TERRAPEX

WELLDALE LIMITED PARTNERSHIP

PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT

1186-1196 Wellington Street West, Ottawa, Ontario

FINAL REPORT

June 23, 2021

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PROJECT # CO810.00

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LIST OF ACRONYMS

amsl	Above mean sea level
ANSI:	Area of Natural or Scientific Interest
APEC:	Area of Potential Environmental Concern
AST:	Aboveground Storage Tank
BH:	Borehole
BTEX:	Benzene, Toluene, Ethylbenzene, and Xylenes
CALA:	Canadian Analytical Laboratories Association
COC:	Contaminant of Concern
COPC:	Contaminant of Potential Concern
CSA:	Canadian Standards Association
CSM:	Conceptual Site Model
CV:	Combustible Vapour
DO:	Dissolved Oxygen
DNAPL:	Dense Non-aqueous Phase Liquid
EC:	Electrical Conductivity
ERIS:	Environmental Risk Information Service Ltd.
EPA:	Environmental Protection Act
ESA:	Environmental Site Assessment
F1-F4	Petroleum hydrocarbon fractions 1 through 4 of the CCME Canada Wide Standards
HDPE:	High density polyethylene
LDPE:	Low density polyethylene
LEL:	Lower Explosive Limit
LNAPL:	Light Non-aqueous Phase Liquid
LPH:	Liquid-Phase Petroleum Hydrocarbons (free-product)
MECP:	Ministry of Environment, Conservation and Parks
mg/kg:	milligrams per kilogram
m bg	metres below grade
mg/L:	milligrams per litre
MGRA:	Modified Generic Risk Assessment (under O. Reg. 153/04)
MNR:	Ontario Ministry of Natural Resources
MOE:	Ontario Ministry of Environment
MOECC:	Ontario Ministry of Environment and Climate Change
MW:	Monitoring well
NAPL:	Non-aqueous Phase Liquid
NHIC:	Natural Heritage Information Centre
ORP:	oxidation-reduction potential
OSHA:	Occupational Safety and Health Act
PAHs:	Polycyclic Aromatic Hydrocarbons
PCA:	Potentially Contaminating Activity (from O. Reg. 153/04)
PCBs:	Polychlorinated Biphenyls
PHC:	Petroleum Hydrocarbon
PID:	Photo Ionization Detector
ppm:	Parts Per Million
PVC:	Polyvinyl chloride
QA:	Quality Assurance
QC:	Quality Control

LIST OF ACRONYMS (CONTINUED)

QP:	Qualified Person under O. Reg. 143/04
RA:	Risk Assessment
RAP:	Remedial Action Plan
RDL:	Reportable Detection Limit
RSC:	Record of Site Condition (under O. Reg. 153/04)
R.R.O. 1990:	Revised Regulations of Ontario, 1990.
SAR:	Sodium Adsorption Ratio
SCC:	Standards Council of Canada
SCS:	Site Condition Standards (from O. Reg. 153/04)
SOP:	Standard Operating Procedure
SV:	Soil Vapour
SVOCs:	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Procedure (Reg. 558/00)
TOC:	Total Organic Carbon
TP:	Test Pit
TPH:	Total Petroleum Hydrocarbons
UST:	Underground Storage Tank
VOCs:	Volatile Organic Compounds
WWIS:	Water Well Information System

1.0 EXECUTIVE SUMMARY

Terrapex Environmental Ltd. (Terrapex) was retained by Welldale Limited Partnership (Welldale or the Client) to conduct a Phase Two Environmental Site Assessment (ESA) of the properties located at 1186-1196 Wellington Street West, Ottawa, Ontario (referenced variously as the "Phase Two Property" or the "Site").

It is understood that the study documented herein is being undertaken by Welldale for the purpose of filing a Record of Site Condition per Ontario Regulation 153/04, *Records of Site Condition - Part XV.1 of the Act* for the Site as part of the proposed re-development of the Site for future mixed-use including residential.

The overall objective of the investigation was to assess Areas of Potential Environmental Concern (APECs) identified during a previous Phase One ESA work program at the Site. Secondary objectives were to identify the location and concentration of contaminants in the land or water on, in, or under the Phase Two Property.

The Site is located on the south side of Wellington Street West, to the southwest of the intersection with Parkdale Ave. The Site comprises three adjacent properties and is rectangular in shape, with a total area of approximately 2,495 m^2. The Site is relatively flat other than a downward slope towards a loading dock at the back of the building on the 1188-1190 Wellington Street West property.

There are buildings on the 1188-1190 and 1194-1196 Wellington Street West properties with footprints of approximately 400 m^2 and 865 m^2, respectively. The 1186 Wellington Street West property is a parking lot with an area of approximately 978 m^2

A Phase One ESA identified seven APECs for the Site. Based on the Phase One Conceptual Site Model (CSM), a sampling and analysis plan (SAAP) was developed to assess each of the APECs for contaminants of potential concern (COPCs) in any potentially impacted media.

Eleven boreholes were drilled as part of this Phase Two ESA, five of which were completed as monitoring wells. Representative soil and groundwater samples were submitted for laboratory analysis of COPCs.

Full Depth Generic Site Condition Standards (SCS) applicable to residential, parkland, or institutional property use listed in Table 3 of the April 15, 2011 Ministry of the Environment, Conservation and Parks (MECP) *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* document (hereafter referenced as the MECP Table 3 SCS) were considered appropriate for evaluating laboratory analytical results.

The Phase Two ESA investigation of the Site, as documented in this report, determined that:

- a COPC was identified within soil at the Site (barium concentration in soil sample MW111-1, located in APECs 3, 4, and 7, at a depth 0.0 – 0.6 m below grade (bg) was greater than the MECP Table 3 SCS);
- groundwater impacts were not identified (concentrations of all COPCs were below MECP Table 3 SCS); and,
- sediment was not present at the Site.

As delineated soil impacts remain on-Site, additional investigative, remedial, and/or risk assessment work will be required to file a Record of Site Condition (RSC). However, it is understood that all soil at the Site will be excavated as part of the proposed re-development.

2.0 INTRODUCTION

Terrapex Environmental Ltd. (Terrapex) was retained by Welldale Limited Partnership (Welldale or the Client) to conduct a Phase Two Environmental Site Assessment (ESA) of the properties located at 1186-1196 Wellington Street West, Ottawa, Ontario (referenced variously as the "Phase Two Property" or the "Site").

It is understood that the study documented herein is being undertaken by Welldale for the purpose of filing a Record of Site Condition (RSC) per Ontario Regulation 153/04 (O. Reg. 153/04), *Records of Site Condition - Part XV.1 of the Act* for the Site as part of the proposed re-development of the Site for future mixed-use including residential.

The overall objective of the investigation was to assess Areas of Potential Environmental Concern (APECs) identified during a previous Phase One ESA work program at the Site. Secondary objectives were to identify the location and concentration of contaminants in the land or water on, in, or under the Phase Two Property.

The findings of the Phase One ESA are documented in Terrapex's report entitled *Phase One Environmental Site Assessment, 1186-1196 Wellington Street West, Ottawa, Ontario, Final Report,* dated June 23, 2021.

2.1 SITE DESCRIPTION

The Site is located on the south side of Wellington Street West between Parkdale Avenue and Hamilton Avenue North. The Site comprises three adjacent properties with civic addresses 1186, 1188-1190 and 1194-1196 Wellington Street West. The Site is rectangular in shape with a total area of approximately 2,495 m^2. The Site is relatively flat other than a downward slope towards a loading dock at the back of the building on the 1188-1190 Wellington Street West property.

There are buildings on the 1188-1190 and 1194-1196 Wellington Street West properties with footprints of approximately 400 m^2 and 865 m^2, respectively. The 1186 Wellington Street West property is a parking lot with an area of approximately 978 m^2.

Information regarding the location and identification of the Phase One property is provided in the table below. Refer to Figure 1 for the location of the Site, and to Figure 2 for the general layout of the Site at the time of the site reconnaissance.

SUMMARY OF PHASE ONE PROPERTY INFORMATION

Address:	1186-1196 Wellington Street West, Ottawa, Ontario
Property Identification Number:	1186 Wellington Street West 04094-0217 (LT) 1188-1190 Wellington Street West 04094-0154 (LT) 1194-1196 Wellington Street West 04094-0155 (LT)
Legal Description:	1186 Wellington Street West Part of Lots A and B, Plan 58, South Wellington St., Ottawa, as in CR181530, Except Parts 1 and 2 Plan 4R18253 1188-1190 Wellington Street West Part Lot B, Plan 58, South of Wellington St, as in CR437155; Ottawa 1194-1196 Wellington Street West Lot C, Plan 58, South of Wellington St.; Part Lot D, Plan 58, South of Wellington St, as in N704521; Ottawa
UTM Coordinates (centre of site):	18T East: 442,910 m North: 5,027,685 m
Site Area:	2,495 m^2
Structures:	Buildings (on the 1188-1190 and 1194-1196 Wellington Street West properties)
Occupants (current):	1186 Wellington Street West – vacant (parking lot) 1188-1190 Wellington Street West – Rexall Drugstore (main floor), unoccupied (2nd floor) 1194-1196 Wellington Street West – Cornerstone House of Refuge Apostolic Church
Other facilities of note:	None

Welldale provided a Surveyor's Real Property Report, entitled *Part 1 – Plan of Survey, Part of Lots A, B, C & D, Registered Plan 58 (Geographic Township of Nepean), City of Ottawa* prepared by Stantec Geomatic Ltd., dated July 2, 2020. A copy of the plan of survey is included in Appendix I.

2.2 PROPERTY OWNERSHIP

The registered owner of the Site is Welldale Limited Partnership. Authorization to proceed with the study was provided by Mr. Kevin A. Harper, Infill Development Director at Welldale, located at 200-180 Kent Street in Ottawa, Ontario.

2.3 CURRENT AND PROPOSED FUTURE USES

Current Site usage includes:

- An asphalt-covered parking lot at 1186 Wellington Street West;
- A Rexall Pharmacy and office space (currently unoccupied) at 1188-1190 Wellington Street West; and,
- The Cornerstone House of Refuge Apostolic Church at 1194-1196 Wellington Street West.

The existing ground surface at the Site is relatively flat with no significant slopes. The elevation ranged between 65.2 to 65.8 m above mean sea level (amsl).

Our understanding of the proposed future Site uses are based on the information and files provided by Welldale. It is our understanding that Welldale has purchased the Site (i.e. all three properties) with the intent to demolish all of the existing structures and construct a single mixed-use (residential and commercial) building ranging between one and eighteen storeys in height with a maximum three levels of underground parking.

Terrapex also understands that the Client has completed their pre-purchase due diligence and now requires a detailed assessment to support the planned re-development of the Site.

2.4 APPLICABLE SITE CONDITION STANDARDS

Generic Ministry of the Environment, Conservation and Parks (MECP) Site Condition Standards (SCS) for evaluating laboratory analytical results were selected from the April 15, 2011 *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* (MOE, 2011) document on the basis of the criteria specified in O. Reg. 153/04.

The Site specific details which influenced the soil and groundwater standards selection are summarized below:

- the Site is not within or adjacent to an area of natural significance as defined within Section 1 (1) of O. Reg. 153/04, does not include any land within 30 m of an area of natural significance, and is not otherwise considered ”potentially sensitive”;
- the soil pH was between the prescribed values for the application of generic SCS;
- more than 2 m of overburden was observed over at least two-thirds of the area of the Site;
- the Site does not include a waterbody and is not located within 30 m of a waterbody;
- stratified site conditions will not be used when evaluating laboratory analytical results;
- current use of the Site is considered to be commercial/institutional;
- proposed future use of the Site is expected to be commercial and residential and the proposed grading is anticipated not to vary significantly from the existing grade;
- potable water at the Site, and all other properties located (in whole or in part) within 250 m of the Site, is supplied by a municipal drinking water system (as defined in the *Safe Drinking Water Act, 2002*);
- neither the Site nor any property located (in whole or in part) within 250 m of the Site has a well that is used or intended for use as a source of water for human consumption or for agriculture;
- the Site is not located in an area designated in a municipal Official Plan as a well-head protection area, or another designation by the municipality intended for the protection of groundwater; and,
- soil texture at the Site has been classified as “coarse textured” based on the result of grain size analysis conducted for two representative soil samples.

Based on the above, Full Depth Generic SCS applicable to residential, parkland, or institutional property use that are listed in Table 3 of the April 15, 2011 MECP *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* document (hereafter referenced as the MECP Table 3 SCS) are considered appropriate for evaluating laboratory analytical results.

In accordance with the requirements of Section 35 of O. Reg. 153/04, notification of the intent to use standards corresponding to a non-potable groundwater condition was provided to the Clerk of the City of Ottawa on May 21, 2021. In a letter dated June 14, 2021, the municipality indicated its concurrence with the proposed use of non-potable standards at the Site. A copy of the notification correspondence is provided in Appendix II.

3.0 BACKGROUND INFORMATION

3.1 PHYSICAL SETTING

3.1.1 WATER BODIES & AREAS OF NATURAL SIGNIFICANCE

Water Bodies: The nearest mapped water body is the Ottawa River, located approximately 1.2 km north of the Site.

Areas of Natural Significance: Terrapex conducted a search of the information provided on the Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO) on-line map of Natural Heritage Areas to identify any environmentally sensitive areas or areas of natural significance within the Phase One Study Area. Search results indicated that there are no Provincial Parks, Conservation Reserves, Areas of Natural or Scientific Interest, or Wetlands in the Phase One Study Area.

3.1.2 TOPOGRAPHY & SURFACE WATER DRAINAGE

Topography: Based on contour information obtained from the geoOttawa mapping application, the land in the vicinity of the Site slopes down generally to the northwest towards the Ottawa River.

The existing ground surface at the Site is relatively flat with no slopes with elevations near 65.2 to 65.8 m amsl.

Surface Water Drainage: Mapping available on the Rideau Valley Conservation Authority (RVCA) website indicates that the Site is within the Ottawa River West sub-watershed. Accordingly, surface water drainage from the Site (other than what is captured into the municipal storm water sewer system) may ultimately flow to this water body.

Interpreted Direction of Groundwater Flow: Based on topography, the general regional groundwater flow is assumed to be northwest towards the Ottawa River. It should be recognized that groundwater flow at the Site might also be influenced by local subsurface structures and utilities.

3.2 PAST INVESTIGATIONS

Terrapex was provided with three previous environmental reports by the client to review as summarized below.

***Phase I Environmental Site Assessment (Revised), 1194 and 1196 Wellington Street West, Ottawa, Ontario*, prepared by Pinchin for Cornerstone House of Refuge, August 23, 2018**

Pinchin conducted a Phase I ESA for the 1194-1196 Wellington Street West property. The relevant findings of the report are as follows:

- At the time of the assessment, the property was developed with building used as a church. Previously the building was used as a theatre with some commercial space.
- Pinchin indicated that the building was constructed at some time between 1947 and 1949.
- The building was previously heated by heating oil stored in an aboveground storage tank (AST) that was located in the southwest portion of the basement (the date of removal was not provided). Vent and fill pipes were observed by Pinchin in the southwest corner of the property.
- The following other potential environmental concerns were identified:
    - Patton's Cleaners and Dyers (i.e. a former dry cleaner) (located approximately 10 m west of the Site); and,
    - A retail fuel outlet was formerly located at 1186 Wellington Street West (i.e. on-Site) that operated between approximately 1930 and 1984. Further, records indicated that 3,000 L of furnace oil spilled at the property in 1992, and an unknown quantity of gasoline spilled in 1993.

Based on the findings of the Phase I ESA, Pinchin recommended that a Phase II ESA be conducted.

***Phase I-Environmental Site Assessment, 1186, 1188, 1194 and 1196 Wellington Street, Ottawa, Ontario*, prepared by Paterson for Minto Communities, July 16, 2020**

Paterson conducted a Phase I ESA that included all three properties that comprise the Site. Although referred to as a Phase I ESA, Paterson indicated that the assessment was conducted in accordance with the requirements of O. Reg. 153/04 (i.e. a Phase One ESA). The relevant findings of the report are as follows:

- The Site layout and occupants are the same as current (i.e. Rexall pharmacy and church).

- Paterson reported that the Site was first developed in 1902 for institutional purposes. Previous occupants of the Site have included the Evangelist Church, Elmdale Theatre, Imperial Oil (gas station), a retail furniture store, pharmacy and Cornerstone House of Apostolic Church.
- A former dry cleaner was located at 1200 Wellington Street West (located approximately 10 m west of the Site). Paterson indicated that they had conducted a previous investigation that included two boreholes along the eastern boundary of that property (i.e. towards the Site) that included sampling of volatile organic compounds (VOCs). Based on the results of the investigation, Paterson concluded that they did not consider the former dry cleaner as an APEC for the Site.
- Paterson provided a review of three remediation reports for the 1186 Wellington Street West property. These reports were not available to Terrapex for review. The Paterson summary indicated that remediation of the former gas station/automotive service garage was conducted between 1996 and 2001 and included the removal of the majority of the soil and upper bedrock at the property to a depth of approximately 3.5 m below grade (bg). Paterson indicated that it was possible that some limited impacted soil remained around the perimeter of the property.
- The buildings on the 1188-1190 and 1194-1196 Wellington Street West properties were heated by natural gas fired equipment. Evidence of a former heating oil AST was observed in the southwest corner of the basement of the church.
- Paterson identified the following APECs:
    - APEC 1 – former UST nest and identified furnace oil and gasoline releases in the northeastern portion of the Site;
    - APEC 2 – former pump island located in the eastern portion of the Site;
    - APEC 3 – former automotive service garage located on eastern portion of the Site;
    - APEC 4 – importation of fill material of unknown quality across the eastern and southern portions of the Site;
    - APEC 5 – former furnace oil ASTs reportedly located in the southwest corner of the church building; and,
    - APEC 6 - Operating retail fuel outlet at 390 Parkdale Avenue, located at the northwest corner of Wellington Street and Parkdale Avenue (north of the eastern portion of the Site).
- Potential contaminants of concern (PCOC) were identified as petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylenes (collectively BTEX), polycyclic aromatic hydrocarbons (PAHs), and metals and inorganics.

Paterson recommended that a Phase Two ESA be conducted to address the identified APECs. Paterson also recommended that a designated substance survey (DSS) be conducted on each building prior to their demolition.

***Phase II Environmental Site Assessment, 1186, 1188, 1194 and 1196 Wellington Street, Ottawa, Ontario*, prepared by Paterson for Minto Communities, July 29, 2020**

Paterson conducted a Phase Two ESA to assess the APECs identified in the Phase One ESA. The assessment work included the drilling of six boreholes (BH1 to BH6) to a maximum depth of 7.57 m bg, five of which were completed as monitoring wells (all with the exception of BH4). The relevant findings of the report are as follows:

- Analytical results were compared to the MECP Table 3 Site Condition Standards (SCS) applicable in a non-potable groundwater situation for residential / parkland / institutional property use and coarse-textured soil.
- The stratigraphy at the Site was described as asphalt, silty sand to silty clay fill material underlain by limestone bedrock. Sandy silt till was noted above the bedrock at boreholes BH1 and BH6. Bedrock was encountered at depths that ranged between approximately 2.13 and 3.50 m bg.
- Each of the monitoring wells was installed and screened within the bedrock.
- Groundwater flow was determined to be to the north.
- The soil analytical results indicated concentrations of electrical conductivity (EC) and/or sodium adsorption ration (SAR) that exceeded the MECP Table 3 SCS within the fill layer at boreholes BH1, BH2, BH4 and BH6. Concentrations of PHC F3 also exceeded the MECP Table 3 SCS in sample BH6-AU1.
- The concentrations of PHCs, BTEX and volatile organic compounds (VOCs) in the groundwater samples were less than the MECP Table 3 SCS.

Paterson indicated that soil that does not meet the MECP Table 3 SCS and would need to be remediated prior to obtaining the RSC.

Based on a review of the Paterson results, Terrapex makes the following comments:

- The exceedance of EC and SAR are likely related to de-icing of the parking lot in the winter and therefore may not be considered as an exceedance of the Table 3 SCS based on recent amendments to O. Reg. 153/04.
- The PHC F3 exceedance and elevated PHC F4 fraction in sample BH6-AU1 appears anomalous. It was noted that the sample was collected directly beneath the asphalt layer and the result may have been influenced by asphalt residue in the sample.
- Based on the location of the boreholes/monitoring wells, it appears that APEC 5 (related to the former AST in the basement of the church) was not assessed.

4.0 SCOPE OF INVESTIGATION

4.1 OVERVIEW OF SITE INVESTIGATION

Terrapex has reviewed the previous Phase II ESA work undertaken by Paterson in 2020 and is satisfied that the field and analytical work was undertaken in accordance with the protocols of O. Reg. 153/04. Data from that investigation was used in developing the sampling and analysis plan (SAAP).

The scope of Terrapex's assessment comprised the following:

- preparing a SAAP which identified target sampling locations and associated rationale, a proposed laboratory analytical program, sample containers and preservation methods, and the number and type of quality control (QC) samples;
- advancing eleven boreholes on-Site (BH101 to MW111) to depths between approximately 5.3 m and 20.0 m bg using a CME 55 drill rig with standard hollow-stem augers and split-spoon sampling equipment, followed by HQ bedrock coring (for all exterior location), or Geoprobe 420M portable drill rig with dual-tube sampling equipment, followed by downhole air hammer (for MW109 drilled within the building);
- additional soil sampling was conducted at borehole MW111 on May 20, 2021 to address a data gap from the initial drilling;
- collecting soil samples during drilling, and logging visual, olfactory and tactile soil characteristics, including evidence of chemical impacts, if any;
- measuring combustible soil vapour (CSV) concentrations in soil samples;
- submitting selected soil samples for laboratory analyses of COPCs based on the SAAP and field observations;
- installing groundwater monitoring wells at five of the borehole locations;
- developing the newly-installed groundwater monitoring wells;
- monitoring the existing (Paterson 2020) and newly-installed wells for depth to water, combustible vapour (CV) concentrations, and light or dense non-aqueous phase liquid (LNAPL and DNAPL) , if any;
- collecting and submitting groundwater samples from the new monitoring wells for laboratory analyses of COPCs based on the SAAP;
- surveying the elevation of each of the existing and newly installed wells relative to a geodetic benchmark;
- evaluating laboratory analytical results with respect to the selected SCS; and,
- refining the existing Conceptual Site Model (CSM) (developed during the Terrapex Phase One ESA work program) in light of the information collected during the Phase Two ESA activities.

Note that the Phase Two ESA was conducted concurrently with a geotechnical investigation (reported under a separate cover). The depth of certain boreholes was determined based on geotechnical requirements.

The sampling and analysis plan is attached in Appendix III. The sampling procedures are documented in detail in Section 5.0.

4.2 MEDIA INVESTIGATED

Based on the findings of the Phase One ESA work program and detailed in the SAAP, the Phase Two ESA work program investigated the environmental quality of soil and groundwater at the Site. Sediment was not present.

4.3 PHASE ONE CONCEPTUAL SITE MODEL

The Phase One ESA CSM showing the surrounding land use (with water bodies, areas of natural significance, drinking water wells, roads and adjacent property uses), PCAs, and APECs is presented in Figures 3 and 4. A summary of the CSM is provided below.

Site Features: The Site is located on the south side of Wellington Street West, to the southwest of the intersection with Parkdale Avenue. The Site comprises three adjacent properties and is rectangular in shape, measuring approximately 2,495 m^2. There are buildings on the 1188-1190 and 1194-1196 Wellington Street West properties; the 1186 Wellington Street West property is a parking lot with an area of approximately 978 m^2. The Site is relatively flat other than a downward slope towards a loading dock at the back of the building on the 1188-1190 Wellington Street West property.

Site History: The properties were previously owned by different individuals/companies. The 1186 Wellington Street West property operated as a gas station and automotive service garage between approximately 1925 and 2002. Following decommissioning and remediation, the property has been used as a parking lot. The 1188-1190 Wellington Street West property was used for institutional property use (Parkdale Evangel Tabernacle / Salvation Army Hall) between at least 1910 to 1961, at which point it was converted to commercial property use (Saslove Furniture and Appliances, Pharma Plus / Rexall Drugstore). The 1194-1196 Wellington Street West property was used as the Elmdale Theatre between approximately 1928 and 2004, and the Cornerstone House of Refuge Apostolic Church since 2004.

Uses of Adjacent Properties: There are commercial businesses to the east and west of the Site along Wellington Street West, including a gas station located approximately 20 m north of the Site, and an automotive service garage located approximately 40 m northwest of the Site. Residential properties are generally located to the south of the Site.

Existing Buildings and Structures: There are buildings with basements (or partial basements) on the 1188-1190 and 1194-1196 Wellington Street West properties with footprints of approximately 400 m^2 and 865 m^2, respectively. The main floor of the 1188-1190 Wellington Street West building was occupied by a Rexall Drugstore; the upstairs unit was vacant. The 1194-1196 Wellington Street West building was occupied by the Cornerstone House of Refuge Apostolic Church. The buildings were observed to be constructed of finished concrete blocks with stucco and flat tar and gravel roofs.

Water Bodies: The Site does not include and is not adjacent to or within 30 m of a water body, as defined in O. Reg. 153/04. The nearest water body to the Site is the Ottawa River located approximately 1.2 km north of the Site.

Areas of Natural Significance: The Site does not include, and is not within, adjacent to, or within 30 m of an area of natural significance, as defined in O. Reg. 153/04, and no areas of natural significance were identified as being located in whole or in part in the Phase One Study Area.

Drinking Water Wells: No drinking water wells are present at the Site, nor was any evidence identified to suggest drinking water wells have previously been present at the Site. No records of drinking water wells were located within the Phase One Study Area.

Geology/Hydrogeology: The Site is situated within an area characterized by till with local relief. The underlying bedrock in the region is limestone with some shaly parting of the Ottawa formation. Paterson previously described the native soils at the Site as glacial till comprising sandy silt and gravel. Bedrock was described as grey limestone and was encountered at depths that ranged between approximately 2.13 and 3.50 m bg.

Potentially Contaminating Activities: Three PCAs, as listed in Table 2 of Schedule D of O. Reg. 153/04, and another potential concern were identified at the Site:

- PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks related to the former tank nest and pump islands from the former gas station on the 1186 Wellington Street West property, and former heating oil ASTs on the 1194-1196 Wellington Street West property;
- PCA 52 – Storage, Maintenance, Fueling and Repair of Equipment, Vehicles and Materials Used to Maintain Transportation Systems related to the former automotive service garage on the 1186 Wellington Street West property;
- PCA 30 – Importation of Fill Material of Unknown Quality; and,
- Other – The current and historical use of substances for the removal of snow and ice (de-icing activities).

Thirty-two PCAs were identified within the Phase One Study Area, but only one is considered to result in an APEC at the Site (see APEC 6 below).

Areas of Potential Environmental Concern: As a result of the PCAs and other considerations, seven APECs were identified at the Site:

- APEC 1 – In the northeastern portion of the Site in the vicinity of the former UST nest (fuel storage and reported leaks/spills);
- APEC 2 – In the eastern portion of the Site in the vicinity of the former pump islands (former fuel distribution);
- APEC 3 – In the eastern portion of the Site in the vicinity of the former automotive service garage (vehicle maintenance and repair);
- APEC 4 – In the eastern and southern portion of the Site in the parking lot and loading dock area (importation of fill material of unknown quality);
- APEC 5 – In the southwest corner of the Site in the vicinity of two former ASTs (fuel storage);
- APEC 6 – In the northeastern portion of the Site related to the off-site gas station located approximately 20 m from the Site; and,
- APEC 7 – All paved areas (de-icing activities in winter).

Contaminants of Potential Concern: The COPCs associated with the on-Site APECs comprise BTEX, PHC F1–F4, VOCs, PAHs, metals, hydride-forming metal, mercury, hot water soluble boron, hexavalent chromium, cyanide, EC, SAR, sodium and chloride. The COPCs associated with the off-site PCA comprise BTEX, PHC F1-F4.

Migration Pathways: In general, potential migration pathways for subsurface contaminants at the Site would consist of buried services, remnants of former buried services or previously excavated area(s).

Uncertainty: The main uncertainty associated with the CSM developed for the Site relates to the limited information regarding the former gas station and automotive service garage, in addition to the remediation conducted of the 1188 Wellington Street West property following decommissioning.

