Ketone (2-Butanone)	5.0	470000	ND (5.0)	ND (5.0)	ND (5.0)
Methyl Isobutyl Ketone	5.0	140000	ND (5.0)	ND (5.0)	ND (5.0)
Methyl tert-butyl ether	2.0	190	ND (2.0)	ND (2.0)	ND (2.0)
Methylene Chloride	5.0	610	ND (5.0)	ND (5.0)	ND (5.0)
Styrene	0.5	1300	ND (0.5)	ND (0.5)	ND (0.5)
1,1,1,2-Tetrachloroethane	0.5	3.3	ND (0.5)	ND (0.5)	ND (0.5)
1,1,2,2-Tetrachloroethane	0.5	3.2	ND (0.5)	ND (0.5)	ND (0.5)
Tetrachloroethylene	0.5	1.6	ND (0.5)	ND (0.5)	ND (0.5)
Toluene	0.5	18000	ND (0.5)	ND (0.5)	ND (0.5)
1,1,1-Trichloroethane	0.5	640	ND (0.5)	ND (0.5)	ND (0.5)
1,1,2-Trichloroethane	0.5	4.7	ND (0.5)	ND (0.5)	ND (0.5)
Trichloroethylene	0.5	1.6	ND (0.5)	ND (0.5)	ND (0.5)
Trichlorofluoromethane	1.0	2500	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl Chloride	0.5	0.5	ND (0.5)	ND (0.5)	ND (0.5)
m/p-Xylene	0.5		ND (0.5)	ND (0.5)	ND (0.5)
o-Xylene	0.5		ND (0.5)	ND (0.5)	ND (0.5)
Xylenes, total	0.5	4200	ND (0.5)	ND (0.5)	ND (0.5)
Hydrocarbons					
F1 PHCs (C6-C10)	25	750	ND (25)	ND (25)	ND (25)
F2 PHCs (C10-C16)	100	150	ND (100)	ND (100)	ND (100)
F3 PHCs (C16-C34)	100	500	ND (100)	ND (100)	ND (100)
F4 PHCs (C34-C50)	100	500	ND (100)	ND (100)	ND (100)
Semi-Volatiles					
Acenaphthene	0.05	600	ND (0.05)	ND (0.05)	ND (0.05)
Acenaphthylene	0.05	1.8	ND (0.05)	0.06	ND (0.05)
Anthracene	0.01	2.4	ND (0.01)	0.12	ND (0.01)
Benzo[a]anthracene	0.01	4.7	ND (0.01)	0.18	ND (0.01)
Benzo[a]pyrene	0.01	0.81	ND (0.01)	0.19	ND (0.01)
Benzo[b]fluoranthene	0.05	0.75	ND (0.05)	0.16	ND (0.05)
Benzo[g,h,i]perylene	0.05	0.2	ND (0.05)	0.11	ND (0.05)
Benzo[k]fluoranthene	0.05	0.4	ND (0.05)	0.09	ND (0.05)
Chrysene	0.05	1	ND (0.05)	0.26	ND (0.05)
Dibenzo[a,h]anthracene	0.05	0.52	ND (0.05)	ND (0.05)	ND (0.05)
Fluoranthene	0.01	130	ND (0.01)	0.45	ND (0.01)
Fluorene	0.05	400	ND (0.05)	ND (0.05)	ND (0.05)
Indeno [1,2,3-cd] pyrene	0.05	0.2	ND (0.05)	0.10	ND (0.05)
1-Methylnaphthalene	0.05	1800	ND (0.05)	ND (0.05)	ND (0.05)
2-Methylnaphthalene	0.05	1800	ND (0.05)	ND (0.05)	ND (0.05)
Methylnaphthalene (1&2)	0.10	1800	ND (0.10)	ND (0.10)	ND (0.10)
Naphthalene	0.05	1400	ND (0.05)	ND (0.05)	ND (0.05)
Phenanthrene	0.05	580	ND (0.05)	0.42	ND (0.05)
Pyrene	0.01	68	ND (0.01)	0.36	ND (0.01)

Notes:

µg/L - all concentrations provided in micrograms per litre (parts per billion)
MDL - reported analytical method detection limit
ppm - parts per million
NV - no standard listed
"<" or "ND ( )" - less than detection limits indicated (refer to laboratory report)
NA - not applicable
MECP Table 5 SCS - Ontario Ministry of Environment, Conservation and Parks (MECP) Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act. April, 2011. Stratified Site Condition Standards in a Non-Potable Ground Water Condition, residential land use, coarse textured soil.
Bold / Italic - indicates concentration above applicable MECP Table 5 SCS
0.5 - MDL above applicable MECP Table 5 SCS (refer to laboratory reports)
[1] - elevated detection/reporting limits and/or modified analytical protocol (e.g. limited sample volume, sediment in sample, etc.); refer to laboratory r

APPENDIX A

BOREHOLE LOGS

HENRY INVESTMENTS

14072375 Canada Inc.

Phase II Environmental Site Assessment

73-79, 83 Ste-Cecile,

Vanier, Ontario SDC1009

BOREHOLE LOG

CLIENT: **HENRY INVESTMENTS**
PROJECT: **PHASE II ENVIRONMENTAL SITE ASSESSMENT**
73-79, 83 STE. CECILE STREET
VANIER, ONTARIO

CM³ JOB NO: SDC1009

BOREHOLE NO: MW1
SURFACE ELEVATION: 100.04 m

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv)	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
-1										101
0					Ground Surface					100
					GRAVEL					
		SA1			**SAND** brown, dry	45			j-plug flushmount in concrete	
1		SA2								99
					PEAT black, moist				bentonite seal	
2		SA3				60			32 mm solid PVC pipe	98
		SA4				100		GW = 2.81 mbg (12/5/2022)		
3										97
		SA5				70			silica sand	
									32 mm 010 slot PVC pipe	
4		SA6				55				96
									bottom cap	
									silica sand	
5		SA7				70				95
					SILTY SAND with gravel, dark grey, wet					
		SA8				65				
6					**SANDY GRAVEL** brown, wet					94
									bentonite seal	
		SA9				95				
7										93
		SA10				40				
					End of borehole at 7.62 m					

Groundwater Information:
Depth to groundwater from TOP = 2.77 m (12/5/2022)

DRILLING METHOD: HSA AND SPLIT SPOONS
BOREHOLE DIAMETER: 0.18 m (OD)

DRILL DATE: November 25, 2022 LOGGED BY: SDC

Notes: AUGER SAMPLE
SPLIT SPOON

BOREHOLE LOG

CLIENT: **HENRY INVESTMENTS**
PROJECT: **PHASE II ENVIRONMENTAL SITE ASSESSMENT**
73-79, 83 STE. CECILE STREET
VANIER, ONTARIO