4.4 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN

A SAAP dated April 15, 2021 was developed to investigate each of the media of concern in each APEC at the Site. Deviations from the proposed sampling and analysis plan are as follows:

- Borehole BH108 (proposed borehole BH-D) was drilled to 20 m bg (instead of the proposed 16 m bg) for geotechnical purposes.
- For boreholes BH107 and BH110 (proposed boreholes BH-L and BH-J, drilled primarily for geotechnical reasons), soil samples were submitted for laboratory analysis to provide coverage of APEC 4 and APEC 7.

- No soil sample was submitted for laboratory of metals and inorganics from borehole BH101.
- An additional soil sample was submitted for laboratory analysis of metals and inorganics from borehole MW111 (sample MW111-3) for vertical delineation purposes.
- Based on field observation (indicating no apparent concern), less samples of the fill material were submitted for analysis of PAHs. Specifically, samples for PAH analysis were not submitted from boreholes BH102, MW104, and BH107.
- Two soil samples were submitted from borehole MW111 for laboratory analysis of BTEX and PHC F1-F4.
- Since no impacts were identified in the soil samples, groundwater was not assessed for PAHs.
- No field duplicates were submitted for analysis of PAHs and metals and inorganics.
- No methanol blank was submitted for analysis with the soil samples.

These deviations are not considered to have significantly affected the data or the conclusions of the ESA.

4.5 IMPEDIMENTS

Access to the Site was not impeded at any time during the Phase Two ESA work program.

5.0 INVESTIGATION METHOD

5.1 GENERAL

Prior to drilling at the Site, local utility companies were contacted in order to obtain stake-outs and clearance with respect to buried services. A private locating company was also retained to provide clearance with respect to buried services in the work areas. All intrusive sampling locations were greater than the required distance from all located underground utilities, and were therefore given clearance. The approximate locations of the on-Site underground utility locations are provided in Figure 2.

A Site-specific health and safety plan (HASP) and a daily safe work permit were prepared by Terrapex prior to commencing all field work. All team members, including sub-contractors, read and signed the HASP before working at the Site.

All methods used during the investigation were completed as per Terrapex's standard operating procedures (SOPs).

5.2 DRILLING

Exterior borehole drilling and monitoring well installation services were provided by George Downing Estate Drilling Ltd. of Hawkesbury, Ontario; and interior borehole drilling and monitoring well installation services were provided by Strata Drilling Group of Stouffville, Ontario, both MECP-licensed well drilling contractors. Borehole drilling and monitoring well installation for the Phase Two ESA were completed under the full-time supervision of Terrapex staff.

Between April 19 and 22, 2021, exterior borehole drilling (all boreholes with the exception of MW109) and monitoring well installation were completed using a CME 55 drill rig equipped with standard hollow-stem augers/spilt-spoon sampling equipment and bedrock coring equipment. On April 21, 2021, interior borehole drilling and monitoring well installation (i.e. borehole MW109) was completed with a Geoprobe 420M portable drill rig with dual-tube sampling equipment, followed by downhole air hammer (soil was generally not encountered at this location).

Boreholes were advanced to a maximum depth of approximately 20 m bg. However, the Phase Two ESA was completed concurrently with a geotechnical investigation for the proposed re-development. The environmental work program outlined in the SAAP ended in the overburden for soil at depths of approximately 3 m bg. Monitoring wells were installed within bedrock, generally as shallow as possible. However, one monitoring well (MW105) was installed deeper in the bedrock at depths between 13.1 and 16.1 m bg.

The borehole locations are shown in Figure 2.

5.3 SOIL

5.3.1 SOIL SAMPLING

Soil samples were collected on a continuous basis. To mitigate cross-contamination, clean drilling augers/core barrels were used at each borehole and the split-spoon samplers were washed using Alconox detergent and rinsed with distilled water prior to each use.

Each recovered sample was divided into two portions, with one portion placed in a clear sampling bag for field screening/logging, and the second portion placed in an unpreserved laboratory supplied sampling container, brought to the laboratory and extracted at the laboratory within the required 7 days of sampling. Soil descriptions were recorded based on the Unified Soil Classification System (USCS).

Samples for analyses were placed in a cooler with ice packs and delivered under signed chain of custody to the project laboratory for analysis.

Graphic borehole logs illustrating the stratigraphy encountered, chemical analysis and measured combustible soil vapour concentrations are included in Appendix IV.

5.3.2 FIELD SCREENING MEASUREMENTS

CSV concentrations were measured in each soil sample, using a RKI Eagle portable gas detector calibrated to n-hexane and operated in methane elimination mode. The Eagle gas detector can measure total combustible organic compounds to a nominal detection level of 10 parts per million by volume (ppm), with an accuracy of approximately ±5%.

The gas detector was calibrated according to the manufacturer's instructions before the field investigation.

“Worst-case” soil samples were selected on the basis of vapour screening, visual and olfactory evidence of contamination, and sample location in relation to potential point sources of impact.

5.4 GROUNDWATER

5.4.1 MONITORING WELL INSTALLATION

Monitoring wells were installed in five of the newly drilled boreholes (MW104, MW105, MW106, MW109 and MW111). Four of the new monitoring wells (all with the exception of MW109) were installed outside the building using new 50 mm inside-diameter schedule 40 PVC well pipe and #10 slot screen. Monitoring well MW109 was installed in the partial basement of the 1194-1196 Wellington Street West building using 32 mm inside diameter schedule 40 PVC well pipe and #10 slot screen.

The annulus of each well was backfilled with washed silica sand to a depth of approximately 0.3 m above the screened interval. A hydrated bentonite seal was placed above the sand pack to prevent infiltration of surface water into the monitoring well. A steel flushmount casing, cemented in place, was installed at each of the five well locations.

To mitigate cross-contamination, new materials were used for the installation of each monitoring well. Fresh nitrile gloves were donned for the handling of the well material at each well location.

Well installation details are provided on the borehole logs in Appendix IV.

5.4.2 MONITORING WELL DEVELOPMENT METHOD

The monitoring wells installed as part of the current work program were developed on May 13, 2021 (minimum 21 days following drilling) to remove drilling debris that may have been introduced during well installation and to minimize any potential sampling and analytical bias that may result from excessive particulate capture within groundwater samples recovered from these wells.

Prior to development, the wells were monitored for combustible vapours in the well headspace. Depth to water and depth to the bottom of the well were also measured prior to well development. The volume of water in the well and its annulus were calculated based on the depth measurements, diameter of the well standpipe and annulus, and assumed annulus porosity of 30%.

The monitoring wells were developed using a surge block and a dedicated inertial sampler comprising low density polyethylene (LDPE) tubing and a LDPE foot valve. Each well was surged and purged until water free of visible particulate was yielded. A total of 375 L of groundwater was removed during well development.

5.4.3 FIELD MEASUREMENTS OF WATER QUALITY PARAMETERS

Water quality parameters consisting of temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP), were measured during sampling of groundwater using a peristaltic pump and a YSI 556 MPS water quality meter. Prior to sampling, Terrapex recorded the water quality parameters over 3 minute intervals. When the parameters stabilized to within requirements as outlined in the Groundwater Sampling, Low Volume Purging, Using Peristaltic Pump SOP, the well was deemed appropriate for sampling.

5.4.4 GROUNDWATER SAMPLING

Groundwater samples were collected from the monitoring wells on May 25, 2021. Prior to sampling, monitoring activities included the measurement of combustible vapours within the headspace of the well immediately upon removal of the well standpipe cap, using a RKI Eagle portable gas detector calibrated to n-hexane and operated in “methane elimination” mode. The depth to water in the well was measured using a Heron interface probe. The presence, and apparent thickness (if applicable), of any LNAPL or DNAPL in the well was also assessed using the interface probe.

To mitigate cross-contamination, the interface probe was washed with a liquid solution of Alconox detergent and rinsed with fresh water between each monitoring well. A fresh pair of latex or nitrile gloves was donned at each well location.

Sampling was conducted using “low-flow” methodology with a peristaltic pump (Spectra) as per Terrapex's SOP. Samples for metals analyses were filtered in the field using in-line 45 micron filters.

Groundwater samples were collected directly into pre-cleaned, laboratory-supplied bottles, placed in a cooler with ice, and shipped within four days of collection under chain of custody to the project laboratory for analysis.

5.5 SEDIMENT

5.5.1 SEDIMENT SAMPLING

Sediment was not present at the Site.

5.6 ANALYTICAL TESTING

Laboratory analytical services for this work program were provided by AGAT Laboratories Ltd. (AGAT) in Mississauga, Ontario under contract with Terrapex. AGAT was accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) in accordance with the International Standard ISO/IEC17025-2005 – General Requirements for the Competence of Testing and Calibration Laboratories

Soil samples were analyzed as follows:

- Samples of fill material (APEC 4 and APEC 7) and at the location of the former automotive service garage (APEC 3) were collected and submitted for laboratory analysis of metals and inorganics (M&I) including pH, metals, hydride-forming metals, and other regulated parameters and PAHs. A total of eight samples were submitted for analysis of M&I, and six samples were submitted for laboratory analysis of PAHs. One addition sample of fill material was submitted for analysis of M&I for vertical delineation purposes;

- Samples of underlying native soil were collected and submitted for laboratory analysis of PHC related parameters (BTEX and PHC F1-F4) from the locations of historical fuel tank nest (APEC 1), distribution equipment (APEC 2), former automotive service garage (APEC 3), former heating oil tanks (APEC 5), and an off-site retail fuel outlet (APEC 6). A total of 11 soil samples (including two blind field duplicates) were submitted for laboratory analysis of BTEX and PHC F1-F4 analysis; and,
- One sample of underlying native soil, collected within APEC 3 (former automotive service garage), was also submitted for laboratory analysis of VOCs.

Groundwater samples were analyzed as follows:

- Four shallow bedrock groundwater samples (including one blind field duplicate) and one deep bedrock groundwater sample, collected in APECs 1, 2, 3, 4, 6, and 7, were submitted for laboratory analysis of M&I, BTEX and PHC F1-F4;
- One shallow bedrock groundwater sample, collected in APEC 5, was submitted for laboratory analysis of BTEX and PHC F1-F4; and,
- One shallow bedrock groundwater sample, collected in APEC 3 was submitted for laboratory analysis of VOCs.

The specific sample locations and parameters analyzed at each location are shown in Figures 6 (A to H) and Figures 7 (A to F)

5.7 RESIDUE MANAGEMENT PROCEDURES

Waste material (soil cuttings and groundwater purge water) produced during borehole drilling, well development and well purging were contained at the Site in 205 L drums, and later removed from the site for disposal by Clean Water Works Inc. (CWW) at their facility in Ottawa, Ontario.

A copy of the waste manifest is provided in Appendix V.

5.8 ELEVATION SURVEYING

The location, top of pipe and ground surface elevation at each existing and newly installed monitoring well was surveyed by Terrapex on June 3, 2021 (with the exception of MW109) using a Trimble R12 global navigation satellite system.

The survey was conducted using a geodetic benchmark (top of the spindle of the hydrant to the south of the west property line with an elevation of 66.59 m amsl). The location of monitoring well MW109 was measured in the field and the elevations of the top of the pipe and ground surface were surveyed with a standard rod and level and tied into the Site benchmark.

5.9 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

To mitigate cross-contamination, clean drilling augers/core barrels were used at each borehole and the split-spoon sampler was washed using Alconox detergent and rinsed with distilled water prior to each use.

During groundwater sampling, dedicated sampling tubing was used at each monitoring well location. To mitigate cross-contamination, the interface probe was washed with a liquid solution of Alconox detergent and rinsed with fresh municipal water between each monitoring well. A fresh pair of nitrile gloves was donned at each well location.

Pre-cleaned soil and groundwater sample containers for the Site's specific parameters were provided by AGAT and used at each borehole and monitoring well location for the collection of soil and groundwater samples.

The sample containers and preservation methods for soil and groundwater samples collected for this investigation are provided in the Sampling and Analysis Plan in Appendix III.

Samples for analyses were placed in an enclosed cooler with loose ice and shipped with a signed chain of custody and custody seals to AGAT for analysis. Soil samples for analysis of volatile organic parameters were received at the laboratory, and immediately extracted.

AGAT's Quality Assurance/Quality Control (QA/QC) program consisted of the analysis of laboratory replicates, matrix spikes, matrix blanks, method blanks and surrogate percent recoveries, as appropriate for the particular analysis protocol.

Three "blind" field duplicates were submitted to the laboratory for chemical analysis for QA/QC purposes during the Phase Two ESA work program:

- one blind duplicate soil sample of BH101-3 (identified as BH101-13) was submitted for laboratory analysis of BTEX and PHC F1-F4;
- one blind duplicate soil sample of BH108-3 (identified as BH108-13) was submitted for laboratory analysis of BTEX and PHC F1-F4; and,
- one blind duplicate groundwater sample of MW104 (identified as MW114) was submitted for laboratory analysis of M&I, BTEX and PHC F1-F4.

One trip blank water sample (identified as "Trip Blank"), and one trip spike water sample (identified as "Trip Spike") were also submitted for analysis as additional QA/QC measures. The trip blank and trip spike samples were prepared by the laboratory, and the sampling container remained within the bottle order package from the time of the delivery, sampling and submission to the laboratory.

With the exception of the trip blank and trip spike samples that were prepared by AGAT itself, the laboratory was not informed of the nature or number of field QA/QC samples.

6.0 REVIEW AND EVALUATION

6.1 GEOLOGY

The Site is situated within an area characterized by till, plain with local relief. The underlying bedrock in the region is limestone with some shaly parting of the Ottawa formation.

Finished surfaces at the Site were generally observed to be topsoil, asphalt, or concrete-covered. The stratigraphy encountered consisted generally of approximately 0.6 to 1.0 m of fill material overlying silty sand/sandy silt. Based on auger refusal, the apparent bedrock surface ranged between approximately 3.1 and 3.8 m bg. From the recovered rock cores, limestone was observed to be weathered and strong to fair quality near the surface, improving with depth.

Saturated conditions (i.e., the apparent water table) were not observed in the overburden and coring prevented the observation of saturated conditions during drilling. However, the water table was measured in existing monitoring wells.

A copy of the borehole logs is included in Appendix IV.

6.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

The monitoring wells were generally screened in bedrock in the 4.0 to 7.0 m bg interval, although 1.5 m long screens were used in two monitoring wells (MW106 and MW109). One deeper monitoring well was installed in the bedrock in the 13.0 to 16.0 m bg interval (MW105). Installation details of the monitoring wells are shown in Table 1 and in the borehole logs in Appendix IV.

Newly-installed monitoring wells were monitored on May 25, 2021, and existing and newly installed monitoring wells (except monitoring well MW109 which was in the basement and not accessible at that time) were also monitored on June 7, 2021.

The depth to groundwater in the shallow bedrock monitoring wells on June 7, 2021 ranged between 3.92 m bg (61.35 m amsl at monitoring well BH3) and 4.09 m bg (61.48 m amsl and 61.41 m amsl at monitoring wells MW111 and BH2, respectively). The depth to water in the adjacent deep and shallow bedrock monitoring wells MW105 and MW106 was 3.78 m bg and 3.94 m bg, respectively.

No evidence of either LNAPL or DNAPL was observed during monitoring, purging, or sampling of the monitoring wells during this work program.

Groundwater monitoring data is provided in Table 1.

Groundwater contours were electronically generated using Surfer™ Surface Mapping System with the Point Kriging geostatistical gridding method to interpolate between data points. Interpreted groundwater contours based on these calculations are shown in Figure 5. As shown, the water table is relatively flat, with flow to the north. Cross-sections are provided in Figure 8. As shown, the water table appears to lie just beneath the apparent bedrock surface at the Site.

As the water table is relatively shallow, the direction of groundwater flow may be somewhat influenced by seasonal factors and may also be influenced by deeper utilities (e.g., water and sewer lines).

6.3 GROUNDWATER HYDRAULIC GRADIENTS

As shown in Figure 5 and Figure 8, the water table was relatively flat on June 7, 2021, lying just beneath the apparent bedrock surface, which also appears to be relatively flat. Based on the measured groundwater elevations, the greatest horizontal hydraulic gradient at the Site (between 61.57 m amsl at monitoring well BH5 and 61.26 m amsl at monitoring well MW104) was 1% to the north (0.014 m/m) on June 7, 2021.

As shown in Table 1 and Figure 8, groundwater elevations in the deeper bedrock monitoring well MW105, screened between 13.1 and 16.1 m bg and the adjacent shallower monitoring well MW106, screened between 4.0 and 5.5 m bg (both fully wetted) were relatively similar, which is indicative of being in the same hydrostratigraphic unit. The vertical gradient between these two adjacent monitoring wells was 2% up (0.018 m/m) on May 25, 2021 and 2% up (0.017 m/m) on June 7, 2021.

6.4 COARSE SOIL TEXTURE

Grain size distribution analyses were conducted on two samples of fill material collected from borehole MW105 from an area previously excavated at the Site. Shallow fill sample MW105-1 was described as sand and gravel fill; whereas, deeper sample MW105-3 was described as sand fill. Both of the samples were identified as coarse textured as defined by O. Reg. 153/04. Based on the prevalence of the fill material across the Site, soil at the Site is considered to be coarse textured.

Copies of the grain size distribution reports are provided in Appendix VI.

6.5 SOIL FIELD SCREENING

Visual (staining) or olfactory (odour) evidence of impacted soil was generally not observed in the recovered soil samples and CSV concentrations measured in recovered soil samples were generally less than 10 ppm. However, some black staining was observed in soil sample BH108-3, collected between 1.2 and 1.8 m bg; and CSV concentrations of 20 ppm and 60 ppm were measured in soil samples BH101-3 and MW111-6, respectively.

All of the above noted soil samples were submitted for laboratory analysis.

6.6 SOIL QUALITY

Soil analytical results are provided in Table 2A (M&I), Table 2B (PAHs), Table 2C (BTEX and PHCs), and Table 2D (VOCs excluding BTEX). Soil analytical results are shown in plan view in Figures 6A to 6H and in cross-section view in Figures 9A to 9H. Copies of the Laboratory certificates of analyses are provided in Appendix VII.

As shown, concentrations of COPCs in soil were all less than the applicable Table 3 SCS in all soil samples submitted for laboratory analysis except for barium in soil sample MW111-1 collected between 0.0 and 0.6 m bg; EC in soil samples BH103-1, MW104-1, MW105-1, BH108-1, BH110-1, MW111-1, and MW111-3; and, SAR in soil samples BH108-1 and BH110-1.

The QP_{ESA} has determined that the levels of EC and SAR in soil exceeded the applicable SCS solely due to the application of road salt for the purposes of ensuring the safety of vehicular or pedestrian traffic under snowy and/or icy conditions.

As a result, per Paragraph 1 of Section 49.1 of O. Reg. 153/04, the applicable Site Condition Standards for EC and SAR in soil have not been deemed to be exceeded for the purpose of the Environmental Protection Act, and as a result, have not been considered contaminants of concern (COCs). Notwithstanding, exceedances have been noted on Table 2A.

The barium exceedance in soil sample MW111-1 is delineated aerially based on the results at boreholes BH102, BH103, MW104, MW105, BH107, BH108 and BH110, and vertically based on the results from soil sample MW111-3 (collected between 1.2 and 1.8 m bg)

Prior to filing a Record of Site Condition for the Phase Two Property, barium-impacts in soil in the vicinity of borehole MW111 will require remediation or risk assessment. It is understood that remediation is being considered during Site re-development works.

6.7 GROUNDWATER QUALITY

Groundwater analytical results are provided in Table 3A (M&I), Table 3B (BTEX and PHCs), and Table 3C (VOCs excluding BTEX). Groundwater analytical results are shown in plan view in Figures 7A to 7F and in cross-section view in Figures 10A to 10F. Copies of the laboratory certificates of analyses are provided in Appendix VII.

As shown, concentrations of COPCs in groundwater were less than the applicable Table 3 SCS in all groundwater samples submitted for laboratory analysis except for chloride in groundwater samples collected at monitoring wells MW104 (and blind field duplicate MW114) and MW106.

The QP_{ESA} has determined that the levels of chloride in groundwater exceeded the applicable SCS solely due to the application of road salt for the purposes of ensuring the safety of vehicular or pedestrian traffic under snowy and/or icy conditions.

As a result, per Paragraph 1 of Section 49.1 of O. Reg. 153/04, the applicable Site Condition Standard for chloride in groundwater has not been deemed to be exceeded for the purpose of the Environmental Protection Act, and as a result, has not been considered a COC. Notwithstanding, exceedances have been noted on Table 3A.

6.8 SEDIMENT QUALITY

Sediment was not present at the Site.

6.9 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS

QA/QC Control Limits: A review of the quality assurance reports attached to the laboratory certificates of analyses indicate that the laboratory QA/QC samples were generally within the quality control limits, with the following exception noted: reference material percent recoveries for selenium and mercury in soil samples BH102-1 and MW111-3 were outside AGAT's internal acceptable limit of ±30% as identified in laboratory reports 21Z737993 and 21T742988, respectively.

Based on additional information provided by AGAT, for a multi-element scan for laboratory control standards, up to 10% of analytes may exceed the quoted limits by an additional 10% and it is considered by AGAT to be acceptable. The lower limit can go to 60% and upper limit is acceptable up to 140%. AGAT commented that these analyses were for internal laboratory quality control check and the results provided in these two reports were considered acceptable.

Based on the additional information provided by AGAT, the QP does not see a concern with the laboratory results for the QA/QC control limits.

Matrix Spike Recoveries: No issues regarding matrix spike recoveries were outlined in any of the laboratory certificates of analysis.

Detection Limits: No sample dilution was required by the laboratory, and reporting detection limits were not adjusted.

Travel Spike Samples: Travel spike recoveries reported by the laboratory are summarized in Table 3B. The recoveries of all analysed parameters within the travel spike sample were within acceptance limits.

Travel Blank Samples: Laboratory results for the travel blank sample are presented in Table 3B. Detectable concentrations of the tested parameters were not reported in the travel blank sample.

Field Duplicate Samples: Field duplicate sample results are presented in the soil and groundwater analytical results tables (Table 2C, Table 3A, and Table 3B). Relative percent difference (RPD) for field duplicate sample results is calculated as follows:

$$RPD = \left| \frac{result_1 - result_2}{\frac{1}{2} x\ (result_1 + result_2)} \right| x\ 100\%$$

RPD is not calculated where reported concentrations are less than five times the method detection limit (MDL). Increased RPD values may be encountered whenever duplicate analyses are completed on samples representing heterogeneous fill materials, however significant concerns regarding the validity of analytical results would generally not be suspected if calculated RPD do not exceed the specified alert criteria by more than a factor of 2.(i.e., an RPD of >60%).

Quantitative correlation was not calculable for the blind field duplicate soil samples or for many of the groundwater parameters as concentrations were less than five times the MDL. However, calculated RPDs between the blind field duplicate groundwater samples were less than the alert criteria of 30% for all parameters where the RPD was calculated.

Sample Holding Times: Sample holding times were met for all samples.

6.10 PHASE TWO CONCEPTUAL SITE MODEL

A preliminary CSM was developed as part of the Phase One ESA, which is discussed in Section 4.3. Following the completion of the Phase Two ESA field program, the CSM has been updated to present the current Site characteristics and identify actual or potential sources of contamination, pathways, release mechanisms, receptors, and exposure routes. Additional inputs to the CSM include:

- stratigraphy observed during this Phase Two ESA work program;
- results of chemical testing for the current soil and groundwater conditions; and,
- groundwater levels and interpreted groundwater flow direction.

A narrative summary of the phase two CSM is provided below. Figures illustrating the phase two CSM are attached, and referenced in the appropriate sections below.

OVERVIEW

Site Description (Figures 1 and 2): The Site is located on the south side of Wellington Street West, to the southwest of the intersection with Parkdale Ave. The Site comprises three adjacent properties and is rectangular in shape with a total area of approximately 2,495 m^2. The Site is relatively flat other than a downward slope towards a loading dock at the back of the building on the 1188-1190 Wellington Street West property.

There are buildings on the 1188-1190 and 1194-1196 Wellington Street West properties with footprints of approximately 400 m^2 and 865 m^2, respectively. The 1186 Wellington Street West property is a parking lot with an area of approximately 978 m^2

Past and Present Uses: Currently 1186 Wellington Street West is an asphalt-covered parking lot; 1188-1190 Wellington Street West property includes a Rexall Pharmacy and offices (currently unoccupied); and, 1194-1196 Wellington Street West property is the Cornerstone House of Refuge Apostolic Church.

The properties were previously owned by different individual/companies. The 1186 Wellington Street West property operated as a gas station and automotive service garage between approximately 1925 and 2002. Following decommissioning and remediation, the property has been used as a parking lot.

The 1188-1190 Wellington Street West property was used as institutional property use (Parkdale Evangel Tabernacle / Salvation Army Hall) between at least 1910 to 1961, at which point it was converted to commercial property use (Saslove Furniture and Appliances, Pharma Plus / Rexall Drugstore).

The 1194-1196 Wellington Street West property was used as the Elmdale Theatre between approximately 1928 and 2004, and the Cornerstone House of Refuge Apostolic Church since 2004.

Adjacent Land Uses (Figure 3): There are commercial businesses to the east and west of the Site along Wellington Street West, including a gas station located approximately 20 m north of the Site, and an automotive service garage located approximately 40 m northwest of the Site. Residential properties are generally located to the south of the Site.

Assessment Criteria: Full Depth Generic SCS applicable to residential, parkland, or institutional property use listed in Table 3 of the April 15, 2011 MECP *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* document (hereafter referenced as the MECP Table 3 SCS) were considered appropriate for evaluating laboratory analytical results.

PCAs AND APECs

Areas Where Potential Contaminating Activity (PCA) Has Occurred (Figure 3): Three PCAs, as listed in Table 2 of Schedule D of O. Reg. 153/04, and another potential concern were identified at the Site:

- PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks related to the former tank nest and pump islands from the former gas station on the 1186 Wellington Street West property, and former heating oil ASTs on the 1194-1196 Wellington Street West property (i.e. three separate PCAs);
- PCA 52 – Storage, Maintenance, Fueling and Repair of Equipment, Vehicles and Materials Used to Maintain Transportation Systems related to the former automotive service garage on the 1186 Wellington Street West property;
- PCA 30 – Importation of Fill Material of Unknown Quality; and,
- Other – The current and historical use of substances for the removal of snow and ice (de-icing activities).

Thirty-two PCAs were identified within the Phase One Study Area, but only one is considered to result in an APEC at the Site (see APEC 6 below).

Areas of Potential Environmental Concern (APEC) (Figures 4A and 4B): Seven APECs associated with the PCAs were identified on the Phase Two Property:

- APEC 1 – In the northeastern portion of the Site in the vicinity of the former UST nest (fuel storage and reported leaks/spills);
- APEC 2 – In the eastern portion of the Site in the vicinity of the former pump islands (former fuel distribution);
- APEC 3 – In the eastern portion of the Site in the vicinity of the former automotive service garage (vehicle maintenance and repair);
- APEC 4 – In the eastern and southern portion of the Site in the parking lot and loading dock area (importation of fill material of unknown quality);
- APEC 5 – In the southwest corner of the Site in the vicinity of two former ASTs (fuel storage);
- APEC 6 – In the northeastern portion of the Site related to the off-site gas station located approximately 20 m from the Site; and,
- APEC 7 – All paved areas (de-icing activities in winter).

Subsurface Structures and Utilities That May Affect Contaminant Distribution and Transport (Figures 2, 4A, and 4B): In general, potential migration pathways for subsurface contaminants at the Site would consist of buried services, remnants of former buried services or previously excavated areas.

PHYSICAL SETTING OF THE PHASE TWO ESA PROPERTY

Stratigraphy (Figure 8): Finished surfaces at the Site were generally observed to be topsoil, asphalt, or concrete-covered. The stratigraphy encountered consisted generally of approximately 0.6 to 1.0 m of fill material overlying silty sand/sandy silt. Based on auger refusal, the apparent bedrock surface ranged between 3.1 and 3.8 m bg. From the recovered rock cores, limestone was observed to be weathered and strong to fair quality near the surface, improving with depth.

Hydrogeological Characteristics (Figures 5 and 8): The water table was relatively flat, lying just beneath the apparent bedrock surface, which similarly appears to be relatively flat. Based on the measured groundwater elevations, the greatest horizontal hydraulic gradient at the Site (between 61.57 m amsl at monitoring well BH5 and 61.26 m amsl at monitoring well MW104) was 1% to the north (0.014 m/m) on June 7, 2021.