CM³ JOB NO: SDC1009

BOREHOLE NO: MW2
SURFACE ELEVATION: 99.70 m

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv)	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
-1										101
0					Ground Surface					100
0		SA1			**SANDY GRAVEL** with clay, brown, dry	45			j-plug flushmount in concrete	
1										99
1									bentonite seal	
2										98
2									32 mm solid PVC pipe	
2					**PEAT** black, dry				GW = 2.38 mbg (12/5/2022)	
2		SA2				55				97
3										
3		SA3				110			silica sand	
3									32 mm 010 slot PVC pipe	96
4										
4		SA4				35			bottom cap	
4									silica sand	95
5		SA5				70				
5					**SANDY GRAVEL** dark grey, moist					
6									bentonite seal	94
6										93
					SILTY SAND grey, wet					
					End of borehole at 6.86 m					

Groundwater Information:
Depth to groundwater from TOP = 2.26 m (12/5/2022)

DRILLING METHOD: HSA AND SPLIT SPOONS
BOREHOLE DIAMETER: 0.18 m (OD)

DRILL DATE: November 25, 2022 LOGGED BY: SDC

Notes: AUGER SAMPLE
SPLIT SPOON

BOREHOLE LOG

CLIENT: **HENRY INVESTMENTS**
PROJECT: **PHASE II ENVIRONMENTAL SITE ASSESSMENT**
73-79, 83 STE. CECILE STREET
VANIER, ONTARIO

CM³ JOB NO: SDC1009

BOREHOLE NO: MW3
SURFACE ELEVATION: 99.84 m

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv)	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
-1										101
0					Ground Surface					100
					ASPHALT				j-plug flushmount in concrete	
		SA1			**SILTY SAND** with gravel, brown, dry	30				
1					**SAND** with gravel, gray, moist				bentonite seal	99
2									32 mm solid PVC pipe	98
									GW = 2.62 mbg (12/5/2022)	
3									silica sand	97
									32 mm 010 slot PVC pipe	
4										96
									bottom cap	
		SA2							silica sand	
5						55				95
6									bentonite seal	94
		SA3			**SILTY SAND** grey, wet	110				
					End of borehole at 6.86 m					93
					Groundwater Information: Depth to groundwater from TOP = 2.60 m (12/5/2022)					

DRILLING METHOD: HSA AND SPLIT SPOONS
BOREHOLE DIAMETER: 0.18 m (OD)

DRILL DATE: November 25, 2022 LOGGED BY: SDC

Notes: AUGER SAMPLE
SPLIT SPOON

APPENDIX B

LABORATORY REPORTS

HENRY INVESTMENTS

14072375 Canada Inc.

Phase II Environmental Site Assessment

73-79, 83 Ste-Cecile,

Vanier, Ontario SDC1009

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Certificate of Analysis

CM3 Environmental Inc.

5710 Akins Road
Ottawa, ON K2S 1B8
Attn: Spencer Cochrane

Client PO: 73, 79, 83 Ste. Cecille
Project: SDC1009
Custody: 141026

Report Date: 29-Nov-2022
Order Date: 24-Nov-2022

Order #: 2248428

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Paracel ID	Client ID
2248428-01	MW1 SA7
2248428-02	MW2 SA4
2248428-03	MW3 SA2

Approved By:

Mark Foto

Mark Foto, M.Sc.
Lab Supervisor

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
PHC F1	CWS Tier 1 - P&T GC-FID	28-Nov-22	29-Nov-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	25-Nov-22	28-Nov-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	29-Nov-22	29-Nov-22
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	25-Nov-22	28-Nov-22
REG 153: VOCs by P&T GC/MS	EPA 8260 - P&T GC-MS	28-Nov-22	29-Nov-22
Solids, %	CWS Tier 1 - Gravimetric	28-Nov-22	28-Nov-22

Certificate of Analysis

Client: CM3 Environmental Inc.

Client PO: 73, 79, 83 Ste. Cecille

Report Date: 29-Nov-2022

Order Date: 24-Nov-2022

Project Description: SDC1009

	Client ID:	MW1 SA7	MW2 SA4	MW3 SA2	-
	Sample Date:	24-Nov-22 09:00	24-Nov-22 09:00	24-Nov-22 09:00	-
	Sample ID:	2248428-01	2248428-02	2248428-03	-
	MDL/Units	Soil	Soil	Soil	-
Physical Characteristics					
% Solids	0.1 % by Wt.	71.9	83.0	83.0	-
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	-
Arsenic	1.0 ug/g dry	4.4	1.6	2.2	-
Barium	1.0 ug/g dry	67.2	41.1	23.9	-
Beryllium	0.5 ug/g dry	<0.5	0.5	<0.5	-
Boron	5.0 ug/g dry	7.2	6.0	<5.0	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Chromium	5.0 ug/g dry	15.4	16.1	11.9	-
Cobalt	1.0 ug/g dry	6.0	7.1	3.8	-
Copper	5.0 ug/g dry	17.9	22.7	8.6	-
Lead	1.0 ug/g dry	6.0	7.4	3.2	-
Molybdenum	1.0 ug/g dry	7.1	1.4	<1.0	-
Nickel	5.0 ug/g dry	18.6	13.0	10.2	-
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	-
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	-
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	-
Uranium	1.0 ug/g dry	2.1	1.1	<1.0	-
Vanadium	10.0 ug/g dry	24.2	21.3	20.4	-
Zinc	20.0 ug/g dry	27.5	40.8	<20.0	-
Volatiles					
Acetone	0.50 ug/g dry	<0.50	<0.50	<0.50	-
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Bromodichloromethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Bromoform	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Bromomethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Carbon Tetrachloride	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Chlorobenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Chloroform	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Dibromochloromethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Dichlorodifluoromethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,2-Dichlorobenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,3-Dichlorobenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,4-Dichlorobenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,1-Dichloroethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-

Certificate of Analysis

Client: CM3 Environmental Inc.