Groundwater elevations in the deeper bedrock monitoring well MW105, screened between 13.1 and 16.1 m bg and the adjacent shallower monitoring well MW106, screened between 4.0 and 5.5 m bg (both fully wetted) were relatively similar, which is indicative of being in the same hydrostratigraphic unit. The vertical gradient between these two adjacent monitoring wells was 2% up (0.018 m/m) on May 25, 2021 and 2% up (0.017 m/m) on June 7, 2021.

Depth to Bedrock (Figure 8): Based on auger refusal, the apparent bedrock surface ranged between 3.1 and 3.8 m bg.

Depth to Water Table (Figures 5 and 8): The depth to groundwater in the shallow bedrock monitoring wells on June 7, 2021 ranged between 3.92 m bg (61.35 m amsl at monitoring well BH3) and 4.09 m bg (61.48 m amsl and 61.41 m amsl at monitoring wells MW111 and BH2, respectively). The depth to water in the adjacent deep and shallow bedrock monitoring wells MW105 and MW106 was 3.78 m bg and 3.94 m bg, respectively.

Applicability of Section 41 or 43.1 of O. Reg. 153/04:
The Site is not located within an area of natural significance (such as wetlands, provincial parks, nature reserves and valuable animal habitats), does not include and is not adjacent to an area of natural significance or part of such an area, and does not include land that is within 30 m of an area of natural significance or part of such an area.

Soil pH values were within the required ranges.

Areas Where Soil has been Brought to the Property: A soil remediation was conducted at the Site previously where impacted soil was removed and undocumented fill was brought to the Site, generally anticipated to be located in APEC 1, APEC 2, and APEC 3. Minor amounts of general construction fill were observed across the Site.

Locations of Proposed Buildings and Structures (Figure 2B): Our understanding of the proposed future uses are based on the information and files presented by Welldale. It is our understanding that Welldale has purchased the Site (i.e. all three properties) with the intent to demolish all of the existing structures and construct a single mixed-use (residential and commercial) building ranging between one and eighteen storeys in height with a maximum three levels of underground parking.

CONTAMINATION

Media of Concern: Media of concern included soil and groundwater. Sediment is not present at the Site.

Contaminants of Concern (Figures 6B and 9B): Concentrations of contaminants of potential concern in soil were all less than the applicable Table 3 SCS in all soil samples submitted for laboratory analysis except for barium in soil sample MW111-1 collected between 0.0 and 0.6 m bg, which was fully delineated; EC in soil samples BH103-1, MW104-1, MW105-1, BH108-1, BH110-1, MW111-1, and MW111-3; and, SAR in soil samples BH108-1 and BH110-1.

Concentrations of contaminants of potential concern in groundwater were all less than the applicable Table 3 SCS in all groundwater samples submitted for laboratory analysis except for chloride in groundwater samples MW104 (and blind field duplicate MW114) and MW106.

The QP_{ESA} has determined that the levels of EC and SAR in soil, and chloride in groundwater exceeded the applicable Site Condition Standards solely due to the application of road salt for the purposes of ensuring the safety of vehicular or pedestrian traffic under snowy and/or icy conditions.

As a result, per Paragraph 1 of Section 49.1 of O. Reg. 153/04, the applicable Site Condition Standard for EC and SAR in soil and chloride in groundwater have not been deemed to be exceeded for the purpose of the Environmental Protection Act, and as a result, has not been considered a COC.

Areas, Origin, Extent, Distribution and Delineation of Contamination: The barium concentration in soil sample MW111-1, located in APECs 3 and 4, at a depth 0.0 – 0.6 m bg was greater than the MECP Table 3 SCS. PCAs that contributed to these APECs included a former automotive service garage and the importation of untested fill.

It is unclear which PCA may have caused the barium impacts in soil. However, barium concentrations in soil in the underlying soil sample MW111-3 at a depth of 1.2 – 1.8 m bg; and, lateral soil samples BH103, BH107, BH108, and BH111 were less than the Table 3 SCS. Therefore, the impacts appear to be localized.

Migration of Contaminants: As the ground surface is finished asphalt, limiting infiltration; and, since the underlying groundwater is not barium-impacted with respect to the Table 3 SCS, it is unlikely contaminant migration has occurred.

Climatic or Meteorological Impacts on Contaminant Migration: Permeable surfaces at the Site are limited and therefore, surface infiltration from seasonal precipitation is anticipated to be limited. Since soil impacts are limited to surficial fill less than 1.2 m bg, seasonal fluctuation in the water table (at or near the bedrock surface, approximately 3.0 m bg) are not anticipated to contribute to barium migration.

Soil Vapour Intrusion of Contaminants into Buildings: As volatile contaminants have not been identified at the Site, there are no concerns related to the intrusion of vapours into the existing or future buildings at the Site.

CROSS-SECTIONS

Lateral and Vertical Distribution of Contaminants (Figures 6B and 9B): The barium concentration in soil sample MW111-1, located in APECs 3 and 4, at a depth 0.0 – 0.6 m bg was greater than the MECP Table 3 SCS. The barium concentrations in soil in the underlying soil sample MW111-3 at a depth of 1.2 – 1.8 m bg; and, lateral soil samples BH103, BH107, BH108, and BH111 were less than the Table 3 SCS.

Depth to Water in Contaminated Areas (Figure 9B): The depth to groundwater in the shallow bedrock monitoring well MW111 was 4.09 m bg (61.48 m amsl).

Stratigraphy in Contaminated Areas (Figure 9B): As the fill material and underlying native soil are relatively shallow overlying bedrock at approximately 3.6 m bg, they have not been differentiated in Figure 9B. However, the stratigraphy encountered at borehole MW111 was surficial asphaltic concrete, overlying 0.6 m of sand and gravel fill, overlying 1.2 m of sand fill, overlying 1.8 m of silt fill, overlying excellent quality limestone bedrock.

Subsurface Structures and Utilities in Contaminated Areas: No sub-surface structures or utilities are present within the impacted area.

RISK ANALYSIS

Release Mechanisms: The release mechanism for the barium is unknown. However, it is assumed to be related to the fill material that was imported as backfill material following the remediation of the 1186 Wellington Street West property between 1996 and 2001. However, barium concentrations in soil in the underlying soil sample MW111-3 at a depth of 1.2 – 1.8 m bg; and, lateral soil samples BH103, BH107, BH108, and BH111 were less than the Table 3 SCS. Therefore, the impacts appear to be localized. EC and SAR (soil), and chloride (groundwater) are associated with use of salt for de-icing. No other COPCs were identified at the Site.

Contaminant Transport Pathways (Figures 11A and 11B): Contaminant transport pathways include leaching from soil to groundwater, transport into outdoor air by wind and erosion action, and transport into vegetation by root uptake.

However, the ground surface is finished asphalt, limiting exposure to wind, plants and/or infiltration. Since the underlying groundwater is not barium-impacted with respect to the Table 3 SCS, it is unlikely contaminant migration has occurred.

Receptors and Exposure Analysis: Potential human receptors for contaminants at the Site for the current commercial/institutional land use would be limited to outdoor workers. Potential ecological receptors are plants and soil invertebrates. Potential exposure routes for humans to the contaminants consist of ingestion and skin contact for outdoor workers. Potential exposure routes for ecological receptors consist of ingestion, skin contact and consumption of vegetation and prey. Groundwater is not used for potable purposes at the Site, and will not be, given its location in the City of Ottawa. Due to the location and nature of the contaminants, and the proposed development plans, the exposure route of most concern is direct contact with the soil during construction/excavation.

It is anticipated that all soil at the Site will be excavated as part of the proposed re-development of the Site. Therefore, the barium impacted soil will be remediated prior to the change in land use. Soil management may be required at the time of the remediation but the identified barium in the soil will not pose a risk to future residents or workers following the re-development of the Site.

7.0 CONCLUSIONS

The Phase Two ESA investigation of the Site, as documented in this report, indicated that contaminants of concern were identified within soil at the Site; groundwater impacts were not identified; and, sediment was not present at the Site.

As delineated soil impacts remain on-Site, additional investigative, remedial, and/or risk assessment work will be required to file a Record of Site Condition.

7.1 SIGNATURES

The environmental assessment described herein was conducted in accordance with the terms of reference for this project, agreed upon by Welldale Limited Partnership and Terrapex Environmental Ltd.

The Phase Two Environmental Site Assessment of the property located at 1186 – 1196 Wellington Street West in Ottawa, Ontario was conducted in general accordance with O. Reg. 153/04 by, or under the supervision of a Qualified Person as required by the regulation.

Terrapex Environmental Ltd. has exercised due care, diligence, and judgement in the performance of this Phase Two ESA; however, studies of this nature have inherent limitations. The reported information is believed to provide a reasonable representation of the general environmental conditions at the Site, at the time the assessment was conducted. However, the data were collected at discrete locations and conditions may vary at other locations or with the passage of time. The assessment was also limited to a study of those chemical parameters specifically addressed in this report.

In addition, our comments, conclusions, and recommendations are based in part on the observations and data documented by third parties. By necessity, except where explicitly noted, we have relied upon the accuracy and completeness of information presented by said third parties, regardless of any disclaimers regarding reliance provided in the documentation subjected to peer review. Terrapex Environmental Ltd. does not assume any responsibility for errors, omissions, or other limitations pertaining to third party work programs.

This report has been prepared for the sole use of Welldale Limited Partnership. Terrapex Environmental Ltd. accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than Welldale Limited Partnership.

Jason O'Bright, P.Eng.
Project Engineer
Qualified Person per O. Reg. 153/04

Keith Brown, P.Eng.
Senior Project Manager
Qualified Person per O. Reg. 153/04

Mike Grinnell, P.Eng.
Senior Reviewer
Qualified Person per O. Reg. 153/04

8.0 REFERENCES

Ontario Regulation 153/04, *Records of Site Condition – Part XV.1 of the Environmental Protection Act*.

Ministry of the Environment (MOE), *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*, April 15, 2011.

Surveyor's Real Property Report, *Part 1 - Plan of Lots A, B, C & D, Registered Plan 58, Geographic Township and Nepean, City of Ottawa,* Surveyed by Stantec Geomatics Ltd., dated July 2, 2020.

Interactive mapping tool available through the Rideau Valley Conservation Authority.

Phase I Environmental Site Assessment, 1194 and 1196 Wellington Street West, Ottawa, Ontario prepared by Pinchin Ltd. for Cornerstone House of Refuge, dated August 23, 2018.

Phase I-Environmental Site Assessment, 1186, 1188, 1194 and 1196 Wellington Street, Ottawa, Ontario prepared by Paterson Group Inc. for Minto Communities, dated July 16, 2020.

Phase II Environmental Site Assessment, 1186, 1188, 1194 and 1196 Wellington Street, Ottawa, Ontario prepared by Paterson Group Inc. for Minto Communities, dated July 29, 2020.

Phase One Environmental Site Assessment, 1186-1196 Wellington Street West, Ottawa, Ontario prepared by Terrapex Environmental Ltd. for Welldale Limited Partnership, dated June 23, 2021.

FIGURES

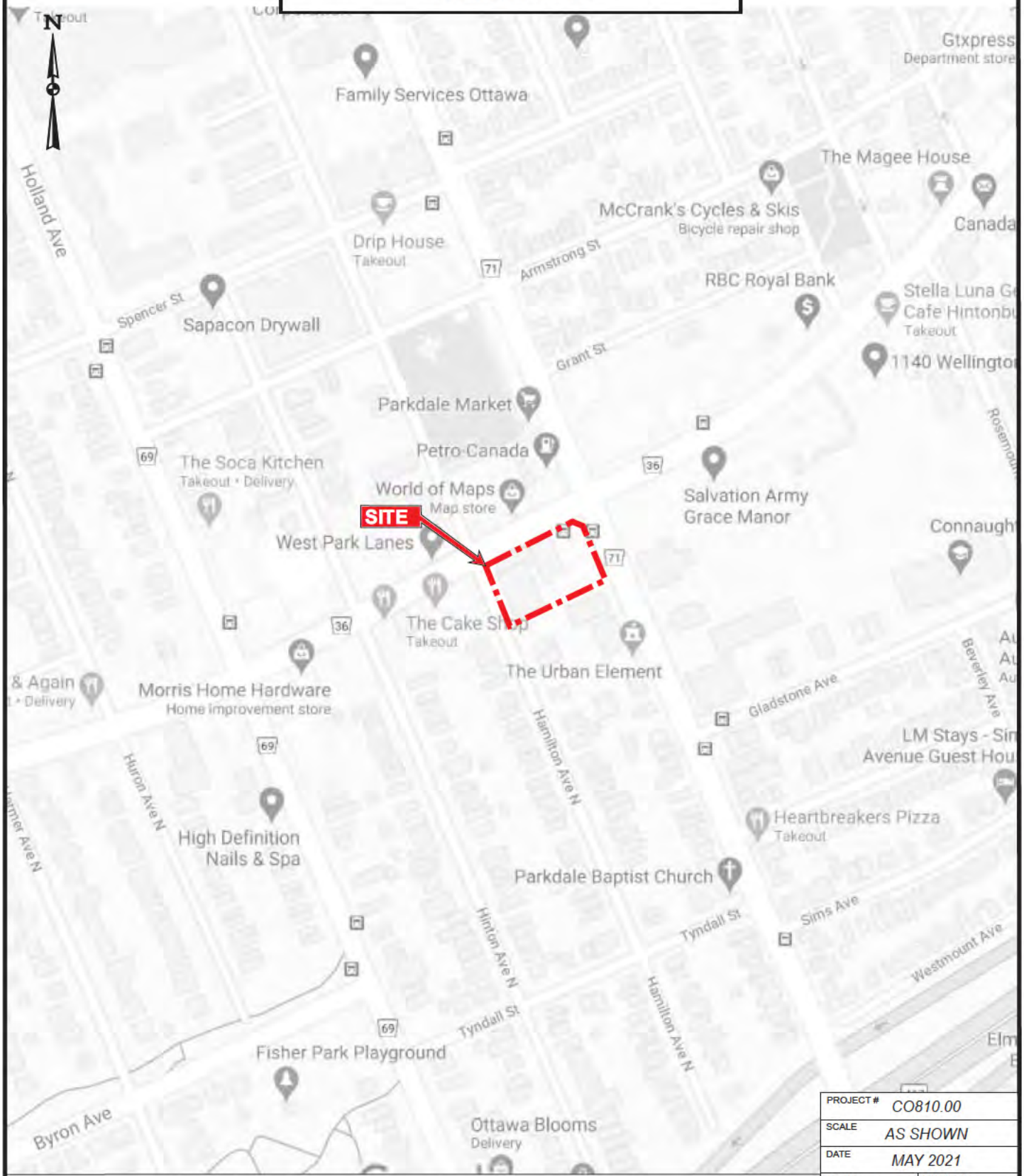
TERRAPEX

SITE LOCATION

1186-1196 WELLINGTON STREET WEST
OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GOOGLE MAPS, 2020

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	MAY 2021
DRAWN	EM/ AB
CHECKED	
DRAWING #	FIGURE 1

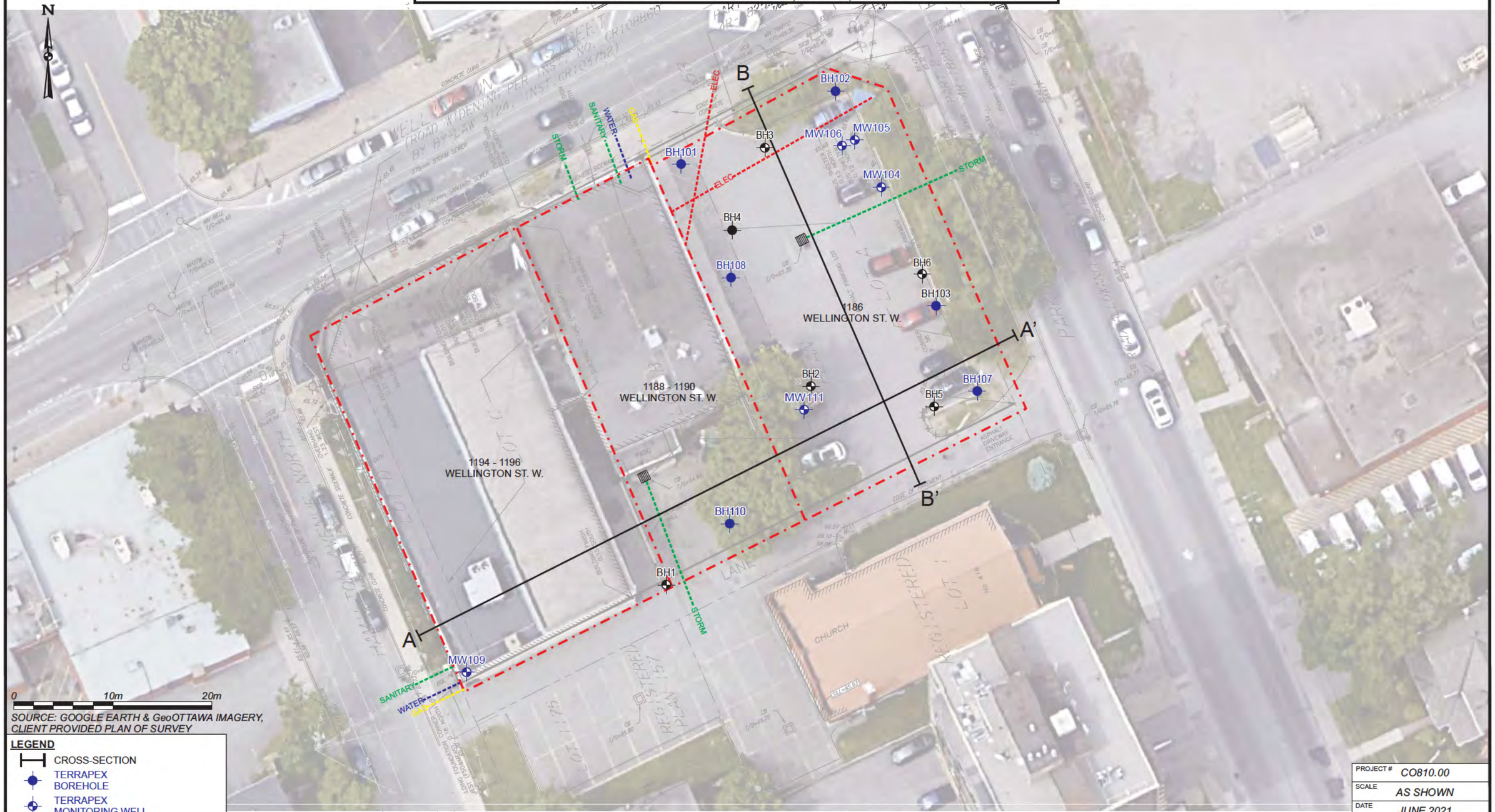
TERRAPEX

GENERAL SITE LAYOUT

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GOOGLE EARTH & GeoOTTAWA IMAGERY, CLIENT PROVIDED PLAN OF SURVEY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 2A

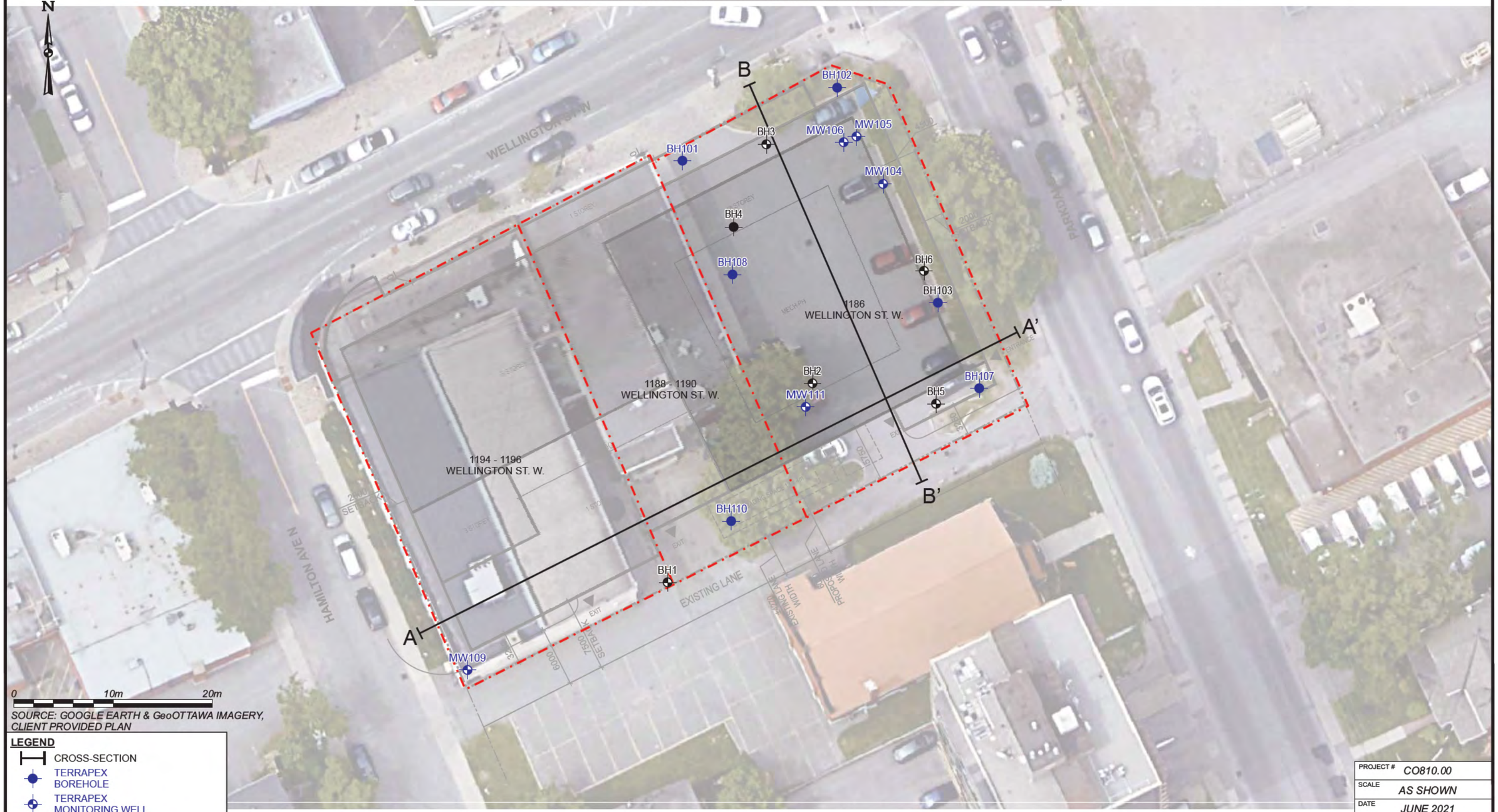
TERRAPEX

GENERAL SITE LAYOUT
CONCEPTUAL SITE PLAN

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GOOGLE EARTH & GeoOTTAWA IMAGERY, CLIENT PROVIDED PLAN

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 2B

TERRAPEX

PHASE ONE STUDY AREA AND SURROUNDING LAND USE

1186-1196 WELLINGTON STREET WEST
OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP

LEGEND

● POTENTIALLY CONTAMINATING ACTIVITIES (PCA)

0 100m 200m

SOURCE: VUMAP FIRST BASE SOLUTIONS, 2017 MAGERY.

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	AB
CHECKED	
DRAWING #	FIGURE 3

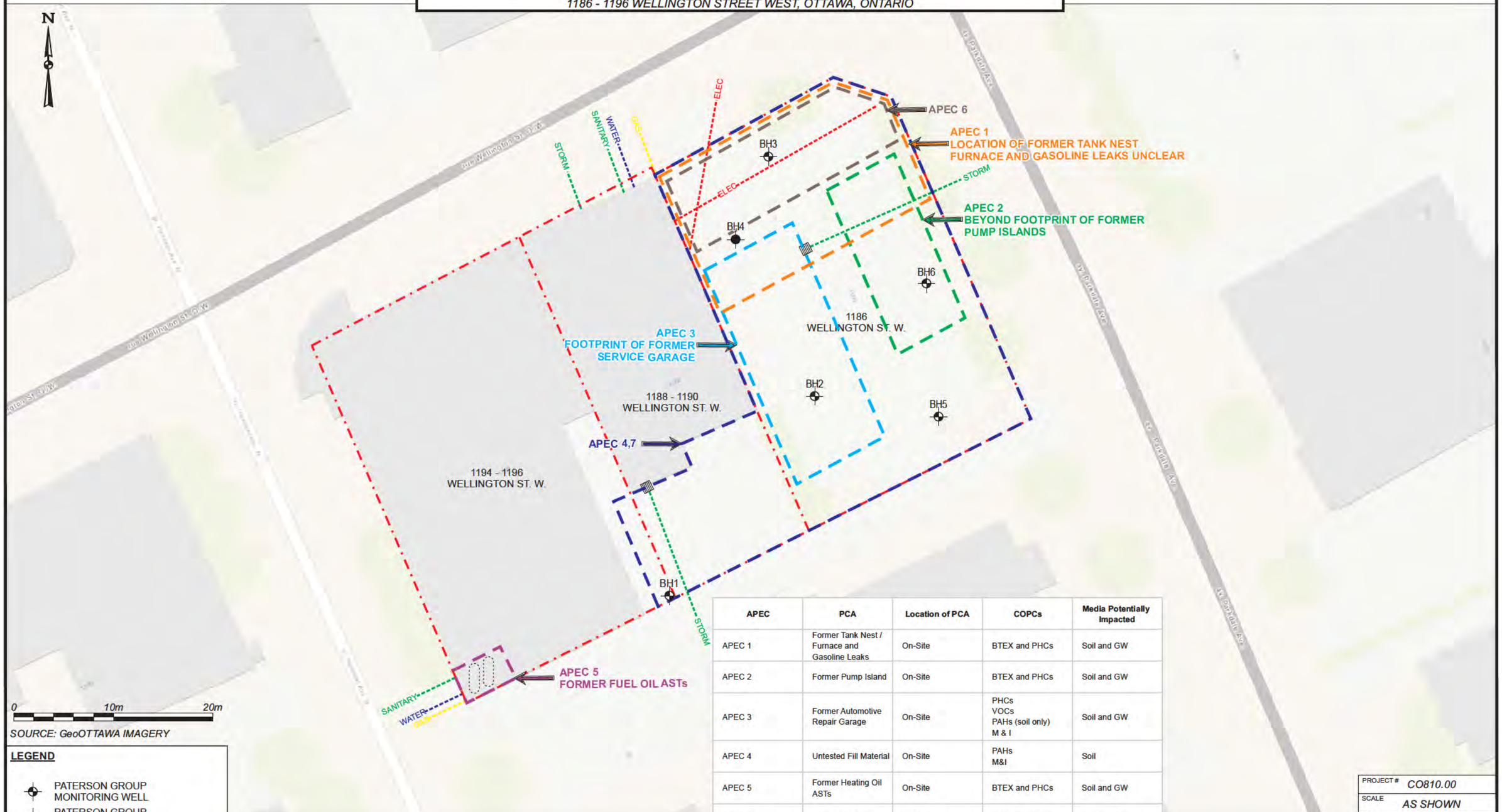
TERRAPEX

PHASE ONE CSM
AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GeoOTTAWA IMAGERY

LEGEND

- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

APEC	PCA	Location of PCA	COPCs	Media Potentially Impacted
APEC 1	Former Tank Nest / Furnace and Gasoline Leaks	On-Site	BTEX and PHCs	Soil and GW
APEC 2	Former Pump Island	On-Site	BTEX and PHCs	Soil and GW
APEC 3	Former Automotive Repair Garage	On-Site	PHCs VOCs PAHs (soil only) M & I	Soil and GW
APEC 4	Untested Fill Material	On-Site	PAHs M&I	Soil
APEC 5	Former Heating Oil ASTs	On-Site	BTEX and PHCs	Soil and GW
APEC 6	Retail Fuel Outlet	Off-Site	BTEX and PHCs	Soil and GW
APEC 7	Parking Lot Deicing	On-Site	EC / SAR	Soil
			Cl / Na	Groundwater