Client PO: 73, 79, 83 Ste. Cecille

Report Date: 29-Nov-2022

Order Date: 24-Nov-2022

Project Description: SDC1009

	Client ID:	MW1 SA7	MW2 SA4	MW3 SA2	-
	Sample Date:	24-Nov-22 09:00	24-Nov-22 09:00	24-Nov-22 09:00	-
	Sample ID:	2248428-01	2248428-02	2248428-03	-
	MDL/Units	Soil	Soil	Soil	-
1,2-Dichloroethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,1-Dichloroethylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
cis-1,2-Dichloroethylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
trans-1,2-Dichloroethylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,2-Dichloropropane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
cis-1,3-Dichloropropylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
trans-1,3-Dichloropropylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,3-Dichloropropene, total	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Ethylene dibromide (dibromoethane, 1,2-)	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Hexane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g dry	<0.50	<0.50	<0.50	-
Methyl Isobutyl Ketone	0.50 ug/g dry	<0.50	<0.50	<0.50	-
Methyl tert-butyl ether	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Methylene Chloride	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Styrene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,1,1,2-Tetrachloroethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,1,2,2-Tetrachloroethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Tetrachloroethylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,1,1-Trichloroethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
1,1,2-Trichloroethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Trichloroethylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Trichlorofluoromethane	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Vinyl chloride	0.02 ug/g dry	<0.02	<0.02	<0.02	-
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	-
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	-
4-Bromofluorobenzene	Surrogate	108%	103%	107%	-
Dibromofluoromethane	Surrogate	111%	109%	109%	-
Toluene-d8	Surrogate	117%	112%	113%	-
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	-
F2 PHCs (C10-C16)	4 ug/g dry	17	<4	<4	-
F3 PHCs (C16-C34)	8 ug/g dry	37	<8	10	-
F4 PHCs (C34-C50)	6 ug/g dry	9	<6	30	-

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Project Description: SDC1009

	Client ID:	MW1 SA7	MW2 SA4	MW3 SA2	-
	Sample Date:	24-Nov-22 09:00	24-Nov-22 09:00	24-Nov-22 09:00	-
	Sample ID:	2248428-01	2248428-02	2248428-03	-
	MDL/Units	Soil	Soil	Soil	-
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Acenaphthylene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Benzo [a] anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Benzo [a] pyrene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Benzo [b] fluoranthene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Benzo [g,h,i] perylene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Benzo [k] fluoranthene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Chrysene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Dibenzo [a,h] anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Fluoranthene	0.02 ug/g dry	<0.02	0.04	<0.02	-
Fluorene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
1-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
2-Methylnaphthalene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Methylnaphthalene (1&2)	0.04 ug/g dry	<0.04	<0.04	<0.04	-
Naphthalene	0.01 ug/g dry	<0.01	<0.01	<0.01	-
Phenanthrene	0.02 ug/g dry	<0.02	0.03	<0.02	-
Pyrene	0.02 ug/g dry	<0.02	0.03	<0.02	-
2-Fluorobiphenyl	Surrogate	93.8%	102%	101%	-
Terphenyl-d14	Surrogate	92.9%	118%	119%	-

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g						
F2 PHCs (C10-C16)	ND	4	ug/g						
F3 PHCs (C16-C34)	ND	8	ug/g						
F4 PHCs (C34-C50)	ND	6	ug/g						
Metals									
Antimony	ND	1.0	ug/g						
Arsenic	ND	1.0	ug/g						
Barium	ND	1.0	ug/g						
Beryllium	ND	0.5	ug/g						
Boron	ND	5.0	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium	ND	5.0	ug/g						
Cobalt	ND	1.0	ug/g						
Copper	ND	5.0	ug/g						
Lead	ND	1.0	ug/g						
Molybdenum	ND	1.0	ug/g						
Nickel	ND	5.0	ug/g						
Selenium	ND	1.0	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1.0	ug/g						
Uranium	ND	1.0	ug/g						
Vanadium	ND	10.0	ug/g						
Zinc	ND	20.0	ug/g						
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo [a] anthracene	ND	0.02	ug/g						
Benzo [a] pyrene	ND	0.02	ug/g						
Benzo [b] fluoranthene	ND	0.02	ug/g						
Benzo [g,h,i] perylene	ND	0.02	ug/g						
Benzo [k] fluoranthene	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo [a,h] anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						
2-Methylnaphthalene	ND	0.02	ug/g						
Methylnaphthalene (1&2)	ND	0.04	ug/g						
Naphthalene	ND	0.01	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*1.37*		*ug/g*		*102*	*50-140*			
Surrogate: Terphenyl-d14	*1.48*		*ug/g*		*111*	*50-140*			
Volatiles									
Acetone	ND	0.50	ug/g						
Benzene	ND	0.02	ug/g						
Bromodichloromethane	ND	0.05	ug/g						
Bromoform	ND	0.05	ug/g						
Bromomethane	ND	0.05	ug/g						
Carbon Tetrachloride	ND	0.05	ug/g						
Chlorobenzene	ND	0.05	ug/g						
Chloroform	ND	0.05	ug/g						
Dibromochloromethane	ND	0.05	ug/g						
Dichlorodifluoromethane	ND	0.05	ug/g						
1,2-Dichlorobenzene	ND	0.05	ug/g						
1,3-Dichlorobenzene	ND	0.05	ug/g						

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	ND	0.05	ug/g						
1,1-Dichloroethane	ND	0.05	ug/g						
1,2-Dichloroethane	ND	0.05	ug/g						
1,1-Dichloroethylene	ND	0.05	ug/g						
cis-1,2-Dichloroethylene	ND	0.05	ug/g						
trans-1,2-Dichloroethylene	ND	0.05	ug/g						
1,2-Dichloropropane	ND	0.05	ug/g						
cis-1,3-Dichloropropylene	ND	0.05	ug/g						
trans-1,3-Dichloropropylene	ND	0.05	ug/g						
1,3-Dichloropropene, total	ND	0.05	ug/g						
Ethylbenzene	ND	0.05	ug/g						
Ethylene dibromide (dibromoethane, 1,2	ND	0.05	ug/g						
Hexane	ND	0.05	ug/g						
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g						
Methyl Isobutyl Ketone	ND	0.50	ug/g						
Methyl tert-butyl ether	ND	0.05	ug/g						
Methylene Chloride	ND	0.05	ug/g						
Styrene	ND	0.05	ug/g						
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g						
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g						
Tetrachloroethylene	ND	0.05	ug/g						
Toluene	ND	0.05	ug/g						
1,1,1-Trichloroethane	ND	0.05	ug/g						
1,1,2-Trichloroethane	ND	0.05	ug/g						
Trichloroethylene	ND	0.05	ug/g						
Trichlorofluoromethane	ND	0.05	ug/g						
Vinyl chloride	ND	0.02	ug/g						
m,p-Xylenes	ND	0.05	ug/g						
o-Xylene	ND	0.05	ug/g						
Xylenes, total	ND	0.05	ug/g						
Surrogate: 4-Bromofluorobenzene	*2.63*		*ug/g*		*82.3*	*50-140*			
Surrogate: Dibromofluoromethane	*1.95*		*ug/g*		*61.1*	*50-140*			
Surrogate: Toluene-d8	*2.59*		*ug/g*		*80.9*	*50-140*			

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	20	8	ug/g	21			7.0	30	
F4 PHCs (C34-C50)	21	6	ug/g	20			5.5	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	3.5	1.0	ug/g	4.1			13.3	30	
Barium	418	1.0	ug/g	477			13.2	30	
Beryllium	1.3	0.5	ug/g	1.4			8.1	30	
Boron	10.2	5.0	ug/g	11.0			7.1	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium	58.3	5.0	ug/g	63.1			7.9	30	
Cobalt	18.3	1.0	ug/g	20.1			9.3	30	
Copper	36.3	5.0	ug/g	40.1			10.0	30	
Lead	9.5	1.0	ug/g	10.2			7.6	30	
Molybdenum	ND	1.0	ug/g	ND			NC	30	
Nickel	43.1	5.0	ug/g	47.7			10.1	30	
Selenium	ND	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	71.9	10.0	ug/g	77.7			7.9	30	
Zinc	106	20.0	ug/g	117			9.4	30	
Physical Characteristics									
% Solids	98.5	0.1	% by Wt.	98.7			0.2	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	0.036	0.02	ug/g	0.033			8.7	40	
Benzo [a] pyrene	0.039	0.02	ug/g	0.039			0.7	40	
Benzo [b] fluoranthene	0.037	0.02	ug/g	0.038			3.1	40	
Benzo [g,h,i] perylene	0.027	0.02	ug/g	0.027			2.2	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	0.020			NC	40	
Chrysene	0.041	0.02	ug/g	0.043			4.1	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	0.076	0.02	ug/g	0.067			12.8	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	0.023	0.02	ug/g	0.020			12.9	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	0.048	0.02	ug/g	0.050			3.9	40	
Pyrene	0.060	0.02	ug/g	0.058			2.8	40	
Surrogate: 2-Fluorobiphenyl	*1.71*		*ug/g*		*114*	*50-140*			
Surrogate: Terphenyl-d14	*1.88*		*ug/g*		*125*	*50-140*			
Volatiles									
Acetone	ND	0.50	ug/g	ND			NC	50	
Benzene	ND	0.02	ug/g	ND			NC	50	
Bromodichloromethane	ND	0.05	ug/g	ND			NC	50	
Bromoform	ND	0.05	ug/g	ND			NC	50	
Bromomethane	ND	0.05	ug/g	ND			NC	50	
Carbon Tetrachloride	ND	0.05	ug/g	ND			NC	50	
Chlorobenzene	ND	0.05	ug/g	ND			NC	50	
Chloroform	ND	0.05	ug/g	ND			NC	50	
Dibromochloromethane	ND	0.05	ug/g	ND			NC	50	

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Dichlorodifluoromethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,3-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,4-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
cis-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
trans-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloropropane	ND	0.05	ug/g	ND			NC	50	
cis-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
trans-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Ethylene dibromide (dibromoethane, 1,2-	ND	0.05	ug/g	ND			NC	50	
Hexane	ND	0.05	ug/g	ND			NC	50	
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g	ND			NC	50	
Methyl Isobutyl Ketone	ND	0.50	ug/g	ND			NC	50	
Methyl tert-butyl ether	ND	0.05	ug/g	ND			NC	50	
Methylene Chloride	ND	0.05	ug/g	ND			NC	50	
Styrene	ND	0.05	ug/g	ND			NC	50	
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
Tetrachloroethylene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
1,1,1-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
Trichloroethylene	ND	0.05	ug/g	ND			NC	50	
Trichlorofluoromethane	ND	0.05	ug/g	ND			NC	50	
Vinyl chloride	ND	0.02	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: 4-Bromofluorobenzene	*2.83*		*ug/g*		*87.3*	*50-140*			
Surrogate: Dibromofluoromethane	*2.29*		*ug/g*		*70.5*	*50-140*			
Surrogate: Toluene-d8	*2.71*		*ug/g*		*83.7*	*50-140*			

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	172	7	ug/g	ND	86.2	80-120			
F2 PHCs (C10-C16)	96	4	ug/g	ND	106	60-140			
F3 PHCs (C16-C34)	264	8	ug/g	21	110	60-140			
F4 PHCs (C34-C50)	186	6	ug/g	20	119	60-140			
Metals									
Antimony	37.6	1.0	ug/g	ND	75.3	70-130			
Arsenic	48.3	1.0	ug/g	1.6	93.4	70-130			
Barium	213	1.0	ug/g	158	110	70-130			
Beryllium	46.3	0.5	ug/g	0.6	91.4	70-130			
Boron	51.6	5.0	ug/g	ND	94.3	70-130			
Cadmium	42.1	0.5	ug/g	ND	84.0	70-130			
Chromium	75.5	5.0	ug/g	25.2	101	70-130			
Cobalt	56.0	1.0	ug/g	8.0	96.0	70-130			
Copper	61.0	5.0	ug/g	16.0	89.9	70-130			
Lead	49.8	1.0	ug/g	4.1	91.5	70-130			
Molybdenum	46.1	1.0	ug/g	ND	91.5	70-130			
Nickel	62.6	5.0	ug/g	19.1	87.1	70-130			
Selenium	44.1	1.0	ug/g	ND	87.7	70-130			
Silver	42.2	0.3	ug/g	ND	84.2	70-130			
Thallium	46.5	1.0	ug/g	ND	92.6	70-130			
Uranium	49.3	1.0	ug/g	ND	98.0	70-130			
Vanadium	76.3	10.0	ug/g	31.1	90.5	70-130			
Zinc	83.5	20.0	ug/g	46.6	73.6	70-130			
Semi-Volatiles									
Acenaphthene	0.214	0.02	ug/g	ND	114	50-140			
Acenaphthylene	0.180	0.02	ug/g	ND	95.7	50-140			
Anthracene	0.188	0.02	ug/g	ND	99.9	50-140			
Benzo [a] anthracene	0.205	0.02	ug/g	0.033	91.4	50-140			
Benzo [a] pyrene	0.211	0.02	ug/g	0.039	91.6	50-140			
Benzo [b] fluoranthene	0.235	0.02	ug/g	0.038	105	50-140			
Benzo [g,h,i] perylene	0.195	0.02	ug/g	0.027	89.2	50-140			
Benzo [k] fluoranthene	0.199	0.02	ug/g	0.020	95.1	50-140			
Chrysene	0.266	0.02	ug/g	0.043	118	50-140			
Dibenzo [a,h] anthracene	0.177	0.02	ug/g	ND	93.9	50-140			
Fluoranthene	0.259	0.02	ug/g	0.067	102	50-140			
Fluorene	0.177	0.02	ug/g	ND	94.2	50-140			
Indeno [1,2,3-cd] pyrene	0.170	0.02	ug/g	0.020	79.6	50-140			
1-Methylnaphthalene	0.192	0.02	ug/g	ND	102	50-140			
2-Methylnaphthalene	0.215	0.02	ug/g	ND	114	50-140			
Naphthalene	0.213	0.01	ug/g	ND	113	50-140			
Phenanthrene	0.241	0.02	ug/g	0.050	102	50-140			
Pyrene	0.255	0.02	ug/g	0.058	105	50-140			
Surrogate: 2-Fluorobiphenyl	*1.46*		*ug/g*		*96.7*	*50-140*			
Surrogate: Terphenyl-d14	*1.73*		*ug/g*		*115*	*50-140*			
Volatiles									
Acetone	6.24	0.50	ug/g	ND	62.4	50-140			
Benzene	4.13	0.02	ug/g	ND	103	60-130			
Bromodichloromethane	3.82	0.05	ug/g	ND	95.6	60-130			