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 4A

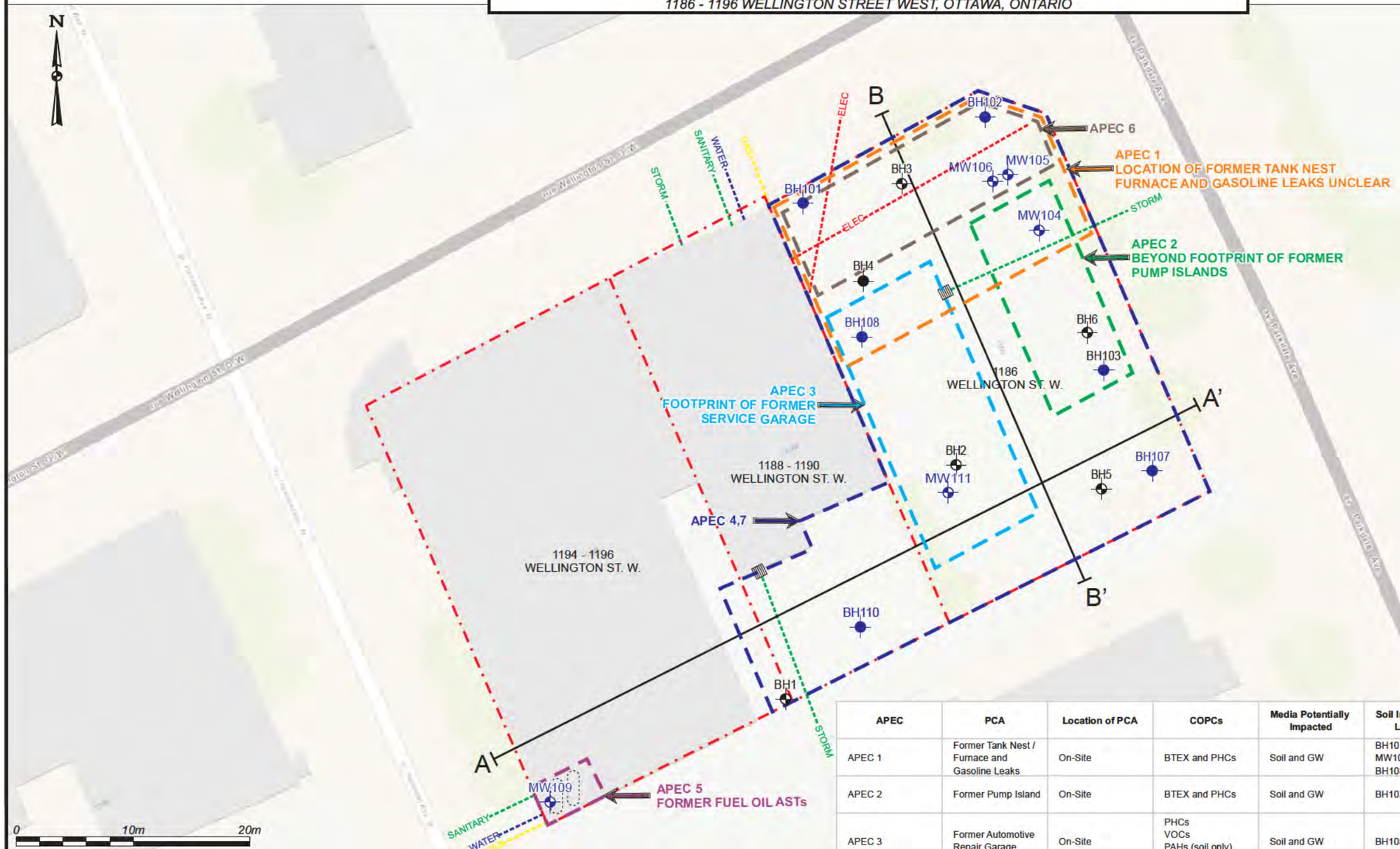
TERRAPEX

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN
PHASE TWO SAMPLING LOCATIONS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

APEC	PCA	Location of PCA	COPCs	Media Potentially Impacted	Soil Investigation Locations	GW Investigation Locations
APEC 1	Former Tank Nest / Furnace and Gasoline Leaks	On-Site	BTEX and PHCs	Soil and GW	BH101, BH102, MW104, MW105, BH108	MW104, MW105, MW106
APEC 2	Former Pump Island	On-Site	BTEX and PHCs	Soil and GW	BH103, MW104	MW104
APEC 3	Former Automotive Repair Garage	On-Site	PHCs VOCs PAHs (soil only) M & I	Soil and GW	BH108, MW111	MW111
APEC 4	Untested Fill Material	On-Site	PAHs M&I	Soil	All except BH101, MW109	None
APEC 5	Former Heating Oil ASTs	On-Site	BTEX and PHCs	Soil and GW	MW109	MW109
APEC 6	Retail Fuel Outlet	Off-Site	BTEX and PHCs	Soil and GW	BH101, BH102, MW105	MW105, MW106
APEC 7	Parking Lot Deicing	On-Site	EC / SAR Cl / Na	Soil Groundwater	All except BH101, MW109	All except MW109

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 4B

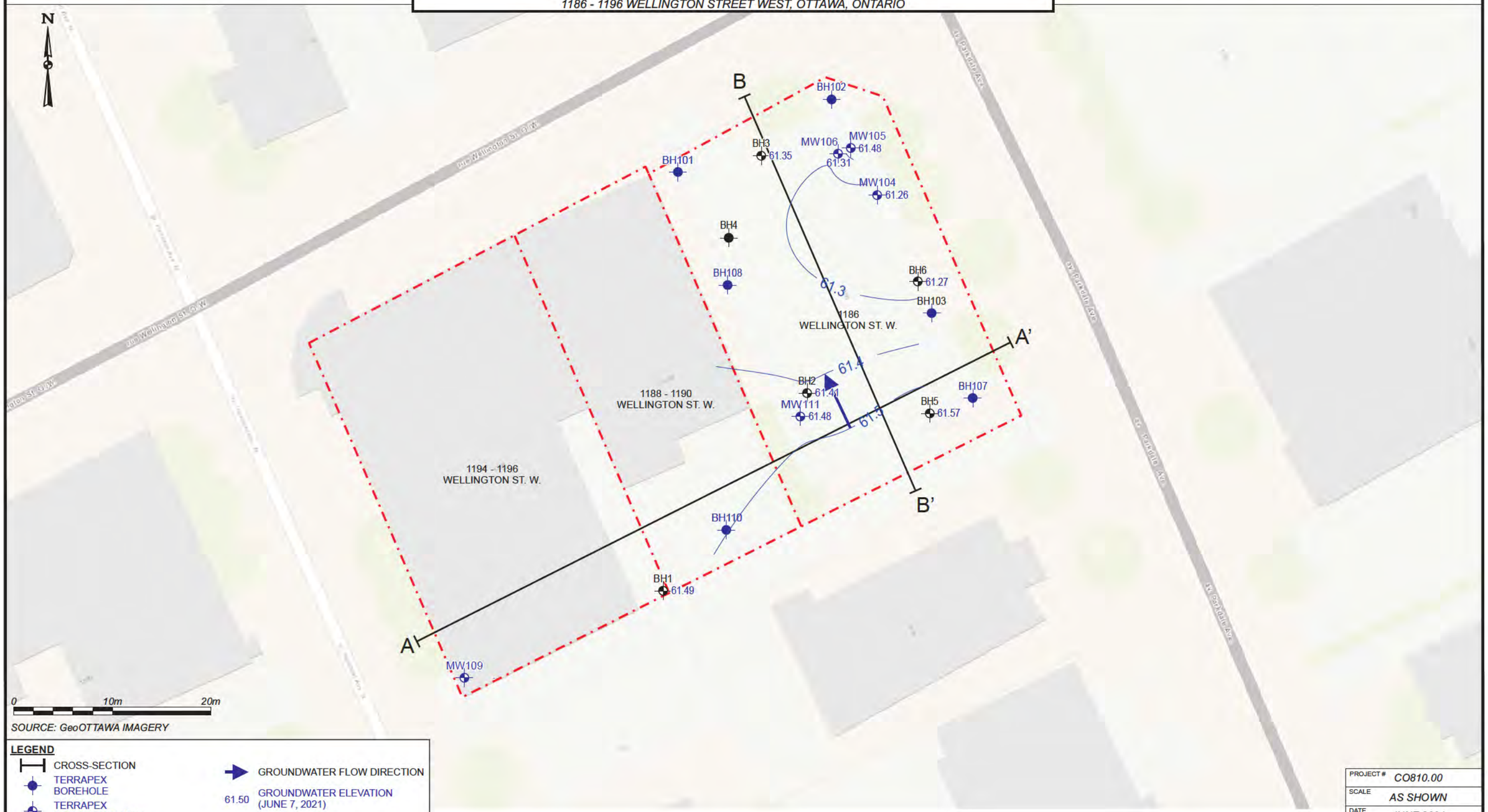
TERRAPEX

INTERPRETED GROUNDWATER FLOW DIRECTION
JUNE 7, 2021

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE
- GROUNDWATER FLOW DIRECTION
- 61.50 GROUNDWATER ELEVATION (JUNE 7, 2021)

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 5

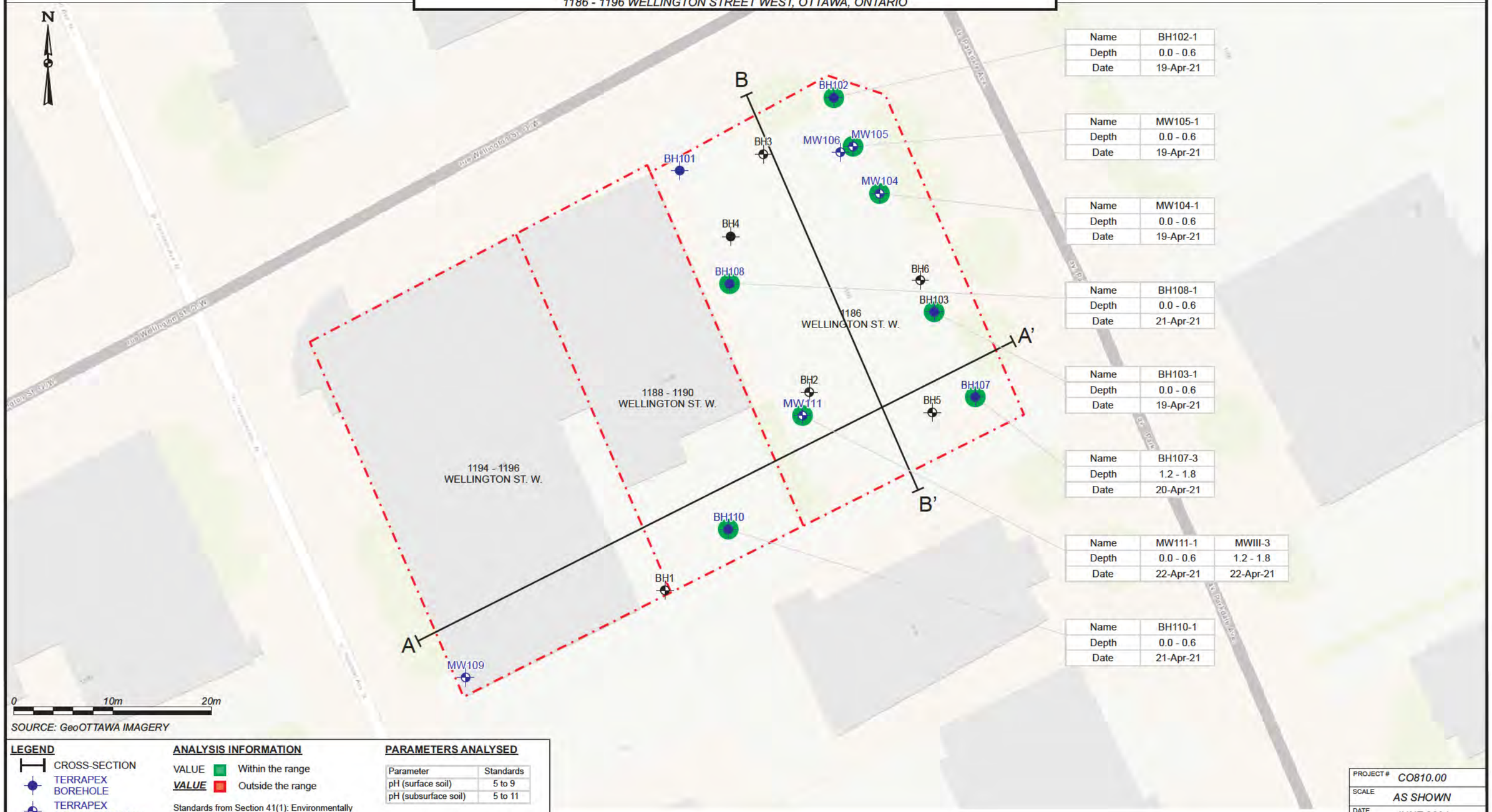
TERRAPEX

SUMMARY OF SOIL RESULTS
pH

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	BH102-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW105-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW104-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH108-1
Depth	0.0 - 0.6
Date	21-Apr-21

Name	BH103-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH107-3
Depth	1.2 - 1.8
Date	20-Apr-21

Name	MW111-1	MWIII-3
Depth	0.0 - 0.6	1.2 - 1.8
Date	22-Apr-21	22-Apr-21

Name	BH110-1
Depth	0.0 - 0.6
Date	21-Apr-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Within the range

VALUE Outside the range

Standards from Section 41(1): Environmentally Sensitive Areas, under O.Reg 153/04, Records of Site Condition – Part XV.1 of he Environmental Protection Act

PARAMETERS ANALYSED

Parameter	Standards
pH (surface soil)	5 to 9
pH (subsurface soil)	5 to 11

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6A

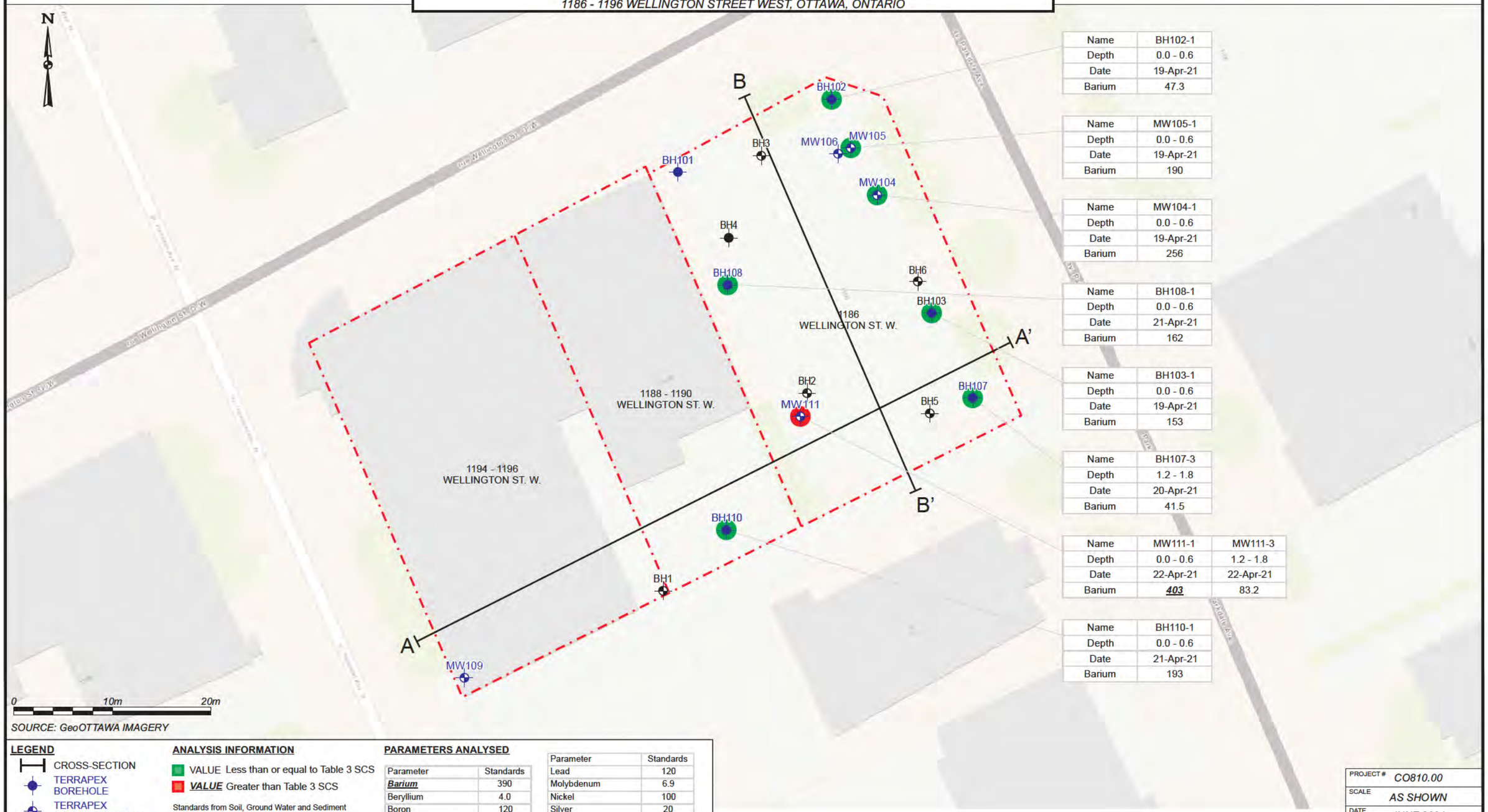
TERRAPEX

SUMMARY OF SOIL RESULTS
METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	BH102-1
Depth	0.0 - 0.6
Date	19-Apr-21
Barium	47.3

Name	MW105-1
Depth	0.0 - 0.6
Date	19-Apr-21
Barium	190

Name	MW104-1
Depth	0.0 - 0.6
Date	19-Apr-21
Barium	256

Name	BH108-1
Depth	0.0 - 0.6
Date	21-Apr-21
Barium	162

Name	BH103-1
Depth	0.0 - 0.6
Date	19-Apr-21
Barium	153

Name	BH107-3
Depth	1.2 - 1.8
Date	20-Apr-21
Barium	41.5

Name	MW111-1	MW111-3
Depth	0.0 - 0.6	1.2 - 1.8
Date	22-Apr-21	22-Apr-21
Barium	***403***	83.2

Name	BH110-1
Depth	0.0 - 0.6
Date	21-Apr-21
Barium	193

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Barium	390
Beryllium	4.0
Boron	120
Cadmium	1.2
Chromium	160
Cobalt	22
Copper	140

Parameter	Standards
Lead	120
Molybdenum	6.9
Nickel	100
Silver	20
Thallium	1.0
Uranium	23
Vanadium	86
Zinc	340

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6B

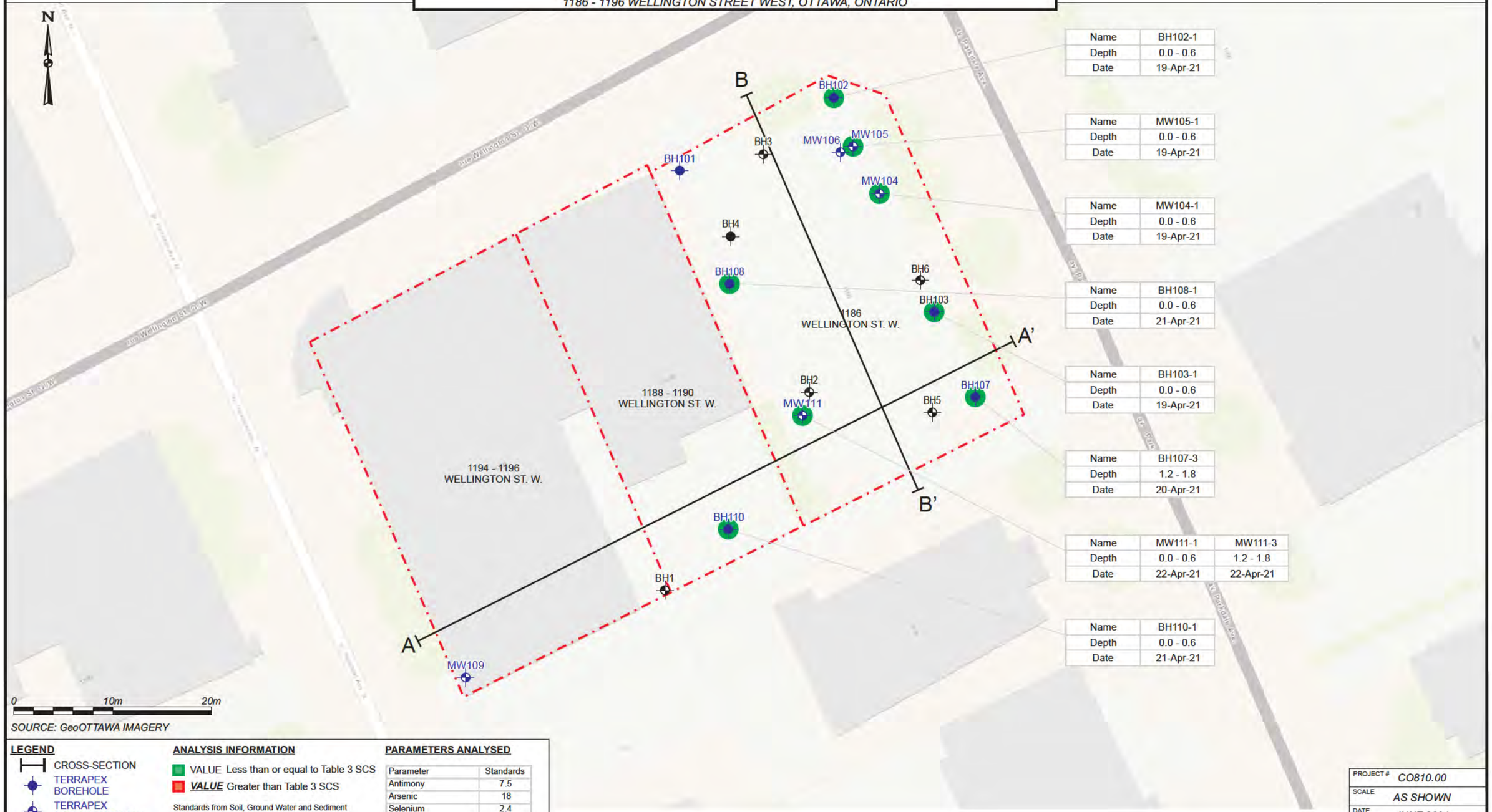
TERRAPEX

SUMMARY OF SOIL RESULTS
HYDRIDE-FORMING METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	BH102-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW105-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW104-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH108-1
Depth	0.0 - 0.6
Date	21-Apr-21

Name	BH103-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH107-3
Depth	1.2 - 1.8
Date	20-Apr-21

Name	MW111-1	MW111-3
Depth	0.0 - 0.6	1.2 - 1.8
Date	22-Apr-21	22-Apr-21

Name	BH110-1
Depth	0.0 - 0.6
Date	21-Apr-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Antimony	7.5
Arsenic	18
Selenium	2.4

PROJECT #	*CO810.00*
SCALE	*AS SHOWN*
DATE	*JUNE 2021*
DRAWN	*JOB*
CHECKED	*KWB*
DRAWING #	*FIGURE 6C*

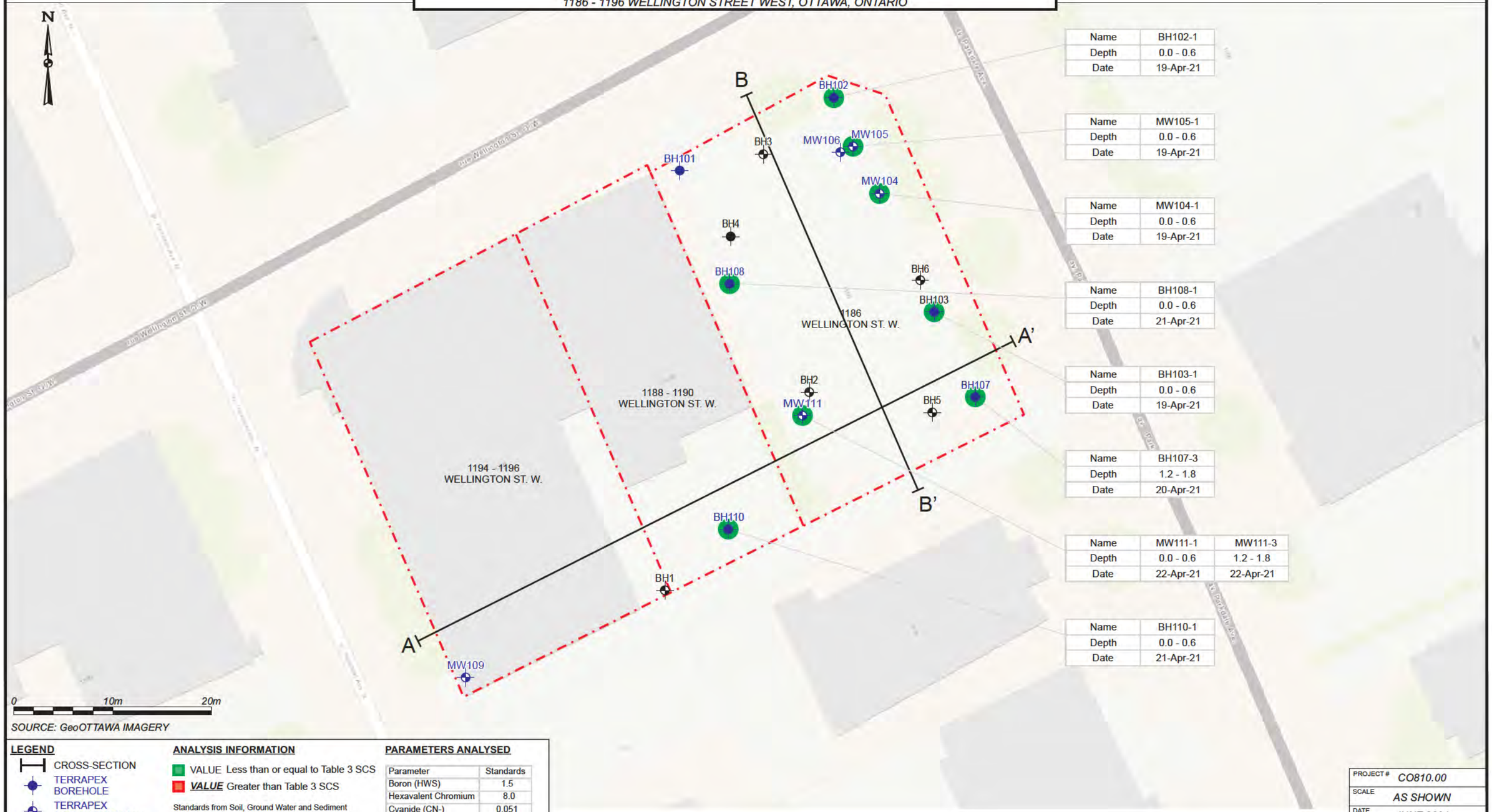
TERRAPEX

SUMMARY OF SOIL RESULTS
OTHER REGULATED PARAMETERS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	BH102-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW105-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW104-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH108-1
Depth	0.0 - 0.6
Date	21-Apr-21

Name	BH103-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH107-3
Depth	1.2 - 1.8
Date	20-Apr-21

Name	MW111-1	MW111-3
Depth	0.0 - 0.6	1.2 - 1.8
Date	22-Apr-21	22-Apr-21

Name	BH110-1
Depth	0.0 - 0.6
Date	21-Apr-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Boron (HWS)	1.5
Hexavalent Chromium	8.0
Cyanide (CN-)	0.051
Mercury	0 27