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromoform	3.94	0.05	ug/g	ND	98.5	60-130			
Bromomethane	2.74	0.05	ug/g	ND	68.5	50-140			
Carbon Tetrachloride	3.20	0.05	ug/g	ND	79.9	60-130			
Chlorobenzene	3.73	0.05	ug/g	ND	93.3	60-130			
Chloroform	3.82	0.05	ug/g	ND	95.6	60-130			
Dibromochloromethane	3.61	0.05	ug/g	ND	90.2	60-130			
Dichlorodifluoromethane	2.87	0.05	ug/g	ND	71.7	50-140			
1,2-Dichlorobenzene	4.27	0.05	ug/g	ND	107	60-130			
1,3-Dichlorobenzene	4.26	0.05	ug/g	ND	107	60-130			
1,4-Dichlorobenzene	4.05	0.05	ug/g	ND	101	60-130			
1,1-Dichloroethane	3.53	0.05	ug/g	ND	88.1	60-130			
1,2-Dichloroethane	3.57	0.05	ug/g	ND	89.2	60-130			
1,1-Dichloroethylene	3.78	0.05	ug/g	ND	94.6	60-130			
cis-1,2-Dichloroethylene	3.36	0.05	ug/g	ND	84.1	60-130			
trans-1,2-Dichloroethylene	4.09	0.05	ug/g	ND	102	60-130			
1,2-Dichloropropane	3.94	0.05	ug/g	ND	98.6	60-130			
cis-1,3-Dichloropropylene	4.17	0.05	ug/g	ND	104	60-130			
trans-1,3-Dichloropropylene	3.89	0.05	ug/g	ND	97.2	60-130			
Ethylbenzene	3.88	0.05	ug/g	ND	97.0	60-130			
Ethylene dibromide (dibromoethane, 1,2-	3.85	0.05	ug/g	ND	96.2	60-130			
Hexane	4.74	0.05	ug/g	ND	118	60-130			
Methyl Ethyl Ketone (2-Butanone)	7.13	0.50	ug/g	ND	71.3	50-140			
Methyl Isobutyl Ketone	10.3	0.50	ug/g	ND	103	50-140			
Methyl tert-butyl ether	9.27	0.05	ug/g	ND	92.7	50-140			
Methylene Chloride	3.50	0.05	ug/g	ND	87.4	60-130			
Styrene	3.86	0.05	ug/g	ND	96.4	60-130			
1,1,1,2-Tetrachloroethane	3.54	0.05	ug/g	ND	88.6	60-130			
1,1,2,2-Tetrachloroethane	4.29	0.05	ug/g	ND	107	60-130			
Tetrachloroethylene	3.94	0.05	ug/g	ND	98.6	60-130			
Toluene	3.57	0.05	ug/g	ND	89.3	60-130			
1,1,1-Trichloroethane	3.58	0.05	ug/g	ND	89.6	60-130			
1,1,2-Trichloroethane	3.99	0.05	ug/g	ND	99.7	60-130			
Trichloroethylene	3.73	0.05	ug/g	ND	93.3	60-130			
Trichlorofluoromethane	3.11	0.05	ug/g	ND	77.7	50-140			
Vinyl chloride	3.31	0.02	ug/g	ND	82.7	50-140			
m,p-Xylenes	7.17	0.05	ug/g	ND	89.7	60-130			
o-Xylene	4.04	0.05	ug/g	ND	101	60-130			
Surrogate: 4-Bromofluorobenzene	*1.92*		*ug/g*		*60.1*	*50-140*			
Surrogate: Dibromofluoromethane	*3.48*		*ug/g*		*109*	*50-140*			
Surrogate: Toluene-d8	*2.69*		*ug/g*		*84.2*	*50-140*			

Qualifier Notes:

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
NC: Not Calculated

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

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Certificate of Analysis

CM3 Environmental Inc.

5710 Akins Road
Ottawa, ON K2S 1B8
Attn: Spencer Cochrane

Client PO: Ste-Cecille
Project: SDC1009
Custody: 138426

Report Date: 9-Dec-2022
Order Date: 5-Dec-2022

Order #: 2250077

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Paracel ID	Client ID
2250077-01	MW1
2250077-02	MW2
2250077-03	MW3

Approved By: Mark Foto

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis

Client: CM3 Environmental Inc.

Client PO: Ste-Cecille

Report Date: 09-Dec-2022

Order Date: 5-Dec-2022

Project Description: SDC1009

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 200.8 - ICP-MS	7-Dec-22	7-Dec-22
PHC F1	CWS Tier 1 - P&T GC-FID	6-Dec-22	6-Dec-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	8-Dec-22	8-Dec-22
REG 153: PAHs by GC-MS	EPA 625 - GC-MS, extraction	7-Dec-22	7-Dec-22
REG 153: VOCs by P&T GC/MS	EPA 624 - P&T GC-MS	6-Dec-22	6-Dec-22

Certificate of Analysis

Report Date: 09-Dec-2022

Client: CM3 Environmental Inc.

Order Date: 5-Dec-2022

Client PO: Ste-Cecille

Project Description: SDC1009

	Client ID:	MW1	MW2	MW3	-
	Sample Date:	05-Dec-22 09:00	05-Dec-22 09:00	05-Dec-22 09:00	-
	Sample ID:	2250077-01	2250077-02	2250077-03	-
	MDL/Units	Water	Water	Water	-
Metals					
Antimony	0.5 ug/L	<0.5	<0.5	<0.5	-
Arsenic	1 ug/L	6	1	3	-
Barium	1 ug/L	487	595	582	-
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	-
Boron	10 ug/L	72	41	61	-
Cadmium	0.1 ug/L	<0.1	<0.1	<0.1	-
Chromium	1 ug/L	<1	<1	<1	-
Cobalt	0.5 ug/L	<0.5	<0.5	1.0	-
Copper	0.5 ug/L	<0.5	<0.5	1.9	-
Lead	0.1 ug/L	<0.1	<0.1	0.2	-
Molybdenum	0.5 ug/L	37.9	2.7	13.1	-
Nickel	1 ug/L	<1	<1	2	-
Selenium	1 ug/L	<1	<1	<1	-
Silver	0.1 ug/L	<0.1	<0.1	<0.1	-
Sodium	200 ug/L	160000	71100	143000	-
Thallium	0.1 ug/L	<0.1	<0.1	<0.1	-
Uranium	0.1 ug/L	8.0	0.6	3.7	-
Vanadium	0.5 ug/L	0.7	2.9	0.7	-
Zinc	5 ug/L	<5	<5	7	-
Volatiles					
Acetone	5.0 ug/L	<5.0	<5.0	<5.0	-
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromodichloromethane	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	-
Bromomethane	0.5 ug/L	<0.5	<0.5	<0.5	-
Carbon Tetrachloride	0.2 ug/L	<0.2	<0.2	<0.2	-
Chlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	-
Dichlorodifluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-

Certificate of Analysis

Client: CM3 Environmental Inc.