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6D

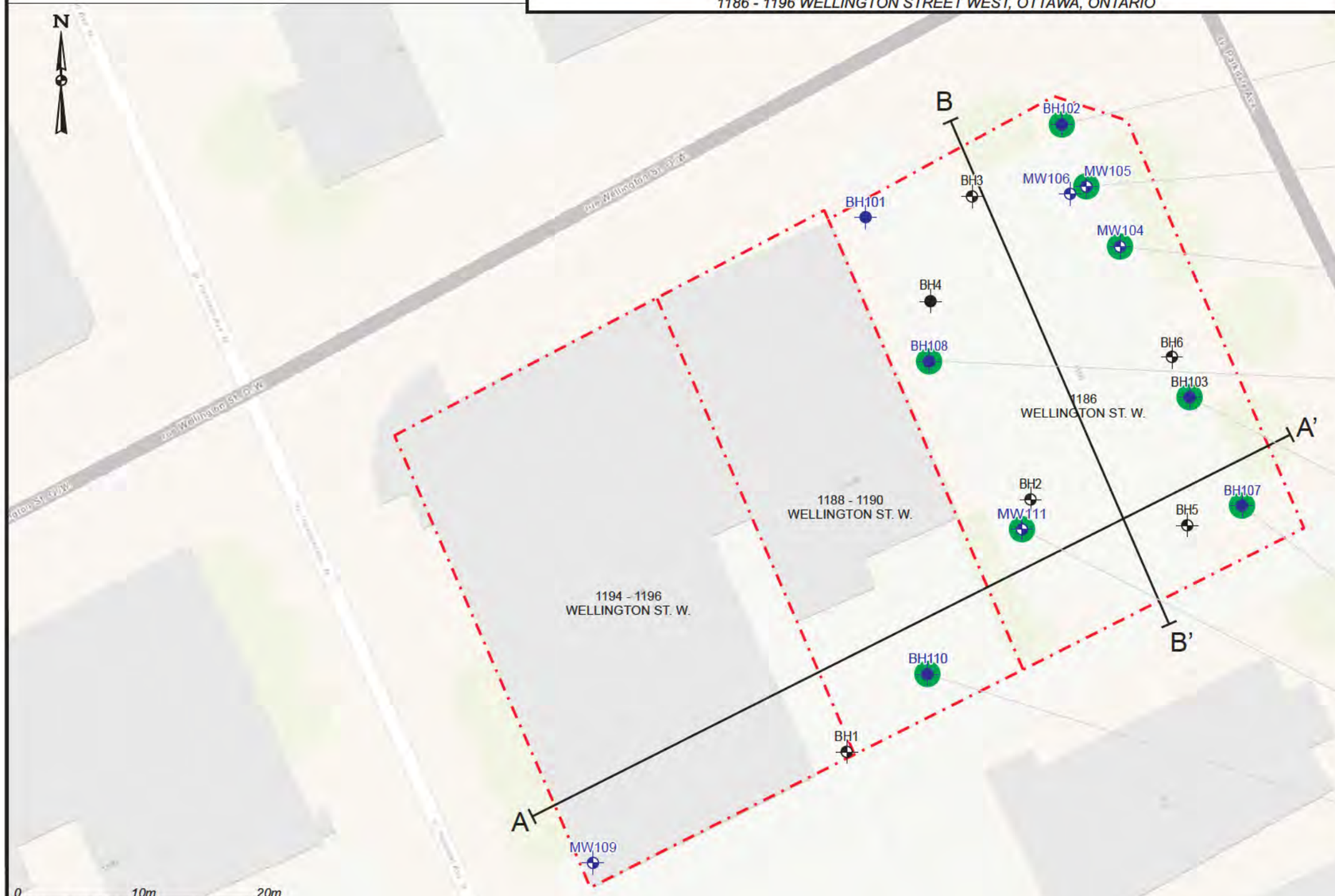
TERRAPEX

SUMMARY OF SOIL RESULTS
ELECTRICAL CONDUCTIVITY & SODIUM ABSORPTION RATIO

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GeoOTTAWA IMAGERY

Name	BH102-1
Depth	0.0 - 0.6
Date	19-Apr-21
EC	0.243
SAR	2.07

Name	MW105-1
Depth	0.0 - 0.6
Date	19-Apr-21
EC	**1.53***
SAR	1.73

Name	MW104-1
Depth	0.0 - 0.6
Date	19-Apr-21
EC	**2.65***
SAR	0.834

Name	BH108-1
Depth	0.0 - 0.6
Date	21-Apr-21
EC	**1.28***
SAR	**15.2***

Name	BH103-1
Depth	0.0 - 0.6
Date	19-Apr-21
EC	**1.72***
SAR	0.478

Name	BH107-3
Depth	1.2 - 1.8
Date	20-Apr-21
EC	0.132
SAR	1.39

Name	MW111-1	MW111-3
Depth	0.0 - 0.6	1.2 - 1.8
Date	22-Apr-21	22-Apr-21
EC	**0.710***	**1.50***
SAR	0.594	3.48

Name	BH110-1
Depth	0.0 - 0.6
Date	21-Apr-21
EC	**1.12***
SAR	**10.9***

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
EC	0.70
SAR	5.0

*Not considered contaminants of concern for the purposes of filing a Record of Site Condition per Section 49.1 of O Reg.153/04.

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6E

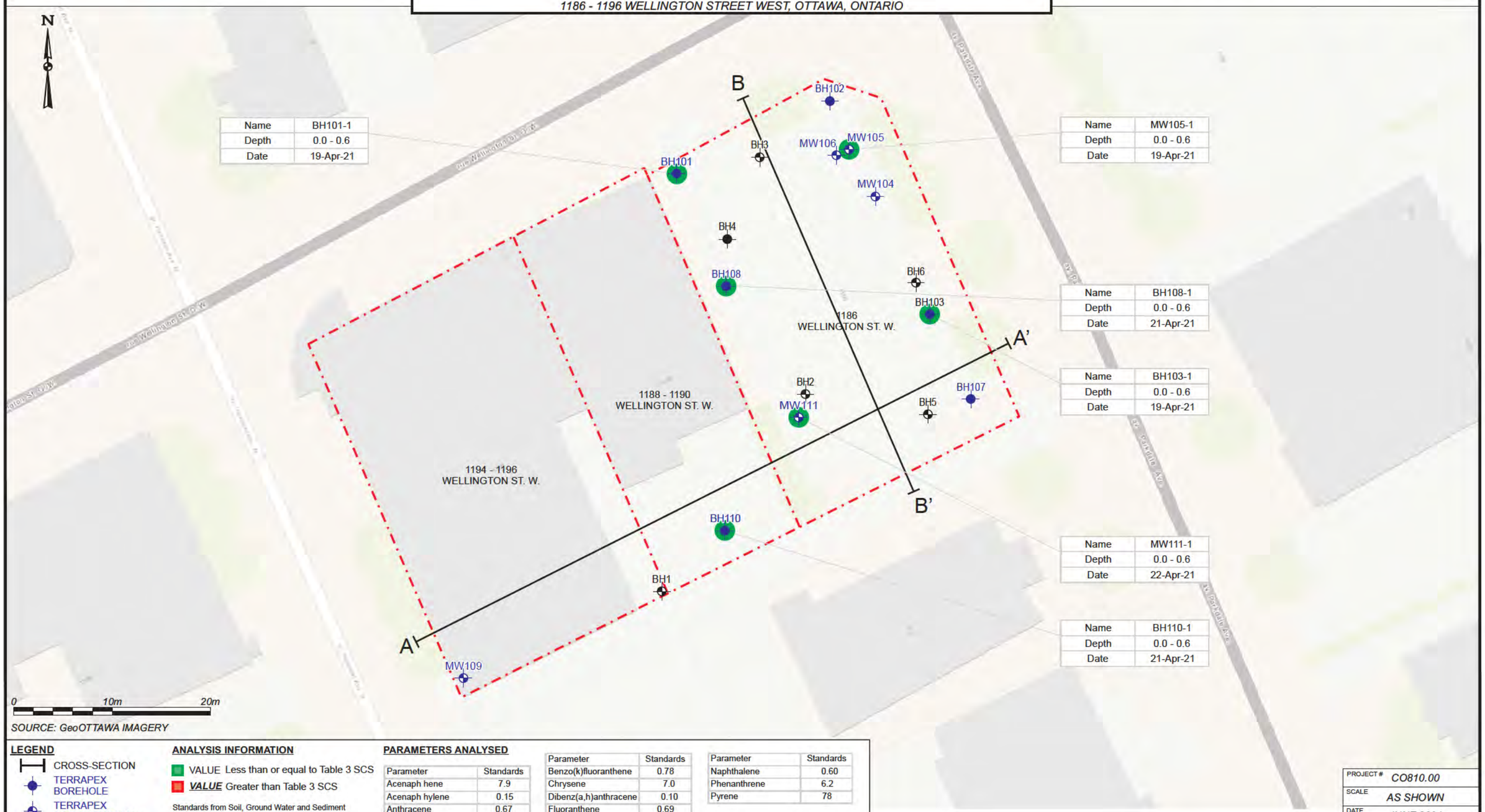
TERRAPEX

SUMMARY OF SOIL RESULTS
PAHs

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	BH101-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW105-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	BH108-1
Depth	0.0 - 0.6
Date	21-Apr-21

Name	BH103-1
Depth	0.0 - 0.6
Date	19-Apr-21

Name	MW111-1
Depth	0.0 - 0.6
Date	22-Apr-21

Name	BH110-1
Depth	0.0 - 0.6
Date	21-Apr-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Acenaph hene	7.9
Acenaph hylene	0.15
Anthracene	0.67
Benz(a)anthracene	0.50
Benzo(a)pyrene	0.30
Benzo(b)fluoranthene	0.78
Benzo(g,h,i)perylene	6.6

Parameter	Standards
Benzo(k)fluoranthene	0.78
Chrysene	7.0
Dibenz(a,h)anthracene	0.10
Fluoranthene	0.69
Fluorene	62
Indeno(1,2,3-cd)pyrene	0.38
Methylnaphthalene, 1-	0.99
Methylnaphthalene, 2-	0.99

Parameter	Standards
Naphthalene	0.60
Phenanthrene	6.2
Pyrene	78

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6F

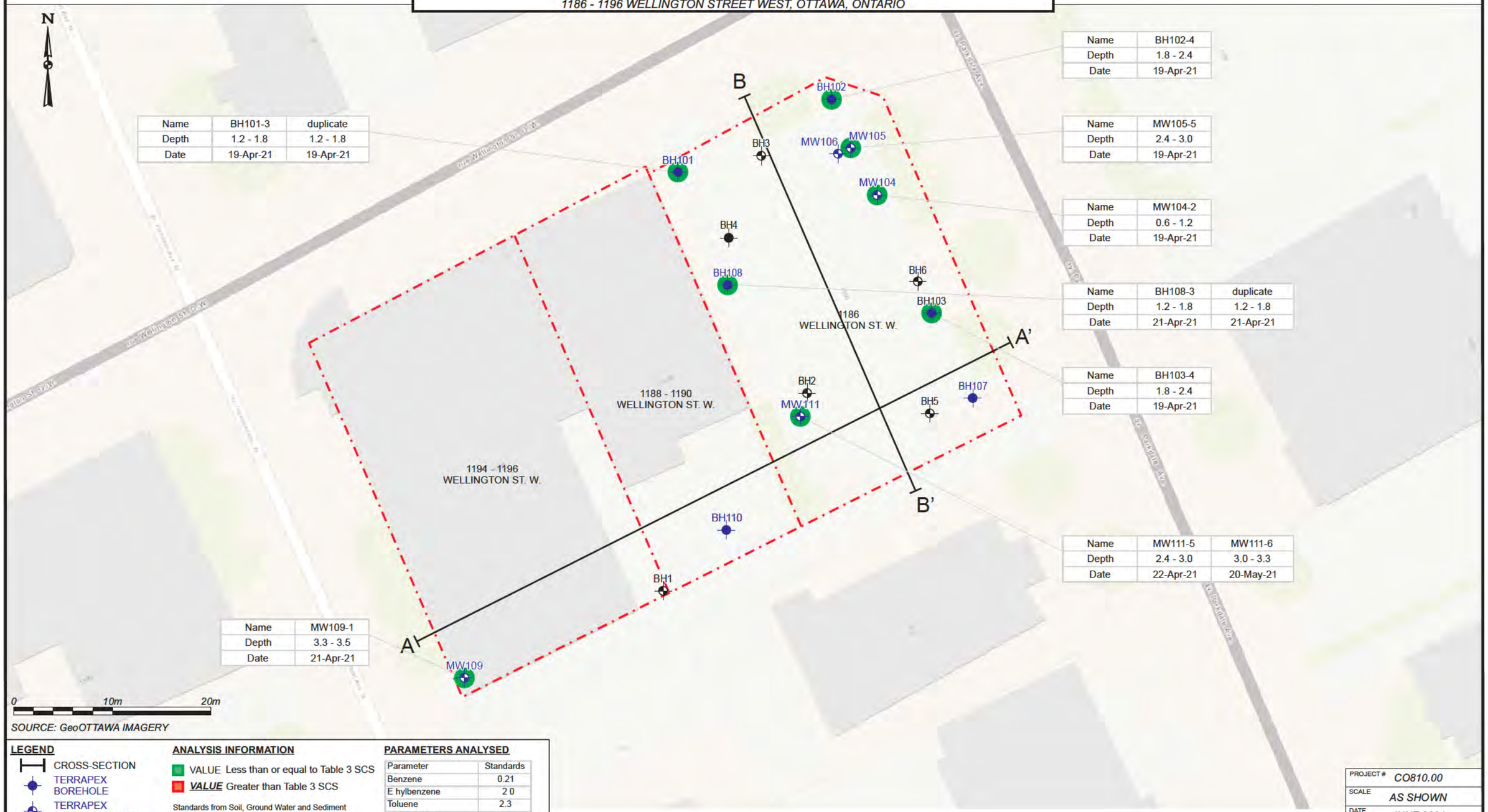
TERRAPEX

SUMMARY OF SOIL RESULTS
BTEX and PHCs

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	BH101-3	duplicate
Depth	1.2 - 1.8	1.2 - 1.8
Date	19-Apr-21	19-Apr-21

Name	BH102-4
Depth	1.8 - 2.4
Date	19-Apr-21

Name	MW105-5
Depth	2.4 - 3.0
Date	19-Apr-21

Name	MW104-2
Depth	0.6 - 1.2
Date	19-Apr-21

Name	BH108-3	duplicate
Depth	1.2 - 1.8	1.2 - 1.8
Date	21-Apr-21	21-Apr-21

Name	BH103-4
Depth	1.8 - 2.4
Date	19-Apr-21

Name	MW111-5	MW111-6
Depth	2.4 - 3.0	3.0 - 3.3
Date	22-Apr-21	20-May-21

Name	MW109-1
Depth	3.3 - 3.5
Date	21-Apr-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Benzene	0.21
E hylbenzene	2 0
Toluene	2.3
Xylenes (total)	3.1
PHC F1	55
PHC F2	98
PHC F3	300
PHC F4	2800

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6G

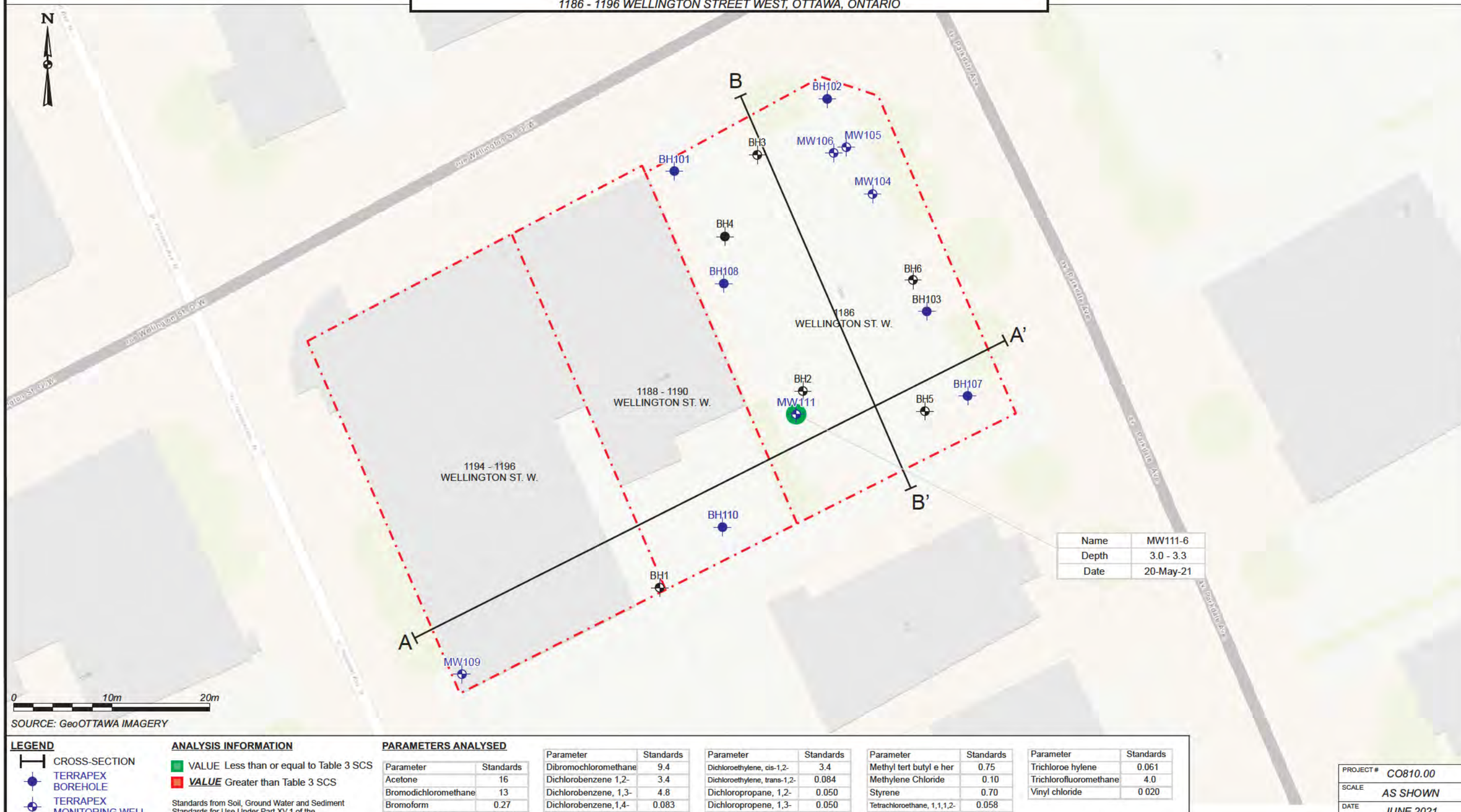
TERRAPEX

SUMMARY OF SOIL RESULTS
VOCs excluding BTEX

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW111-6
Depth	3.0 - 3.3
Date	20-May-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Acetone	16
Bromodichloromethane	13
Bromoform	0.27
Bromomethane	0.050
Carbon tetrachloride	0.050
Chlorobenzene	2.4
Chloroform	0.050

Parameter	Standards
Dibromochloromethane	9.4
Dichlorobenzene 1,2-	3.4
Dichlorobenzene, 1,3-	4.8
Dichlorobenzene,1,4-	0.083
Dichlorodifluoromethane	16
Dichloroethane, 1,1-	3.5
Dichloroethane, 1,2-	0.050
Dichloroethylene, 1,1-	0.050

Parameter	Standards
Dichloroethylene, cis-1,2-	3.4
Dichloroethylene, trans-1,2-	0.084
Dichloropropane, 1,2-	0.050
Dichloropropene, 1,3-	0.050
Ethylene dibromide	0.050
Hexane	2.8
Methyl ethyl ketone	16
Methyl isobutyl ketone	1.7

Parameter	Standards
Methyl tert butyl e her	0.75
Methylene Chloride	0.10
Styrene	0.70
Tetrachloroethane, 1,1,1,2-	0.058
Tetrachloroethane, 1,1,2,2-	0.050
Tetrachloroethylene	0.28
Trichloroethane, 1,1,1-	0.38
Trichloroethane, 1,1,2-	0.050

Parameter	Standards
Trichloroe hylene	0.061
Trichlorofluoromethane	4.0
Vinyl chloride	0 020

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 6H

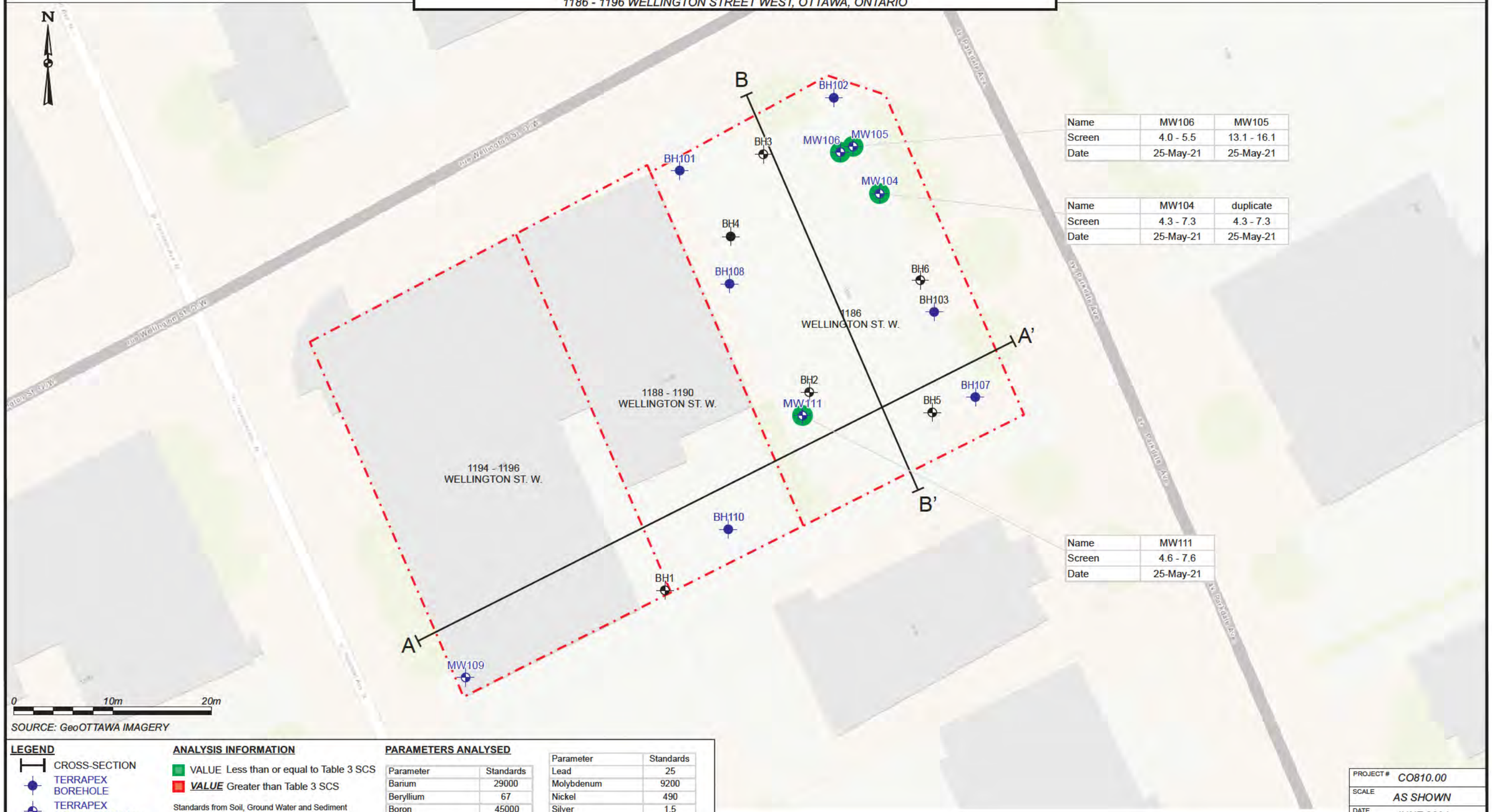
TERRAPEX

SUMMARY OF GROUNDWATER RESULTS
METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW106	MW105
Screen	4.0 - 5.5	13.1 - 16.1
Date	25-May-21	25-May-21

Name	MW104	duplicate
Screen	4.3 - 7.3	4.3 - 7.3
Date	25-May-21	25-May-21

Name	MW111
Screen	4.6 - 7.6
Date	25-May-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Barium	29000
Beryllium	67
Boron	45000
Cadmium	2.7
Chromium	810
Cobalt	66
Copper	87

Parameter	Standards
Lead	25
Molybdenum	9200
Nickel	490
Silver	1.5
Thallium	510
Uranium	420
Vanadium	250
Zinc	1100

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 7A

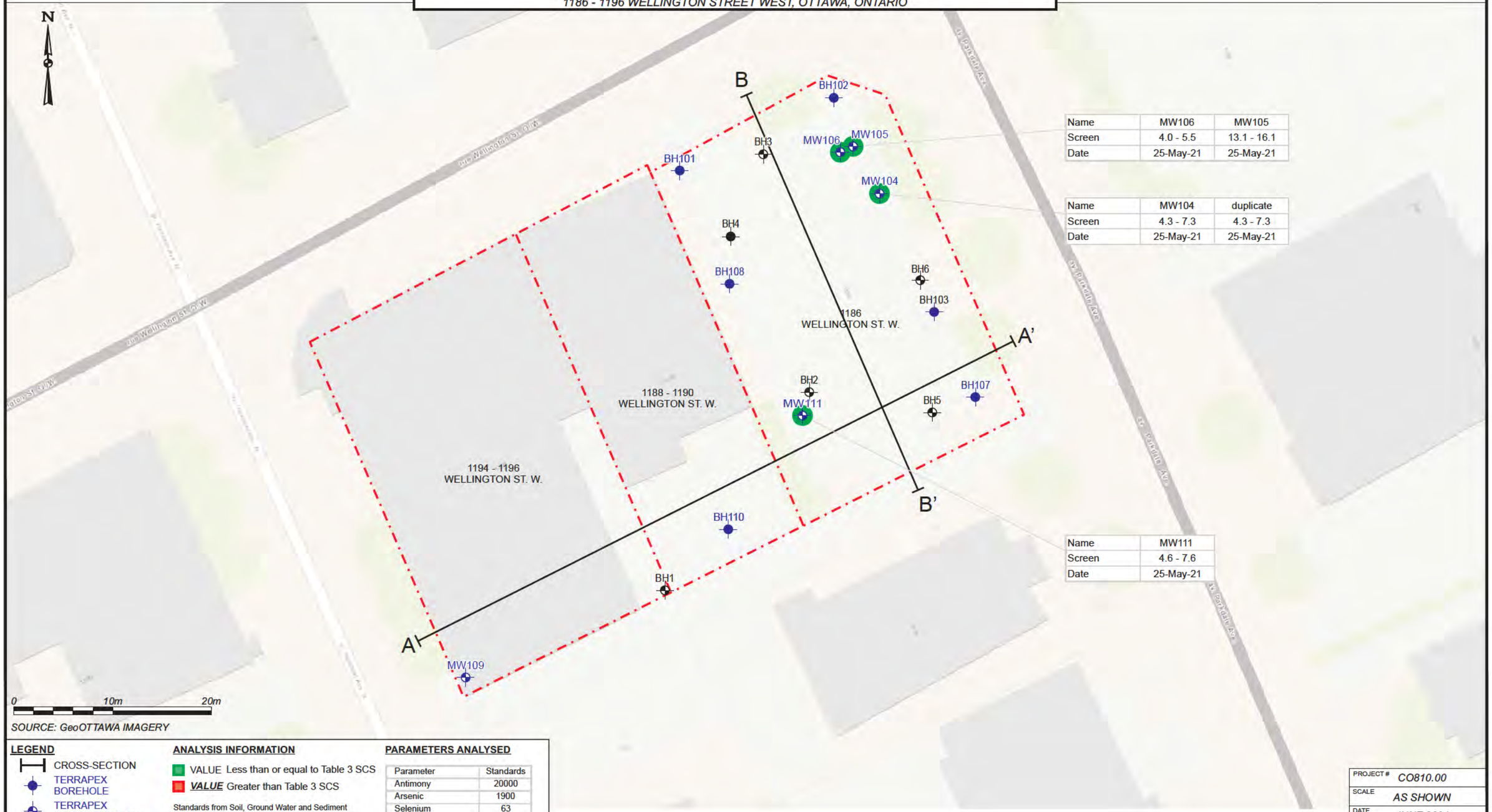
TERRAPEX

SUMMARY OF GROUNDWATER RESULTS
HYDRIDE-FORMING METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW106	MW105
Screen	4.0 - 5.5	13.1 - 16.1
Date	25-May-21	25-May-21