Client PO: Ste-Cecille

Report Date: 09-Dec-2022

Order Date: 5-Dec-2022

Project Description: SDC1009

	Client ID:	MW1	MW2	MW3	-
	Sample Date:	05-Dec-22 09:00	05-Dec-22 09:00	05-Dec-22 09:00	-
	Sample ID:	2250077-01	2250077-02	2250077-03	-
	MDL/Units	Water	Water	Water	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	<0.5	<0.5	-
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	-
Ethylene dibromide (dibromoethane, 1,2-)	0.2 ug/L	<0.2	<0.2	<0.2	-
Hexane	1.0 ug/L	<1.0	<1.0	<1.0	-
Methyl Ethyl Ketone (2-Butanone)	5.0 ug/L	<5.0	<5.0	<5.0	-
Methyl Isobutyl Ketone	5.0 ug/L	<5.0	<5.0	<5.0	-
Methyl tert-butyl ether	2.0 ug/L	<2.0	<2.0	<2.0	-
Methylene Chloride	5.0 ug/L	<5.0	<5.0	<5.0	-
Styrene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-
Trichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	-
Vinyl chloride	0.5 ug/L	<0.5	<0.5	<0.5	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	-
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	-
Xylenes, total	0.5 ug/L	<0.5	<0.5	<0.5	-
4-Bromofluorobenzene	Surrogate	137%	115%	115%	-
Dibromofluoromethane	Surrogate	92.0%	92.8%	92.2%	-
Toluene-d8	Surrogate	94.6%	102%	96.8%	-
Hydrocarbons					
F1 PHCs (C6-C10)	25 ug/L	<25	<25	<25	-
F2 PHCs (C10-C16)	100 ug/L	<100	<100	<100	-
F3 PHCs (C16-C34)	100 ug/L	<100	<100	<100	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	-
Semi-Volatiles					

Certificate of Analysis

Report Date: 09-Dec-2022

Client: CM3 Environmental Inc.

Order Date: 5-Dec-2022

Client PO: Ste-Cecille

Project Description: SDC1009

	Client ID:	MW1	MW2	MW3	-
	Sample Date:	05-Dec-22 09:00	05-Dec-22 09:00	05-Dec-22 09:00	-
	Sample ID:	2250077-01	2250077-02	2250077-03	-
	MDL/Units	Water	Water	Water	-
Acenaphthene	0.05 ug/L	<0.05	<0.05	<0.05	-
Acenaphthylene	0.05 ug/L	<0.05	0.06	<0.05	-
Anthracene	0.01 ug/L	<0.01	0.12	<0.01	-
Benzo [a] anthracene	0.01 ug/L	<0.01	0.18	<0.01	-
Benzo [a] pyrene	0.01 ug/L	<0.01	0.19	<0.01	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	0.16	<0.05	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	0.11	<0.05	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	0.09	<0.05	-
Chrysene	0.05 ug/L	<0.05	0.26	<0.05	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	<0.05	<0.05	-
Fluoranthene	0.01 ug/L	<0.01	0.45	<0.01	-
Fluorene	0.05 ug/L	<0.05	<0.05	<0.05	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	0.10	<0.05	-
1-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	-
2-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	-
Methylnaphthalene (1&2)	0.10 ug/L	<0.10	<0.10	<0.10	-
Naphthalene	0.05 ug/L	<0.05	<0.05	<0.05	-
Phenanthrene	0.05 ug/L	<0.05	0.42	<0.05	-
Pyrene	0.01 ug/L	<0.01	0.36	<0.01	-
2-Fluorobiphenyl	Surrogate	68.2%	76.5%	74.1%	-
Terphenyl-d14	Surrogate	102%	119%	96.8%	-

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Metals									
Antimony	ND	0.5	ug/L						
Arsenic	ND	1	ug/L						
Barium	ND	1	ug/L						
Beryllium	ND	0.5	ug/L						
Boron	ND	10	ug/L						
Cadmium	ND	0.1	ug/L						
Chromium	ND	1	ug/L						
Cobalt	ND	0.5	ug/L						
Copper	ND	0.5	ug/L						
Lead	ND	0.1	ug/L						
Molybdenum	ND	0.5	ug/L						
Nickel	ND	1	ug/L						
Selenium	ND	1	ug/L						
Silver	ND	0.1	ug/L						
Sodium	ND	200	ug/L						
Thallium	ND	0.1	ug/L						
Uranium	ND	0.1	ug/L						
Vanadium	ND	0.5	ug/L						
Zinc	ND	5	ug/L						
Semi-Volatiles									
Acenaphthene	ND	0.05	ug/L						
Acenaphthylene	ND	0.05	ug/L						
Anthracene	ND	0.01	ug/L						
Benzo [a] anthracene	ND	0.01	ug/L						
Benzo [a] pyrene	ND	0.01	ug/L						
Benzo [b] fluoranthene	ND	0.05	ug/L						
Benzo [g,h,i] perylene	ND	0.05	ug/L						
Benzo [k] fluoranthene	ND	0.05	ug/L						
Chrysene	ND	0.05	ug/L						
Dibenzo [a,h] anthracene	ND	0.05	ug/L						
Fluoranthene	ND	0.01	ug/L						
Fluorene	ND	0.05	ug/L						
Indeno [1,2,3-cd] pyrene	ND	0.05	ug/L						
1-Methylnaphthalene	ND	0.05	ug/L						
2-Methylnaphthalene	ND	0.05	ug/L						
Methylnaphthalene (1&2)	ND	0.10	ug/L						
Naphthalene	ND	0.05	ug/L						
Phenanthrene	ND	0.05	ug/L						
Pyrene	ND	0.01	ug/L						
Surrogate: 2-Fluorobiphenyl	*17.5*		*ug/L*		*87.7*	*50-140*			
Surrogate: Terphenyl-d14	*22.3*		*ug/L*		*111*	*50-140*			
Volatiles									
Acetone	ND	5.0	ug/L						
Benzene	ND	0.5	ug/L						
Bromodichloromethane	ND	0.5	ug/L						
Bromoform	ND	0.5	ug/L						
Bromomethane	ND	0.5	ug/L						
Carbon Tetrachloride	ND	0.2	ug/L						
Chlorobenzene	ND	0.5	ug/L						
Chloroform	ND	0.5	ug/L						
Dibromochloromethane	ND	0.5	ug/L						
Dichlorodifluoromethane	ND	1.0	ug/L						
1,2-Dichlorobenzene	ND	0.5	ug/L						

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	ND	0.5	ug/L						
1,4-Dichlorobenzene	ND	0.5	ug/L						
1,1-Dichloroethane	ND	0.5	ug/L						
1,2-Dichloroethane	ND	0.5	ug/L						
1,1-Dichloroethylene	ND	0.5	ug/L						
cis-1,2-Dichloroethylene	ND	0.5	ug/L						
trans-1,2-Dichloroethylene	ND	0.5	ug/L						
1,2-Dichloropropane	ND	0.5	ug/L						
cis-1,3-Dichloropropylene	ND	0.5	ug/L						
trans-1,3-Dichloropropylene	ND	0.5	ug/L						
1,3-Dichloropropene, total	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Ethylene dibromide (dibromoethane, 1,2	ND	0.2	ug/L						
Hexane	ND	1.0	ug/L						
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L						
Methyl Isobutyl Ketone	ND	5.0	ug/L						
Methyl tert-butyl ether	ND	2.0	ug/L						
Methylene Chloride	ND	5.0	ug/L						
Styrene	ND	0.5	ug/L						
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L						
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L						
Tetrachloroethylene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
1,1,1-Trichloroethane	ND	0.5	ug/L						
1,1,2-Trichloroethane	ND	0.5	ug/L						
Trichloroethylene	ND	0.5	ug/L						
Trichlorofluoromethane	ND	1.0	ug/L						
Vinyl chloride	ND	0.5	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Xylenes, total	ND	0.5	ug/L						
Surrogate: 4-Bromofluorobenzene	*92.5*		*ug/L*		*116*	*50-140*			
Surrogate: Dibromofluoromethane	*75.3*		*ug/L*		*94.1*	*50-140*			
Surrogate: Toluene-d8	*76.5*		*ug/L*		*95.7*	*50-140*			

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L	ND			NC	30	
Metals									
Antimony	0.58	0.5	ug/L	ND			NC	20	
Arsenic	6.1	1	ug/L	5.9			4.2	20	
Barium	475	1	ug/L	487			2.3	20	
Beryllium	ND	0.5	ug/L	ND			NC	20	
Boron	74	10	ug/L	72			2.4	20	
Cadmium	ND	0.1	ug/L	ND			NC	20	
Chromium	ND	1	ug/L	ND			NC	20	
Cobalt	ND	0.5	ug/L	ND			NC	20	
Copper	ND	0.5	ug/L	ND			NC	20	
Lead	0.11	0.1	ug/L	ND			NC	20	
Molybdenum	38.0	0.5	ug/L	37.9			0.1	20	
Nickel	ND	1	ug/L	ND			NC	20	
Selenium	ND	1	ug/L	ND			NC	20	
Silver	ND	0.1	ug/L	ND			NC	20	
Sodium	158000	200	ug/L	160000			1.3	20	
Thallium	ND	0.1	ug/L	ND			NC	20	
Uranium	7.8	0.1	ug/L	8.0			2.1	20	
Vanadium	0.79	0.5	ug/L	0.74			6.6	20	
Zinc	ND	5	ug/L	ND			NC	20	
Volatiles									
Acetone	ND	5.0	ug/L	ND			NC	30	
Benzene	ND	0.5	ug/L	ND			NC	30	
Bromodichloromethane	ND	0.5	ug/L	ND			NC	30	
Bromoform	ND	0.5	ug/L	ND			NC	30	
Bromomethane	ND	0.5	ug/L	ND			NC	30	
Carbon Tetrachloride	ND	0.2	ug/L	ND			NC	30	
Chlorobenzene	ND	0.5	ug/L	ND			NC	30	
Chloroform	ND	0.5	ug/L	ND			NC	30	
Dibromochloromethane	ND	0.5	ug/L	ND			NC	30	
Dichlorodifluoromethane	ND	1.0	ug/L	ND			NC	30	
1,2-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,3-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,4-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
cis-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
trans-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloropropane	ND	0.5	ug/L	ND			NC	30	
cis-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
Ethylbenzene	ND	0.5	ug/L	ND			NC	30	
Ethylene dibromide (dibromoethane, 1,2-	ND	0.2	ug/L	ND			NC	30	
Hexane	ND	1.0	ug/L	ND			NC	30	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	ND			NC	30	
Methyl Isobutyl Ketone	ND	5.0	ug/L	ND			NC	30	
Methyl tert-butyl ether	ND	2.0	ug/L	ND			NC	30	
Methylene Chloride	ND	5.0	ug/L	ND			NC	30	
Styrene	ND	0.5	ug/L	ND			NC	30	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
Tetrachloroethylene	ND	0.5	ug/L	ND			NC	30	
Toluene	ND	0.5	ug/L	ND			NC	30	
1,1,1-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2-Trichloroethane	ND	0.5	ug/L	ND			NC	30	

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Trichloroethylene	ND	0.5	ug/L	ND			NC	30	
Trichlorofluoromethane	ND	1.0	ug/L	ND			NC	30	
Vinyl chloride	ND	0.5	ug/L	ND			NC	30	
m,p-Xylenes	ND	0.5	ug/L	ND			NC	30	
o-Xylene	ND	0.5	ug/L	ND			NC	30	
Surrogate: 4-Bromofluorobenzene	*98.8*		*ug/L*		*123*	*50-140*			
Surrogate: Dibromofluoromethane	*75.9*		*ug/L*		*94.9*	*50-140*			
Surrogate: Toluene-d8	*77.6*		*ug/L*		*97.0*	*50-140*			