Name	MW104	duplicate
Screen	4.3 - 7.3	4.3 - 7.3
Date	25-May-21	25-May-21

Name	MW111
Screen	4.6 - 7.6
Date	25-May-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Antimony	20000
Arsenic	1900
Selenium	63

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 7B

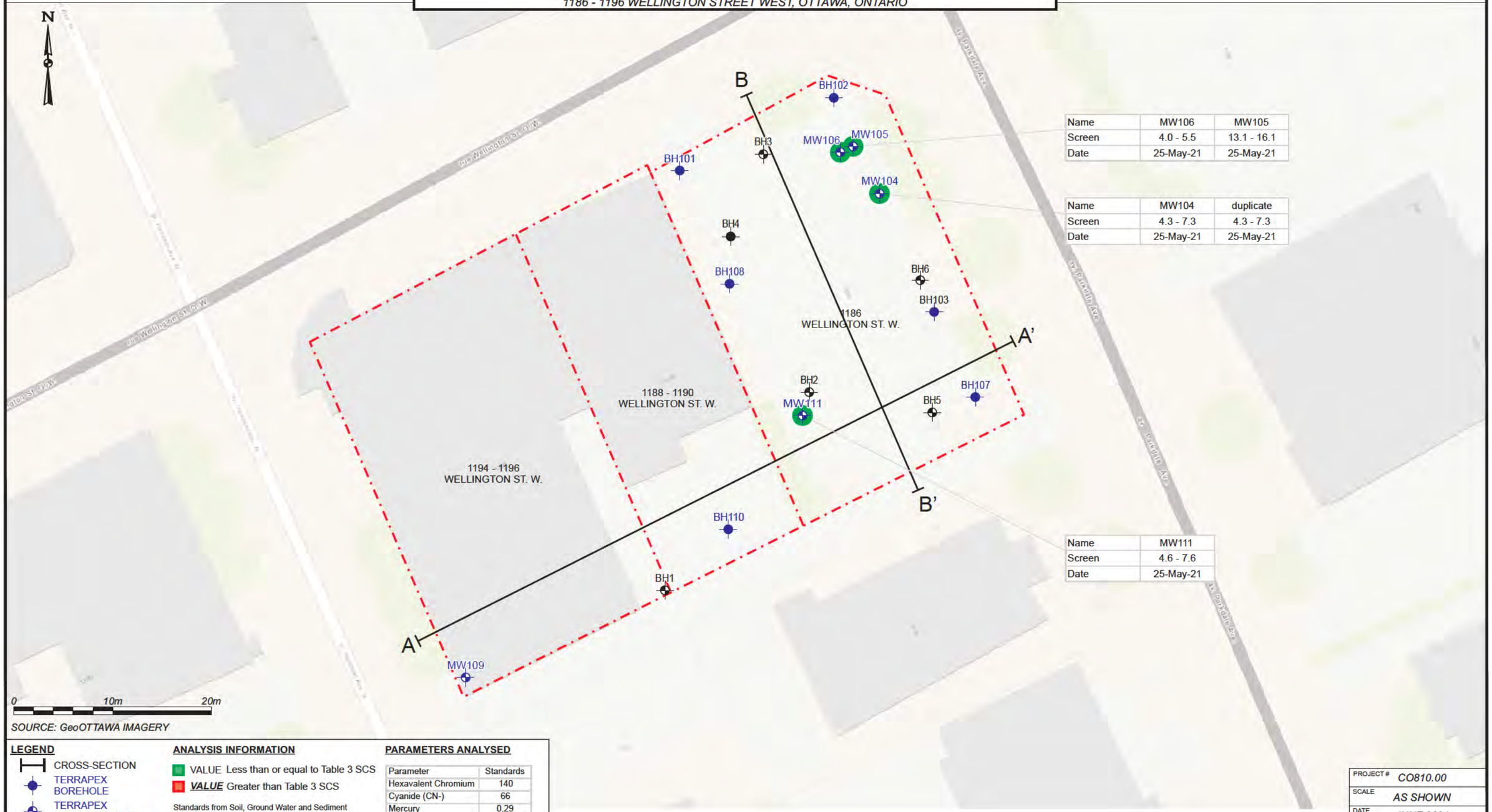
TERRAPEX

SUMMARY OF GROUNDWATER RESULTS
OTHER REGULATED PARAMETERS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW106	MW105
Screen	4.0 - 5.5	13.1 - 16.1
Date	25-May-21	25-May-21

Name	MW104	duplicate
Screen	4.3 - 7.3	4.3 - 7.3
Date	25-May-21	25-May-21

Name	MW111
Screen	4.6 - 7.6
Date	25-May-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Hexavalent Chromium	140
Cyanide (CN-)	66
Mercury	0.29

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 7C

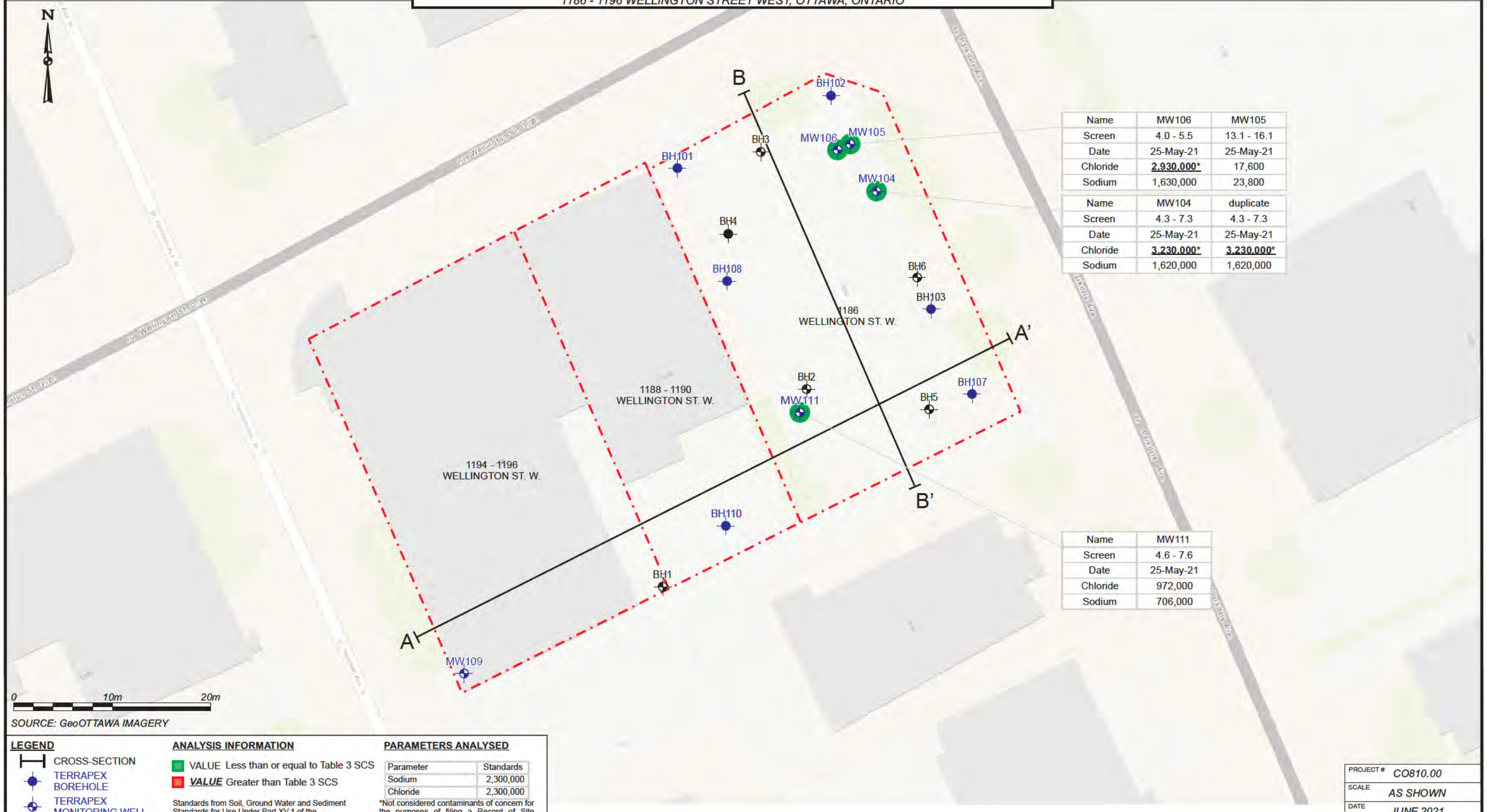
TERRAPEX

SUMMARY OF GROUNDWATER RESULTS
CHLORIDE & SODIUM

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW106	MW105
Screen	4.0 - 5.5	13.1 - 16.1
Date	25-May-21	25-May-21
Chloride	**2,930,000***	17,600
Sodium	1,630,000	23,800

Name	MW104	duplicate
Screen	4.3 - 7.3	4.3 - 7.3
Date	25-May-21	25-May-21
Chloride	**3,230,000***	**3,230,000***
Sodium	1,620,000	1,620,000

Name	MW111
Screen	4.6 - 7.6
Date	25-May-21
Chloride	972,000
Sodium	706,000

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Sodium	2,300,000
Chloride	2,300,000

*Not considered contaminants of concern for the purposes of filing a Record of Site Condition per Section 49.1 of O Reg.153/04.

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 7D

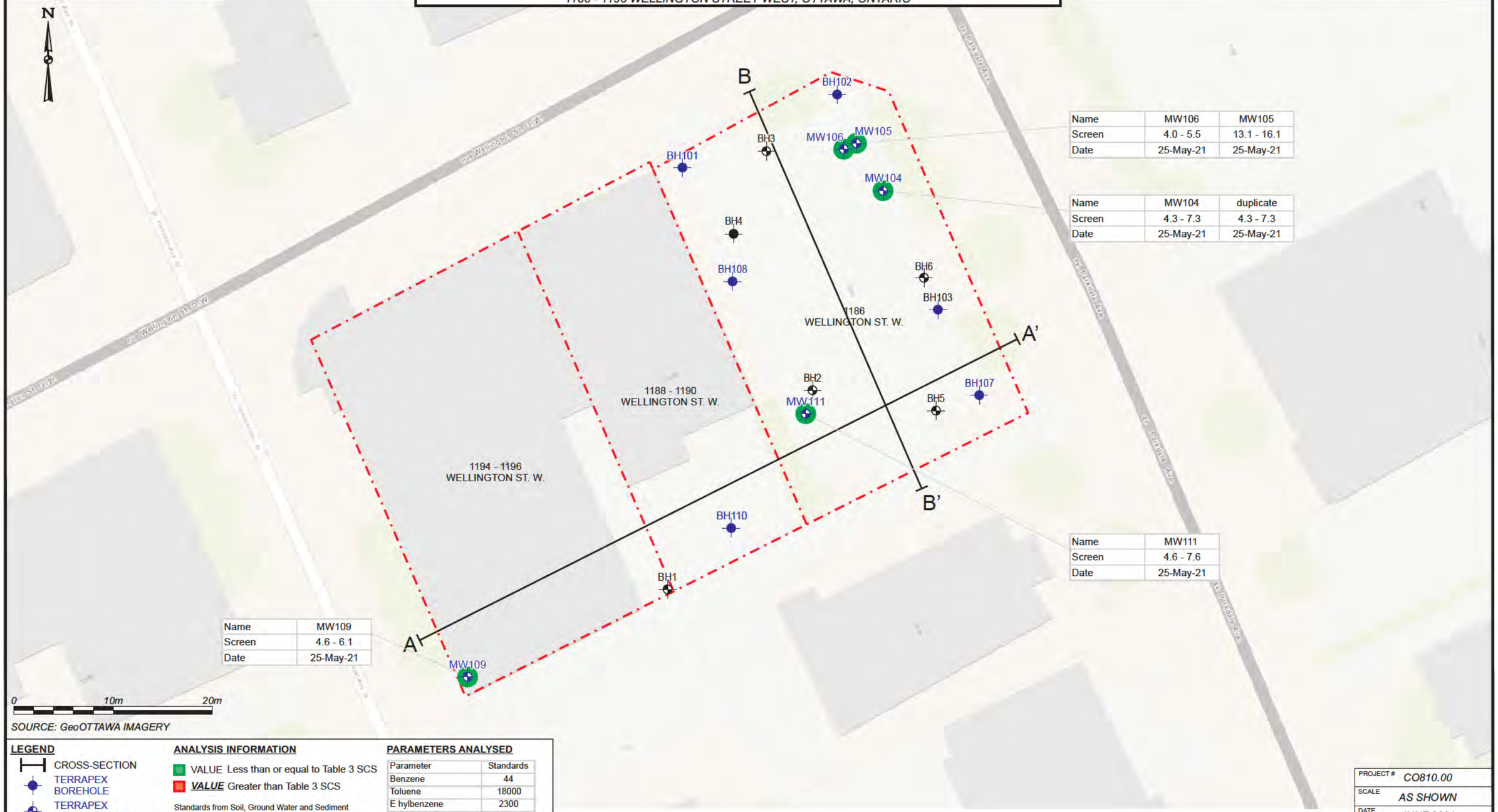
TERRAPEX

SUMMARY OF GROUNDWATER RESULTS
BTEX and PHCs

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW106	MW105
Screen	4.0 - 5.5	13.1 - 16.1
Date	25-May-21	25-May-21

Name	MW104	duplicate
Screen	4.3 - 7.3	4.3 - 7.3
Date	25-May-21	25-May-21

Name	MW111
Screen	4.6 - 7.6
Date	25-May-21

Name	MW109
Screen	4.6 - 6.1
Date	25-May-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Benzene	44
Toluene	18000
E hylbenzene	2300
Xylenes (total)	4200
PHC F1	750
PHC F2	150
PHC F3	500
PHC F4	500

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 7E

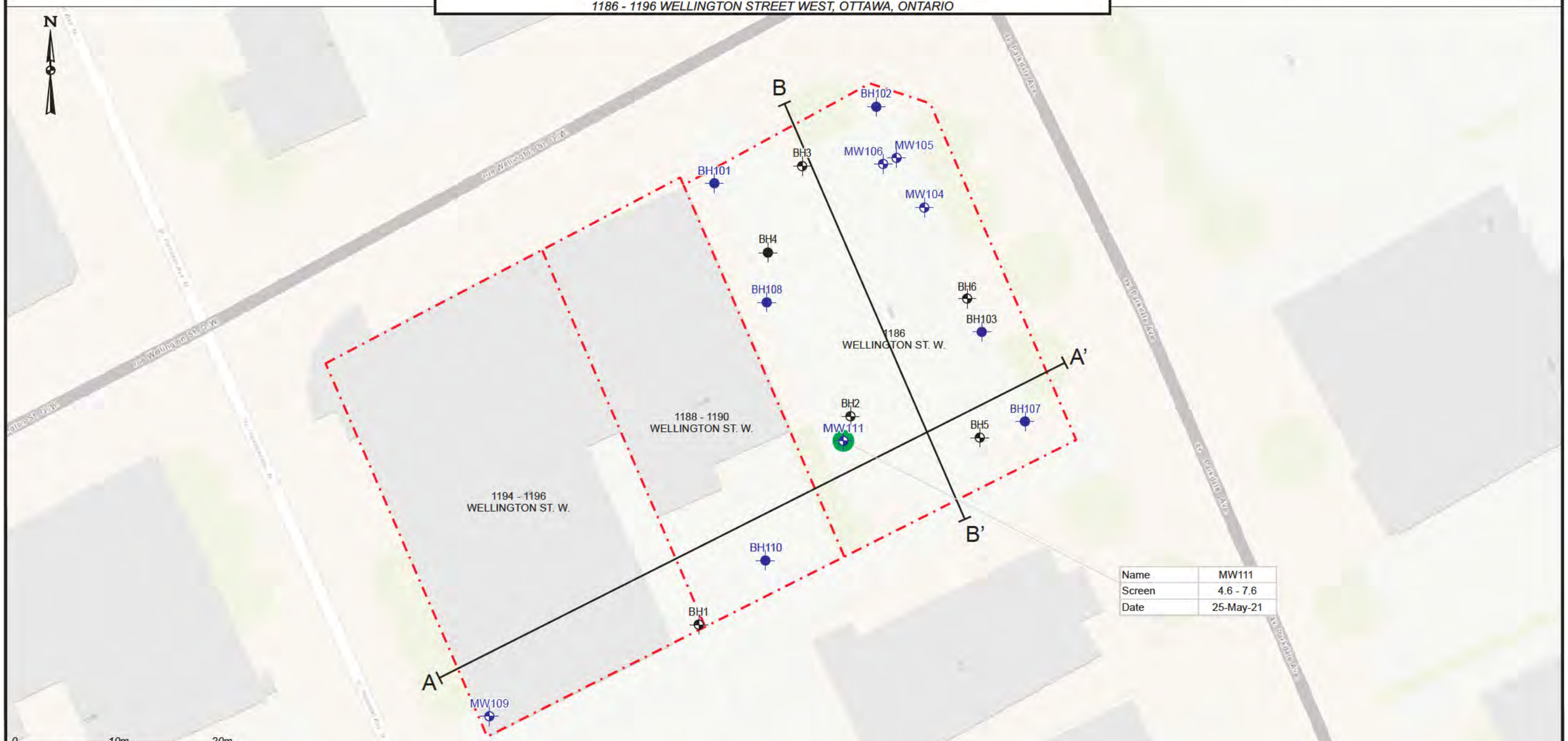
TERRAPEX

SUMMARY OF GROUNDWATER RESULTS
VOCs excluding BTEX

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



Name	MW111
Screen	4.6 - 7.6
Date	25-May-21

SOURCE: GeoOTTAWA IMAGERY

LEGEND

- CROSS-SECTION
- TERRAPEX BOREHOLE
- TERRAPEX MONITORING WELL
- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Acetone	130000
Bromodichlorome hane	85000
Bromoform	380
Bromomethane	5.6
Carbon tetrachloride	0.79
Chlorobenzene	630
Chloroform	2.4

Parameter	Standards
Dibromochloromethane	82000
Dichlorobenzene 1,2-	4600
Dichlorobenzene, 1,3-	9600
Dichlorobenzene,1,4-	8.0
Dichlorodifluoromethane	4400
Dichloroethane, 1,1-	320
Dichloroethane, 1,2-	1.6
Dichloroethylene, 1,1-	1.6

Parameter	Standards
Dichloroethylene, cis-1,2-	1.6
Dichloroethylene, trans-1,2-	1.6
Dichloropropane, 1,2-	16
Dichloropropene, 1,3-	5.2
Ethylene dibromide	0.25
Hexane	51
Methyl ethyl ketone	470000
Methyl isobutyl ketone	140000

Parameter	Standards
Methyl tert butyl e her	190
Methylene Chloride	610
Styrene	1300
Tetrachloroethane, 1,1,1,2-	3.3
Tetrachloroethane, 1,1,2,2-	3.2
Tetrachloroethylene	1.6
Trichloroethane, 1,1,1-	640
Trichloroethane, 1,1,2-	4.7

Parameter	Standards
Trichloroe hylene	1.6
Trichlorofluoromethane	2500
Vinyl chloride	0.50

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 7F

TERRAPEX

CROSS-SECTIONS

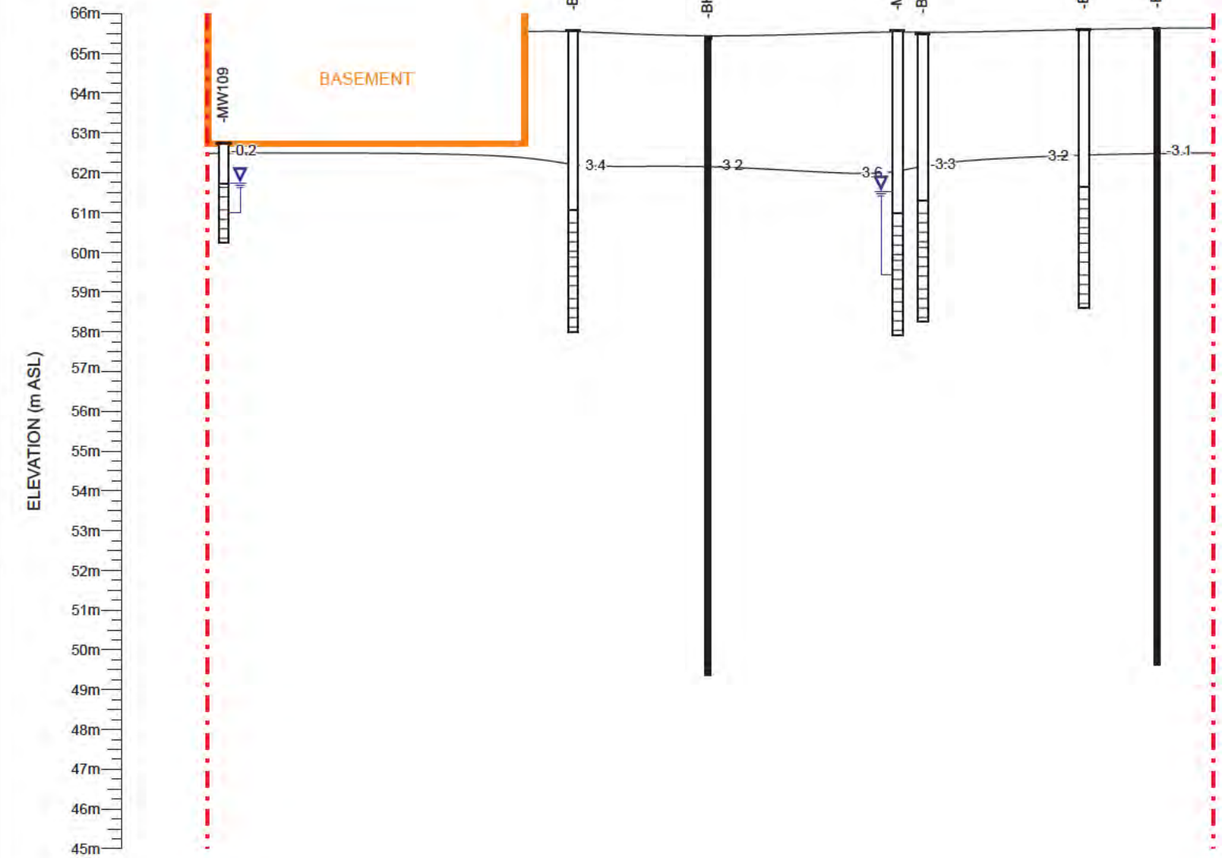
1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP

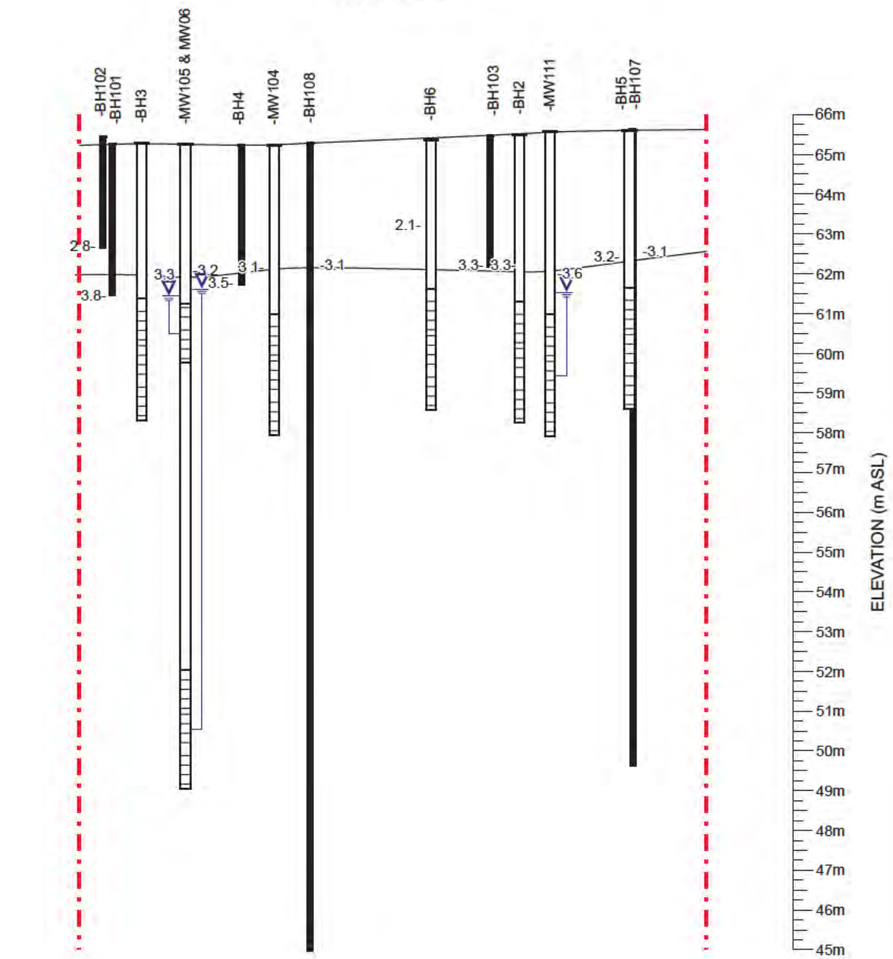
A — A'

LOOKING NORTH



B — B'

LOOKING EAST



0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 8

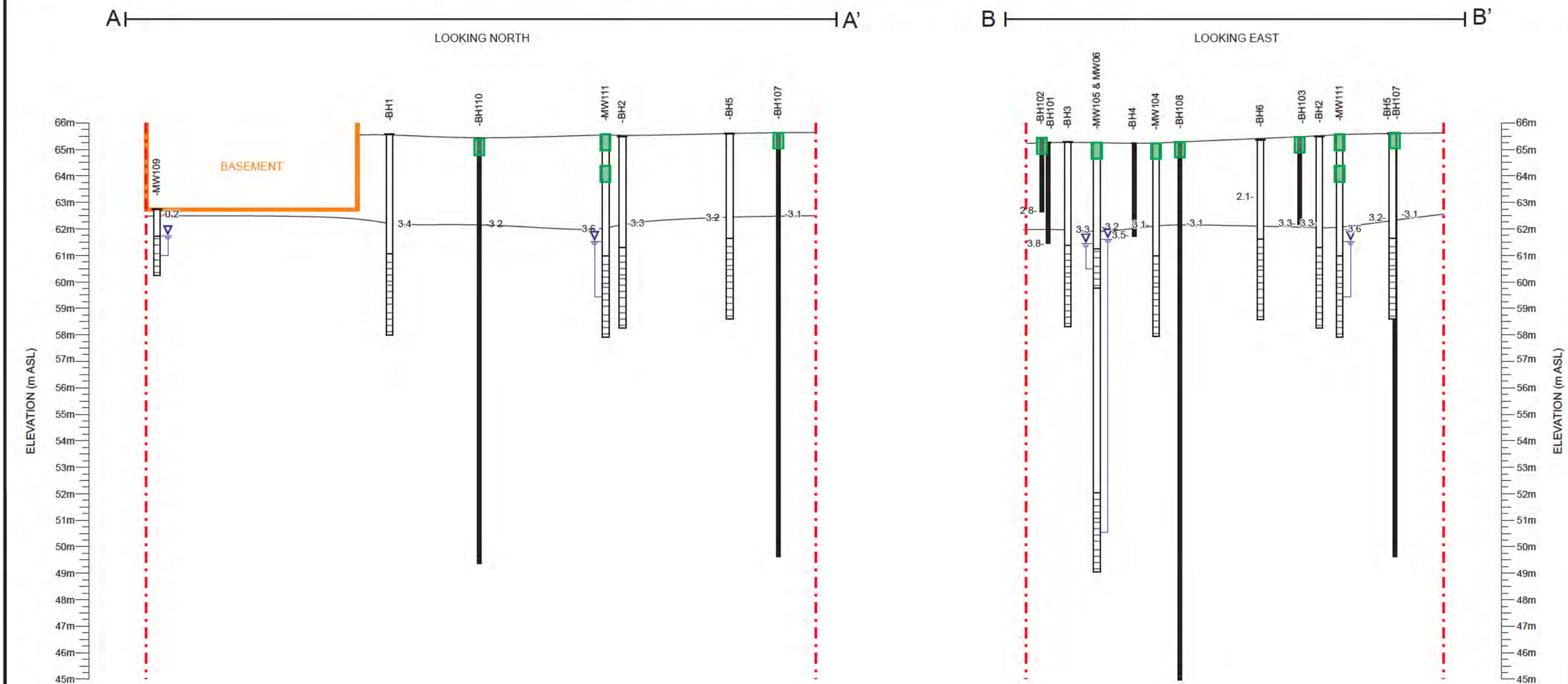
TERRAPEX

CROSS-SECTIONS- SUMMARY OF SOIL RESULTS
pH

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Within the range

VALUE Outside the range

Standards from Section 41(1): Environmentally Sensitive Areas, under O.Reg 153/04, Records of Site Condition – Part XV.1 of he Environmental Protection Act