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	1740	25	ug/L	ND	87.2	68-117			
F2 PHCs (C10-C16)	1500	100	ug/L	ND	93.7	60-140			
F3 PHCs (C16-C34)	3710	100	ug/L	ND	94.5	60-140			
F4 PHCs (C34-C50)	1900	100	ug/L	ND	76.7	60-140			
Metals									
Antimony	44.1	0.5	ug/L	ND	88.3	80-120			
Arsenic	63.9	1	ug/L	5.9	116	80-120			
Barium	55.1	1	ug/L	ND	110	80-120			
Beryllium	43.3	0.5	ug/L	ND	86.6	80-120			
Boron	118	10	ug/L	72	93.3	80-120			
Cadmium	42.0	0.1	ug/L	ND	84.0	80-120			
Chromium	56.3	1	ug/L	ND	112	80-120			
Cobalt	52.1	0.5	ug/L	ND	104	80-120			
Copper	47.2	0.5	ug/L	ND	93.9	80-120			
Lead	43.2	0.1	ug/L	ND	86.3	80-120			
Molybdenum	89.3	0.5	ug/L	37.9	103	80-120			
Nickel	50.5	1	ug/L	ND	99.4	80-120			
Selenium	51.3	1	ug/L	ND	102	80-120			
Silver	58.4	0.1	ug/L	ND	117	80-120			
Sodium	11000	200	ug/L	ND	110	80-120			
Thallium	45.6	0.1	ug/L	ND	91.2	80-120			
Uranium	58.1	0.1	ug/L	8.0	100	80-120			
Vanadium	56.7	0.5	ug/L	0.74	112	80-120			
Zinc	45	5	ug/L	ND	82.2	80-120			
Semi-Volatiles									
Acenaphthene	3.94	0.05	ug/L	ND	78.8	50-140			
Acenaphthylene	3.21	0.05	ug/L	ND	64.2	50-140			
Anthracene	3.86	0.01	ug/L	ND	77.3	50-140			
Benzo [a] anthracene	3.79	0.01	ug/L	ND	75.8	50-140			
Benzo [a] pyrene	4.30	0.01	ug/L	ND	86.1	50-140			
Benzo [b] fluoranthene	4.12	0.05	ug/L	ND	82.3	50-140			
Benzo [g,h,i] perylene	3.59	0.05	ug/L	ND	71.8	50-140			
Benzo [k] fluoranthene	4.15	0.05	ug/L	ND	83.0	50-140			
Chrysene	4.36	0.05	ug/L	ND	87.1	50-140			
Dibenzo [a,h] anthracene	3.95	0.05	ug/L	ND	79.1	50-140			
Fluoranthene	3.89	0.01	ug/L	ND	77.8	50-140			
Fluorene	3.73	0.05	ug/L	ND	74.6	50-140			
Indeno [1,2,3-cd] pyrene	3.47	0.05	ug/L	ND	69.4	50-140			
1-Methylnaphthalene	4.66	0.05	ug/L	ND	93.1	50-140			
2-Methylnaphthalene	4.97	0.05	ug/L	ND	99.3	50-140			
Naphthalene	4.32	0.05	ug/L	ND	86.4	50-140			
Phenanthrene	3.98	0.05	ug/L	ND	79.6	50-140			
Pyrene	3.83	0.01	ug/L	ND	76.5	50-140			
Surrogate: 2-Fluorobiphenyl	*20.0*		*ug/L*		*99.9*	*50-140*			
Surrogate: Terphenyl-d14	*24.7*		*ug/L*		*123*	*50-140*			
Volatiles									
Acetone	72.5	5.0	ug/L	ND	72.5	50-140			
Benzene	37.4	0.5	ug/L	ND	93.4	60-130			

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	38.0	0.5	ug/L	ND	95.0	60-130			
Bromoform	39.6	0.5	ug/L	ND	98.9	60-130			
Bromomethane	48.4	0.5	ug/L	ND	121	50-140			
Carbon Tetrachloride	36.2	0.2	ug/L	ND	90.6	60-130			
Chlorobenzene	46.0	0.5	ug/L	ND	115	60-130			
Chloroform	37.5	0.5	ug/L	ND	93.8	60-130			
Dibromochloromethane	42.9	0.5	ug/L	ND	107	60-130			
Dichlorodifluoromethane	45.9	1.0	ug/L	ND	115	50-140			
1,2-Dichlorobenzene	38.3	0.5	ug/L	ND	95.7	60-130			
1,3-Dichlorobenzene	47.3	0.5	ug/L	ND	118	60-130			
1,4-Dichlorobenzene	45.1	0.5	ug/L	ND	113	60-130			
1,1-Dichloroethane	37.8	0.5	ug/L	ND	94.4	60-130			
1,2-Dichloroethane	30.3	0.5	ug/L	ND	75.7	60-130			
1,1-Dichloroethylene	40.3	0.5	ug/L	ND	101	60-130			
cis-1,2-Dichloroethylene	44.0	0.5	ug/L	ND	110	60-130			
trans-1,2-Dichloroethylene	35.5	0.5	ug/L	ND	88.7	60-130			
1,2-Dichloropropane	33.2	0.5	ug/L	ND	83.0	60-130			
cis-1,3-Dichloropropylene	41.0	0.5	ug/L	ND	102	60-130			
trans-1,3-Dichloropropylene	41.6	0.5	ug/L	ND	104	60-130			
Ethylbenzene	47.0	0.5	ug/L	ND	117	60-130			
Ethylene dibromide (dibromoethane, 1,2	42.9	0.2	ug/L	ND	107	60-130			
Hexane	48.1	1.0	ug/L	ND	120	60-130			
Methyl Ethyl Ketone (2-Butanone)	81.4	5.0	ug/L	ND	81.4	50-140			
Methyl Isobutyl Ketone	97.7	5.0	ug/L	ND	97.7	50-140			
Methyl tert-butyl ether	95.9	2.0	ug/L	ND	95.9	50-140			
Methylene Chloride	30.3	5.0	ug/L	ND	75.8	60-130			
Styrene	44.9	0.5	ug/L	ND	112	60-130			
1,1,1,2-Tetrachloroethane	42.6	0.5	ug/L	ND	106	60-130			
1,1,2,2-Tetrachloroethane	41.8	0.5	ug/L	ND	105	60-130			
Tetrachloroethylene	47.4	0.5	ug/L	ND	119	60-130			
Toluene	39.7	0.5	ug/L	ND	99.2	60-130			
1,1,1-Trichloroethane	35.6	0.5	ug/L	ND	89.0	60-130			
1,1,2-Trichloroethane	42.7	0.5	ug/L	ND	107	60-130			
Trichloroethylene	33.0	0.5	ug/L	ND	82.6	60-130			
Trichlorofluoromethane	33.0	1.0	ug/L	ND	82.6	60-130			
Vinyl chloride	37.6	0.5	ug/L	ND	94.0	50-140			
m,p-Xylenes	95.5	0.5	ug/L	ND	119	60-130			
o-Xylene	45.4	0.5	ug/L	ND	114	60-130			
Surrogate: 4-Bromofluorobenzene	*84.5*		*ug/L*		*106*	*50-140*			
Surrogate: Dibromofluoromethane	*69.9*		*ug/L*		*87.3*	*50-140*			
Surrogate: Toluene-d8	*65.6*		*ug/L*		*82.1*	*50-140*			

Qualifier Notes:

Login Qualifiers :

Container(s) - Labeled improperly/insufficient information - No sample ID on metals by ICP-MS - 125ml bottle.
Applies to samples: MW1

Sample - Not submitted in the correct container - PHC F1 & VOCs.
Applies to samples: MW1

Sample Qualifiers :

3 : MW-1 not properly preserved for VOCs (sodium thiosulphate preserved vials).

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.