PARAMETERS ANALYSED

Parameter	Standards
pH (surface soil)	5 to 9
pH (subsurface soil)	5 to 11

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9A

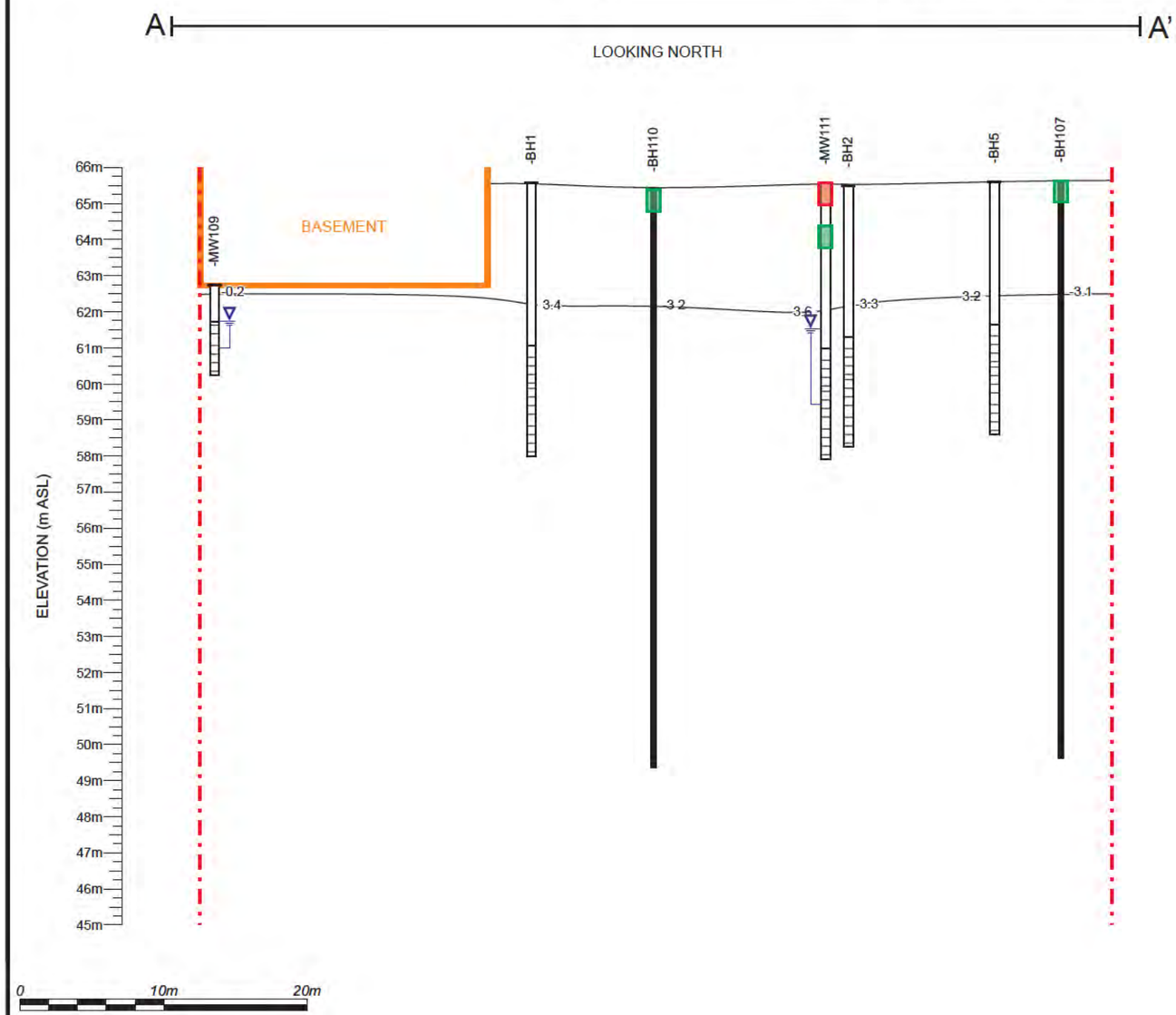
TERRAPEX

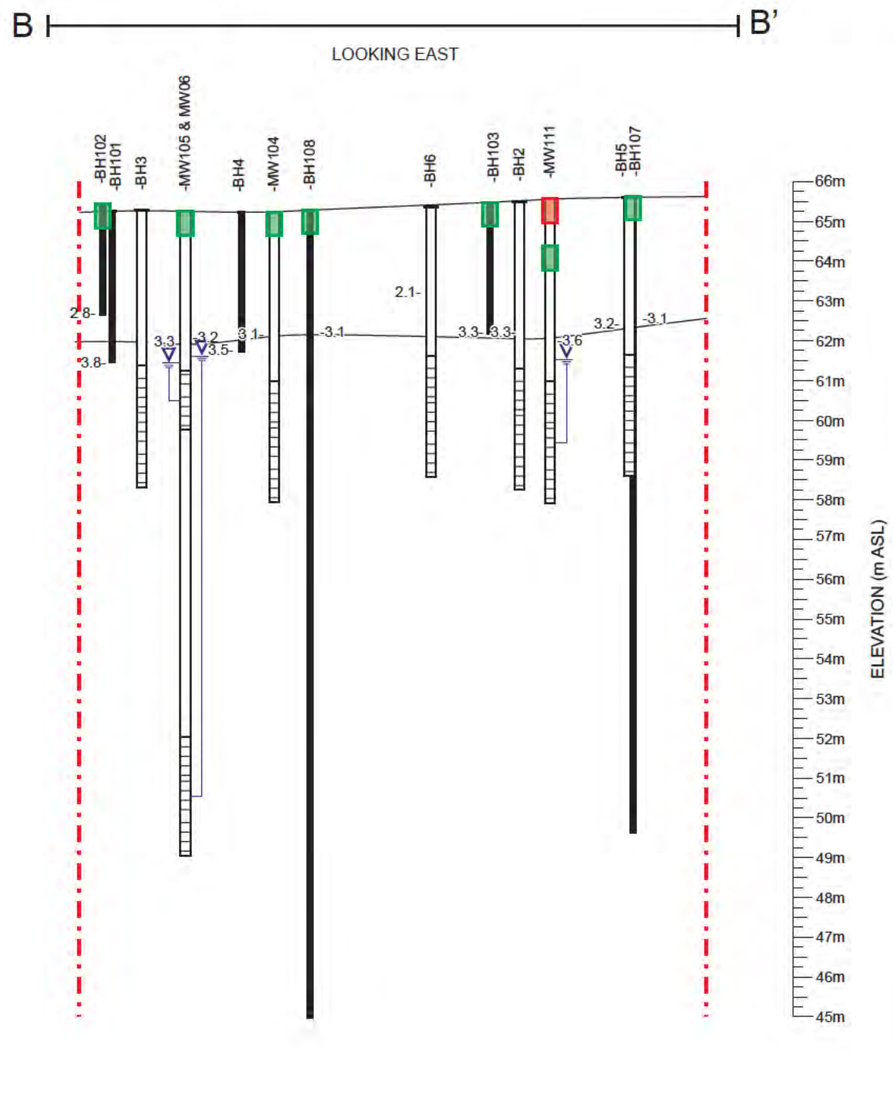
CROSS-SECTIONS- SUMMARY OF SOIL RESULTS METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Barium	390
Beryllium	4.0
Boron	120
Cadmium	1.2
Chromium	160
Cobalt	22
Copper	140

Parameter	Standards
Lead	120
Molybdenum	6.9
Nickel	100
Silver	20
Thallium	1 0
Uranium	23
Vanadium	86
Zinc	340

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9B

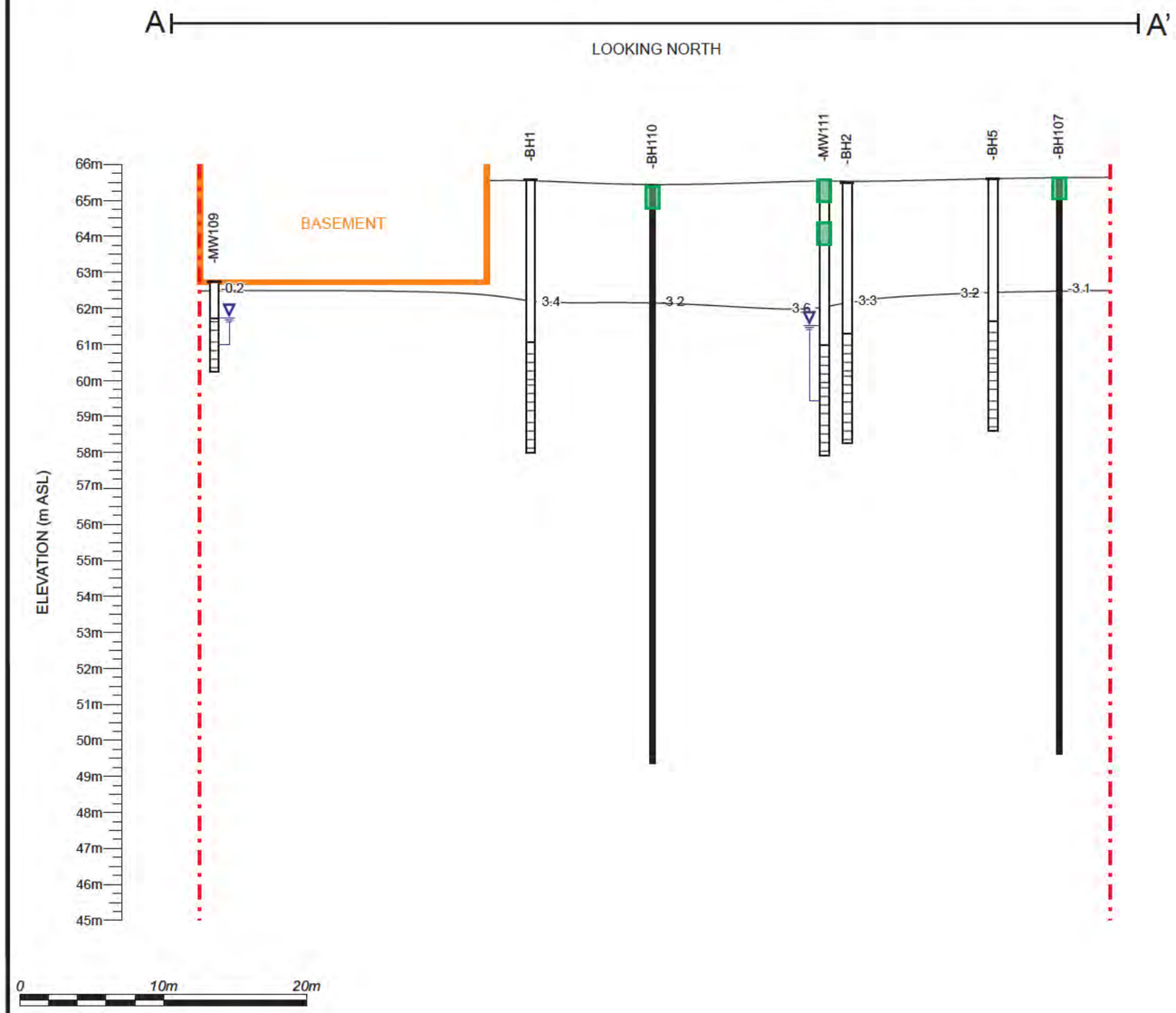
TERRAPEX

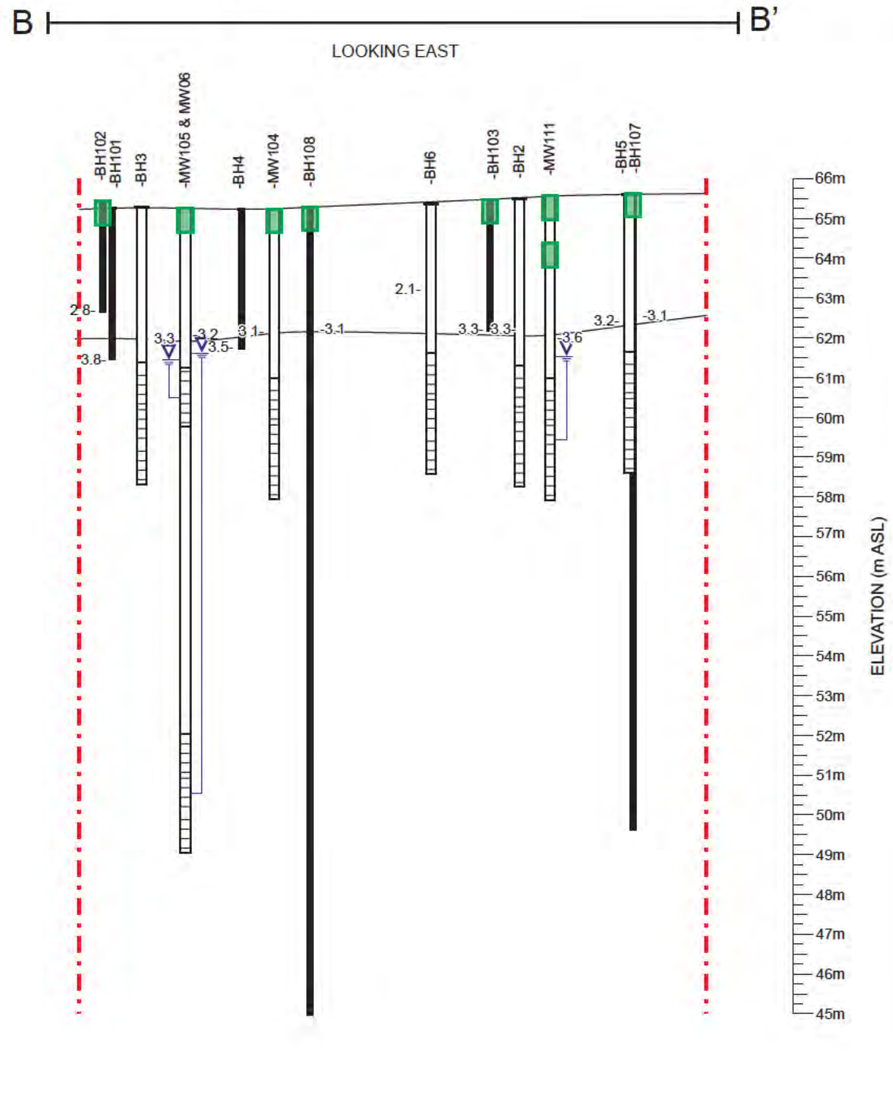
CROSS-SECTIONS- SUMMARY OF SOIL RESULTS
HYDRIDE-FORMING METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Antimony	7.5
Arsenic	18
Selenium	2.4

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9C

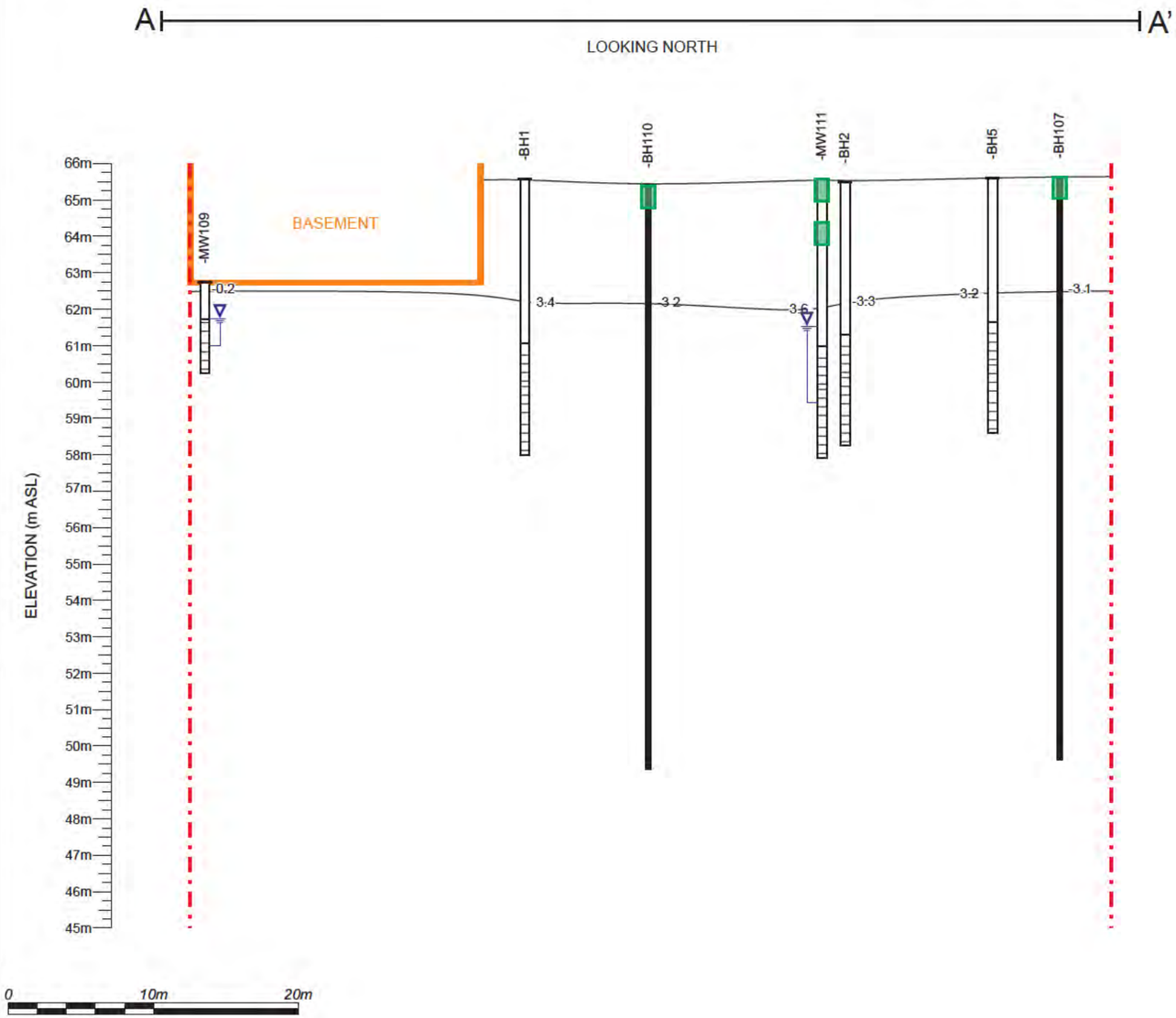
TERRAPEX

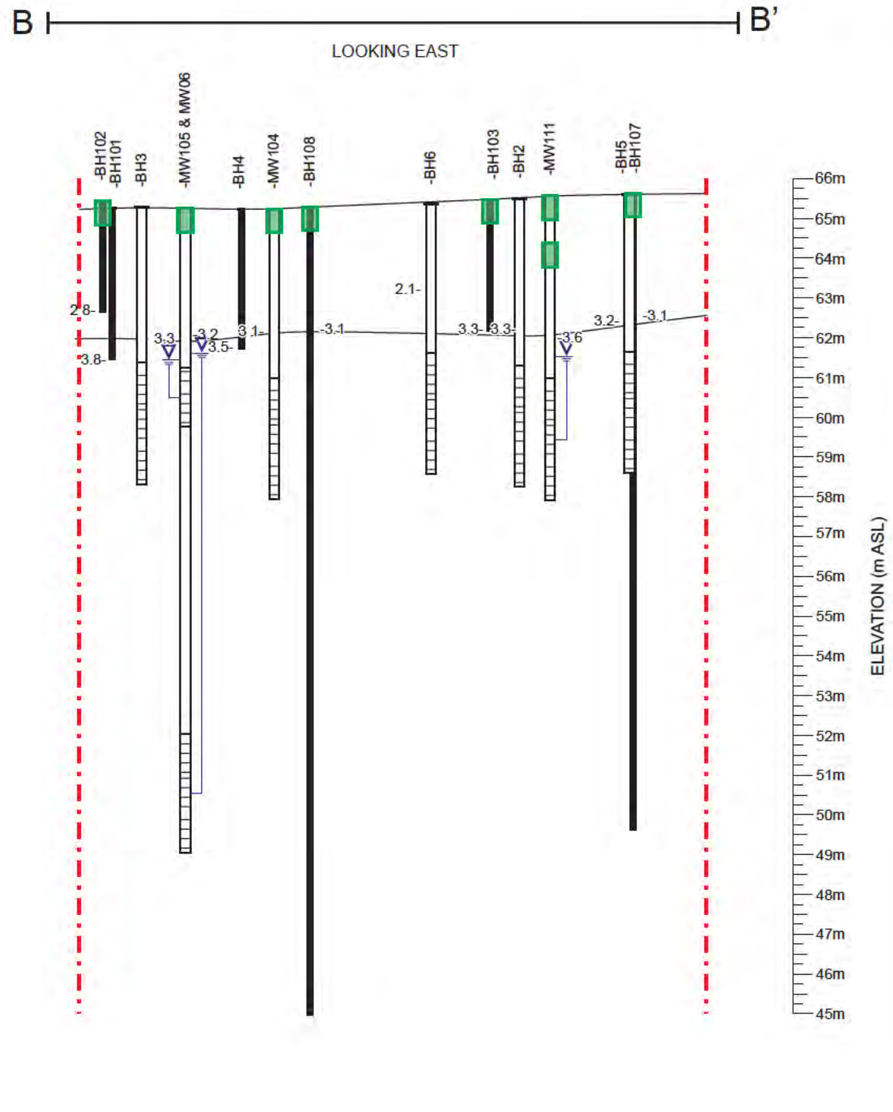
CROSS-SECTIONS- SUMMARY OF SOIL RESULTS OTHER REGULATED PARAMETERS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Boron (HWS)	1.5
Hexavalent Chromium	8.0
Cyanide (CN-)	0.051
Mercury	0 27

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9D

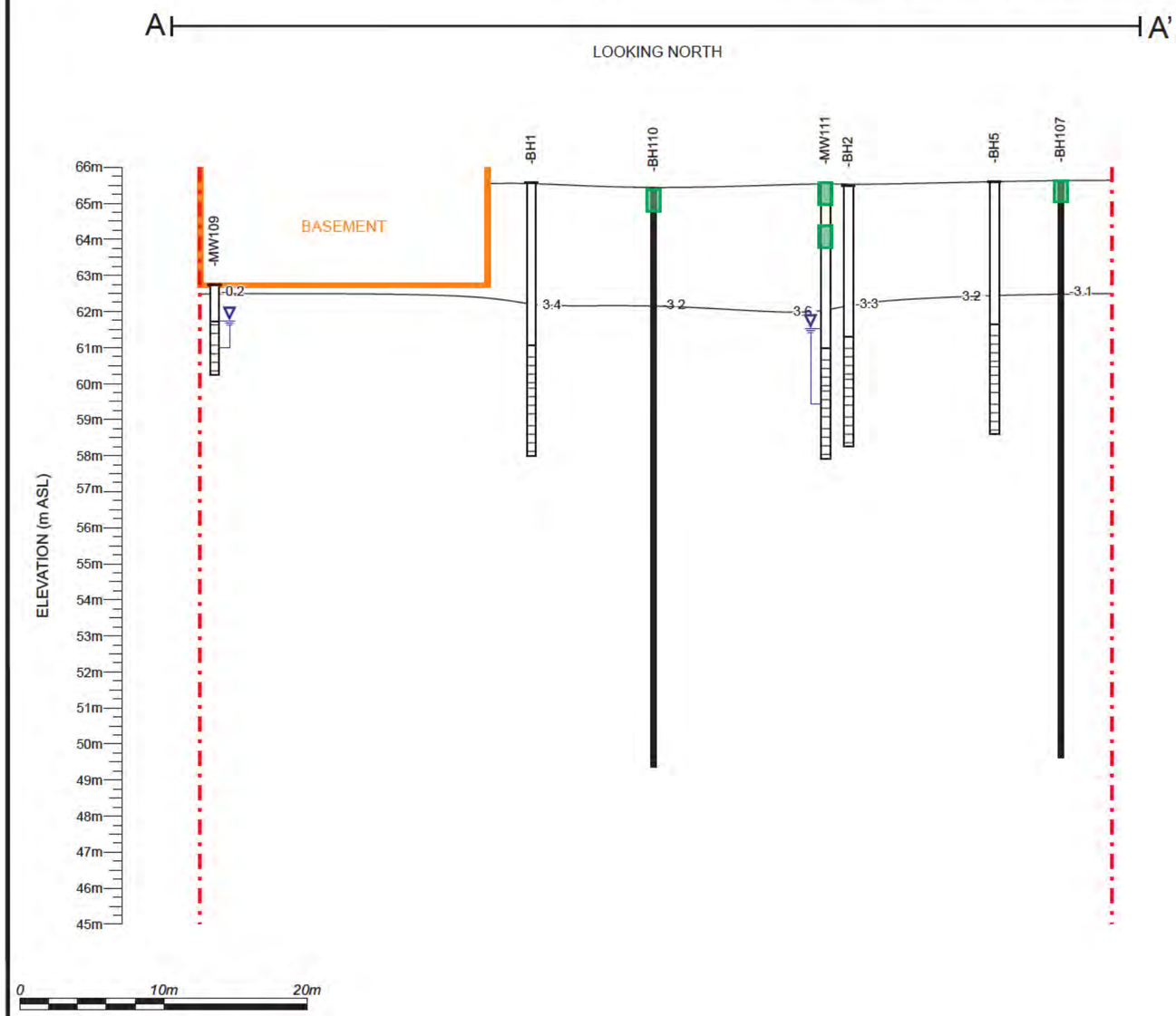
TERRAPEX

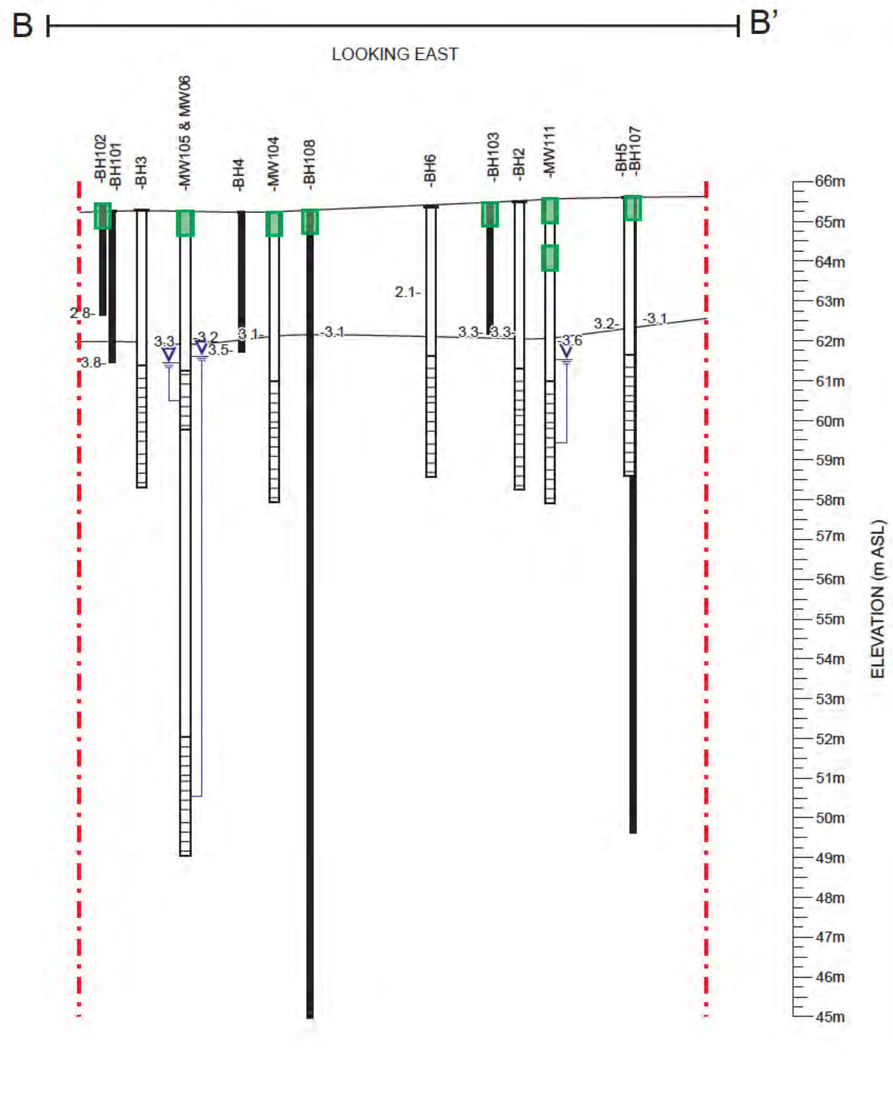
CROSS-SECTIONS- SUMMARY OF SOIL RESULTS ELECTRICAL CONDUCTIVITY & SODIUM ABSORPTION RATIO

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
EC*	0.70
SAR*	5.0

*Not considered contaminants of concern for the purposes of filing a Record of Site Condition per Section 49.1 of O Reg.153/04.

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9E

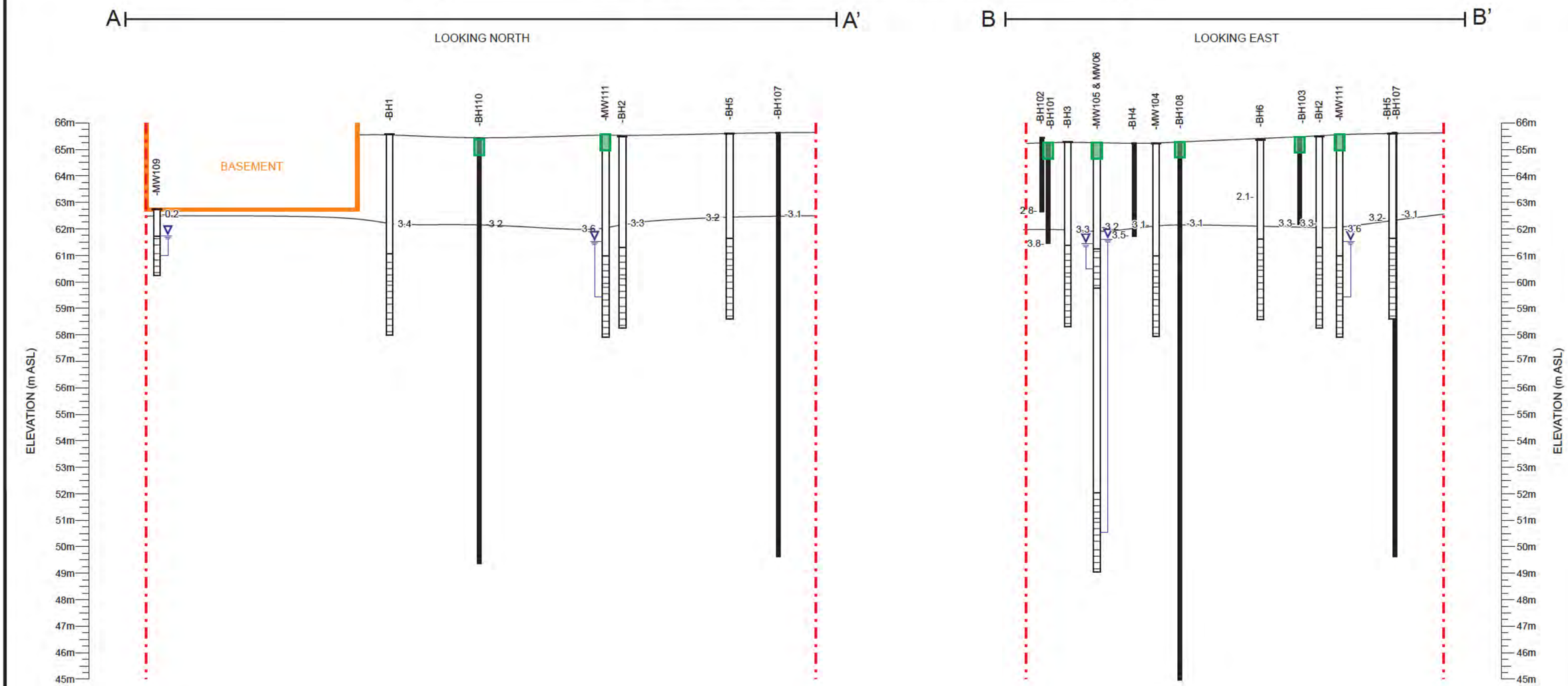
TERRAPEX

CROSS-SECTIONS- SUMMARY OF SOIL RESULTS
PAHs

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Acenaphthene	7.9
Acenaphthylene	0.15
Anthracene	0.67
Benz(a)anthracene	0.50
Benzo(a)pyrene	0.30
Benzo(b)fluoranthene	0.78
Benzo(g,h,i)perylene	6.6

Parameter	Standards
Benzo(k)fluoranthene	0.78
Chrysene	7.0
Dibenz(a,h)anthracene	0.10
Fluoranthene	0.69
Fluorene	62
Indeno(1,2,3-cd)pyrene	0.38
Methylnaphthalene, 1-	0.99
Methylnaphthalene, 2-	0.99

Parameter	Standards
Naphthalene	0.60
Phenanthrene	6.2
Pyrene	78

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9F

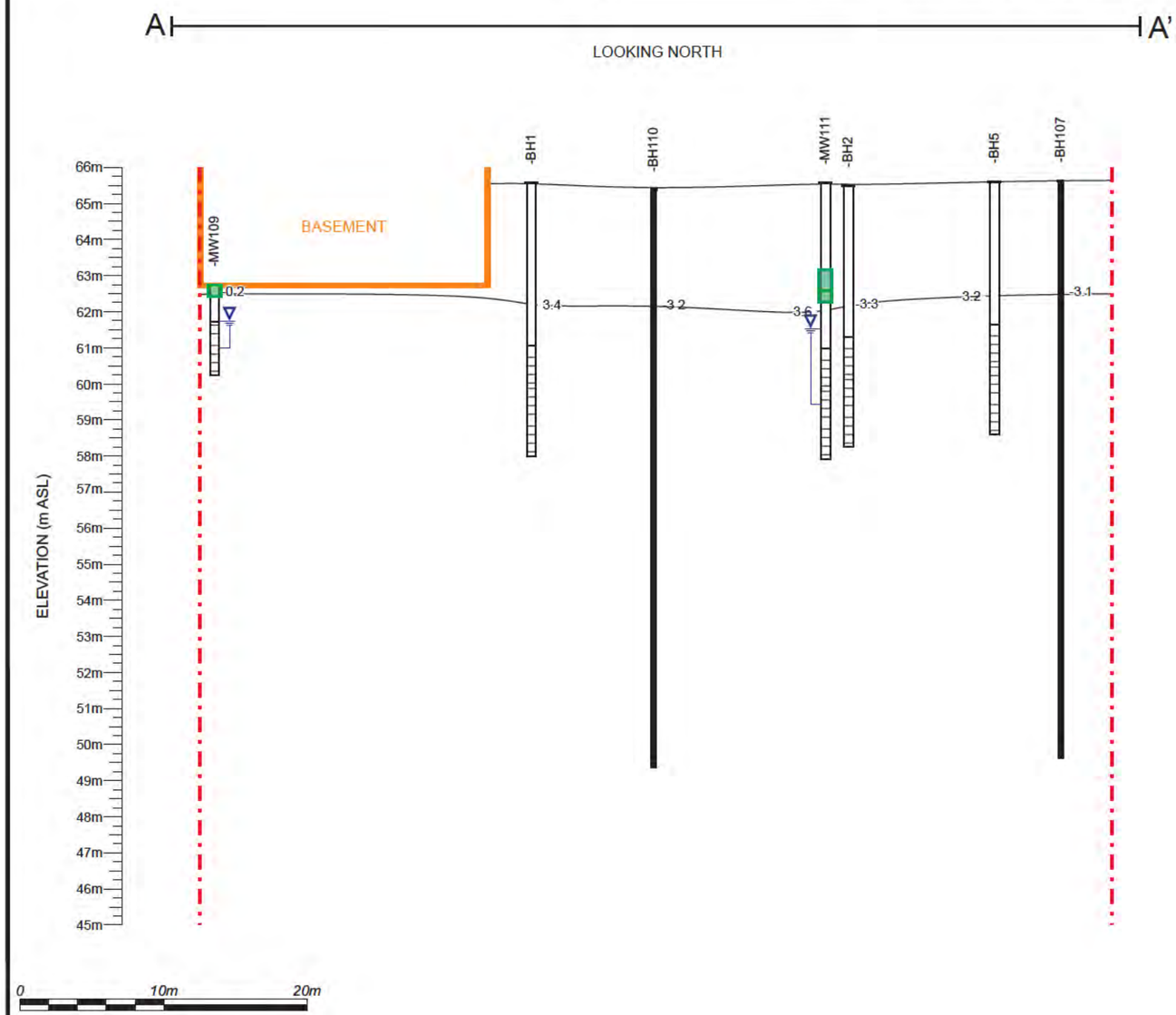
TERRAPEX

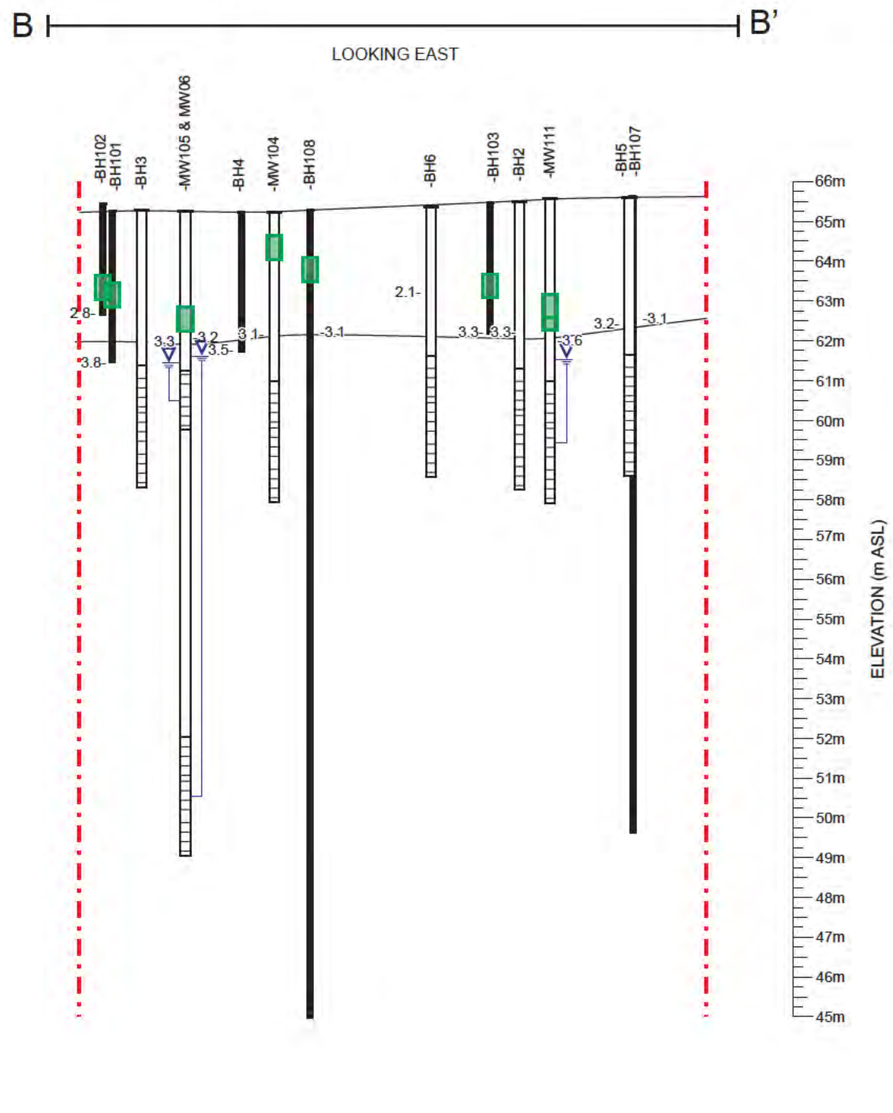
CROSS-SECTIONS- SUMMARY OF SOIL RESULTS
BTEX and PHCs

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Benzene	0.21
E hylbenzene	2 0
Toluene	2.3
Xylenes (total)	3.1
PHC F1	55
PHC F2	98
PHC F3	300
PHC F4	2800

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9G

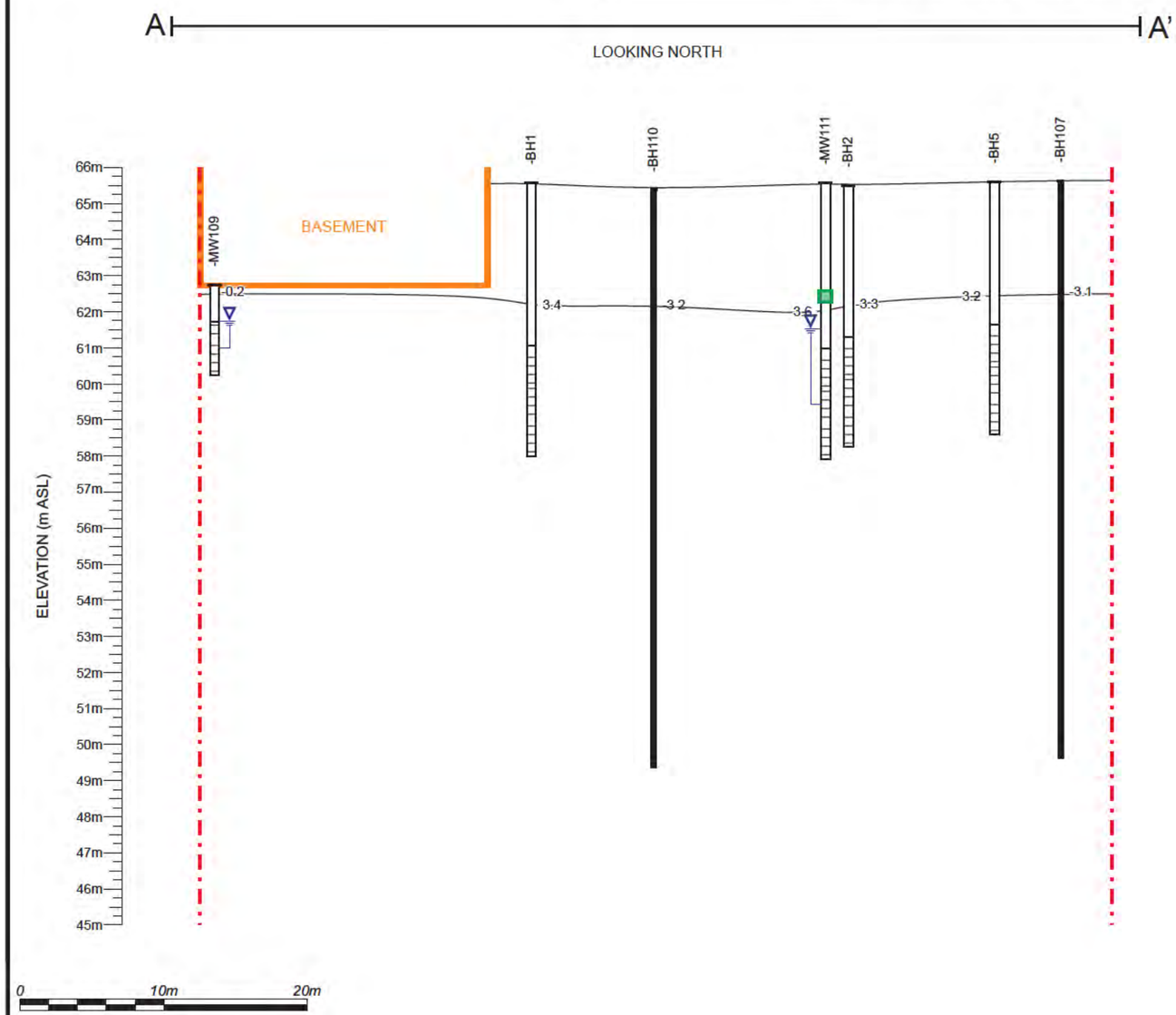
TERRAPEX

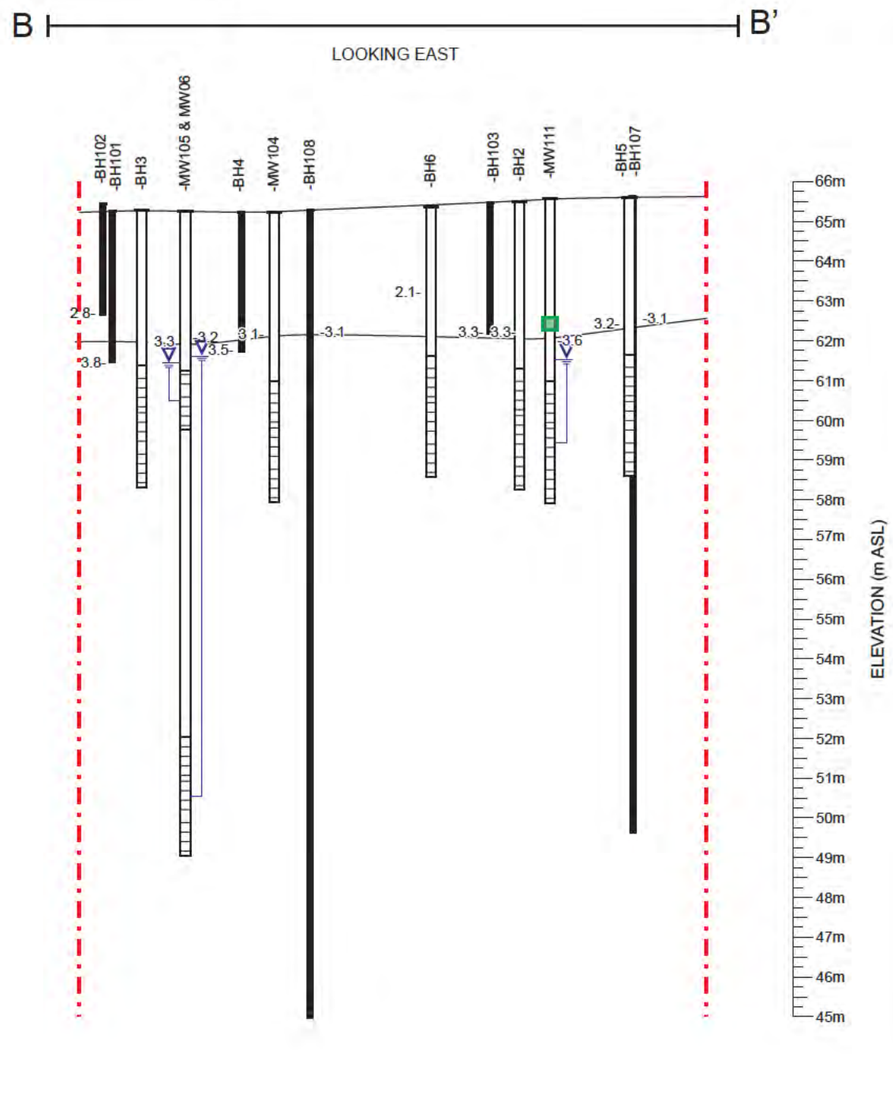
CROSS-SECTIONS- SUMMARY OF SOIL RESULTS
VOCs excluding BTEX

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Acetone	16
Bromodichloromethane	13
Bromoform	0.27
Bromomethane	0.050
Carbon tetrachloride	0.050
Chlorobenzene	2.4
Chloroform	0.050

Parameter	Standards
Dibromochloromethane	9.4
Dichlorobenzene 1,2-	3.4
Dichlorobenzene, 1,3-	4.8
Dichlorobenzene,1,4-	0.083
Dichlorodifluoromethane	16
Dichloroethane, 1,1-	3.5
Dichloroethane, 1,2-	0 050
Dichloroethylene, 1,1-	0 050

Parameter	Standards
Dichloroethylene, cis-1,2-	3.4
Dichloroethylene, trans-1,2-	0.084
Dichloropropane, 1,2-	0.050
Dichloropropene, 1,3-	0.050
Ethylene dibromide	0.050
Hexane	2 8
Me hyl e hyl ketone	16
Me hyl isobutyl ketone	1.7

Parameter	Standards
Methyl tert butyl ether	0.75
Methylene Chloride	0.10
Styrene	0.70
Tetrachloroethane, 1,1,1,2-	0.058
Tetrachloroethane, 1,1,2,2-	0.050
Tetrachloroe hylene	0.28
Trichloroethane, 1,1,1-	0.38
Trichloroethane, 1,1,2-	0.050

Parameter	Standards
Trichloroethylene	0.061
Trichlorofluorome hane	4.0
Vinyl chloride	0.020

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 9H

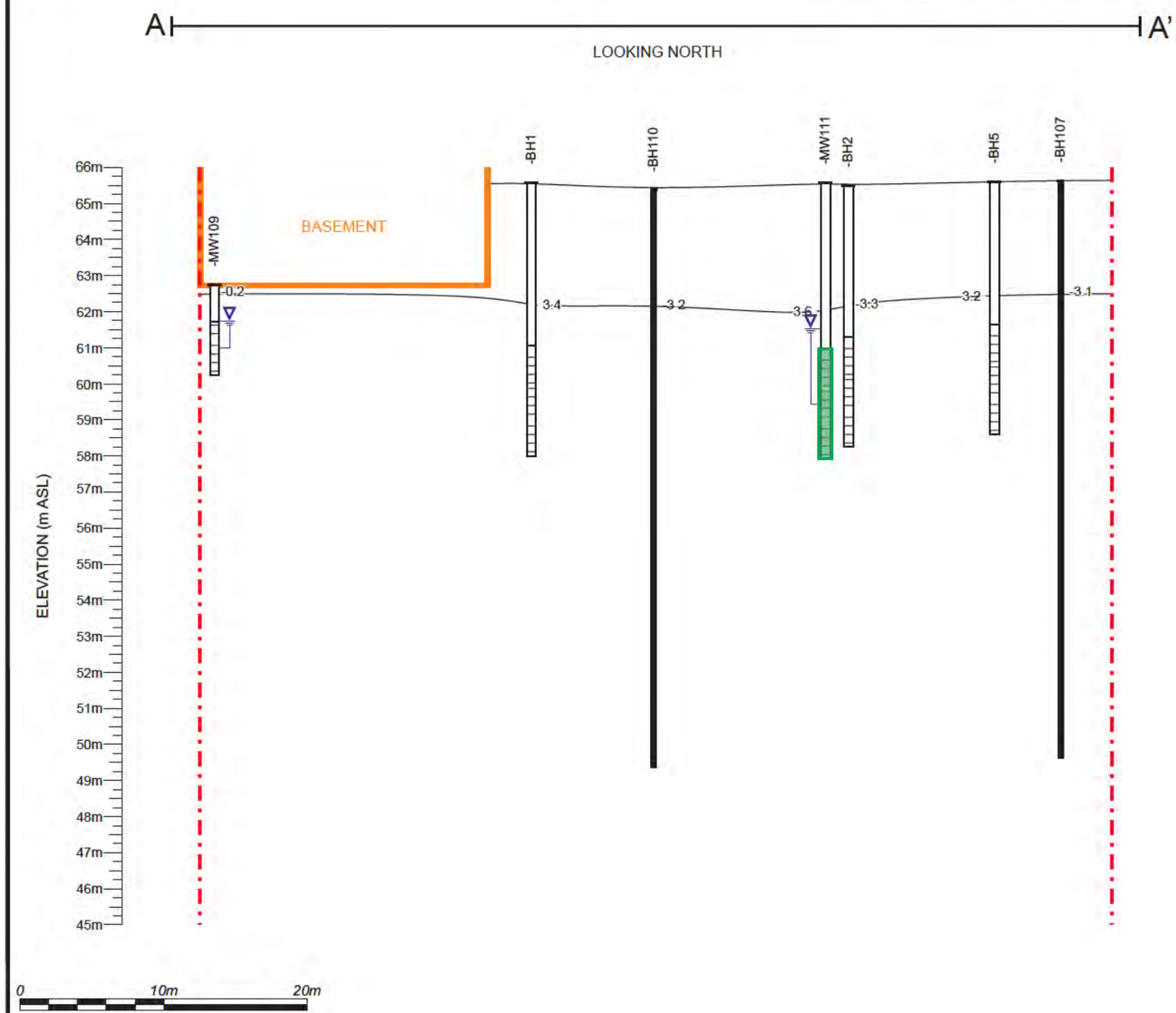
TERRAPEX

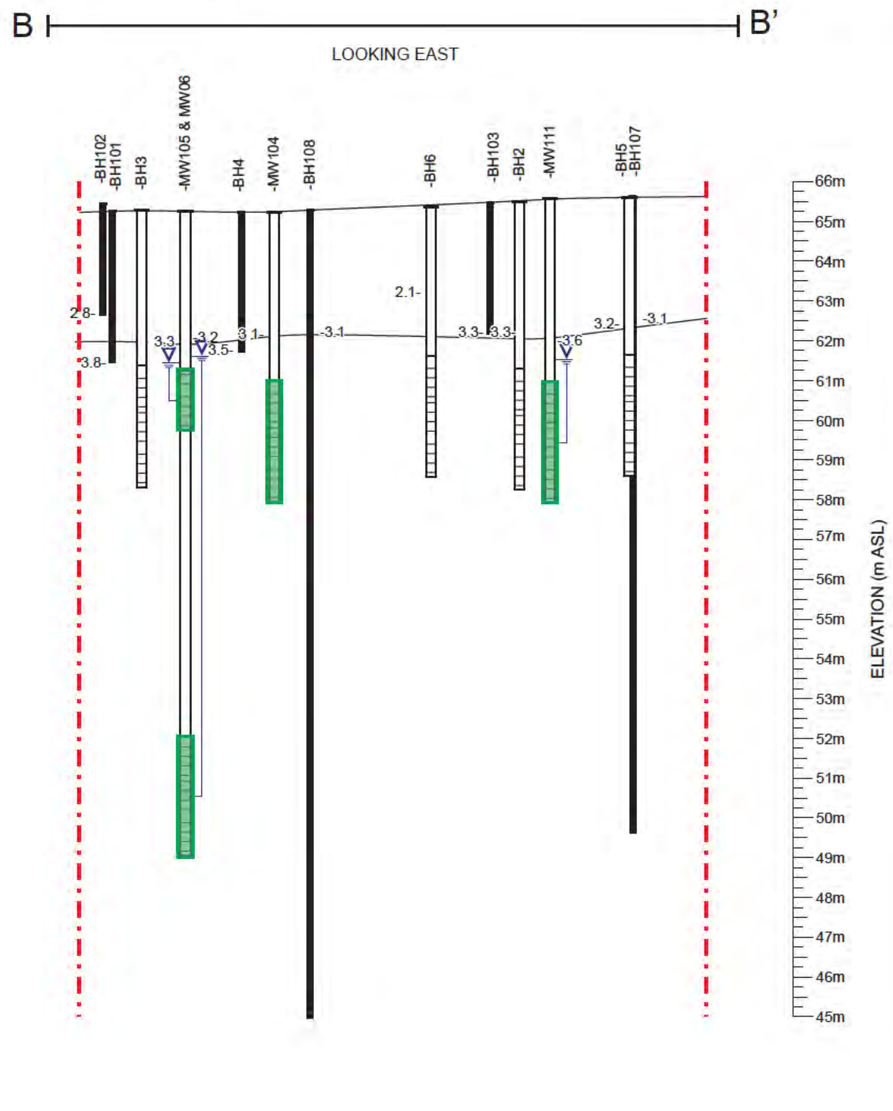
CROSS-SECTIONS- SUMMARY OF GROUNDWATER RESULTS METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Barium	29000
Beryllium	67
Boron	45000
Cadmium	2.7
Chromium	810
Cobalt	66
Copper	87

Parameter	Standards
Lead	25
Molybdenum	9200
Nickel	490
Silver	1.5
Thallium	510
Uranium	420
Vanadium	250
Zinc	1100

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 10A

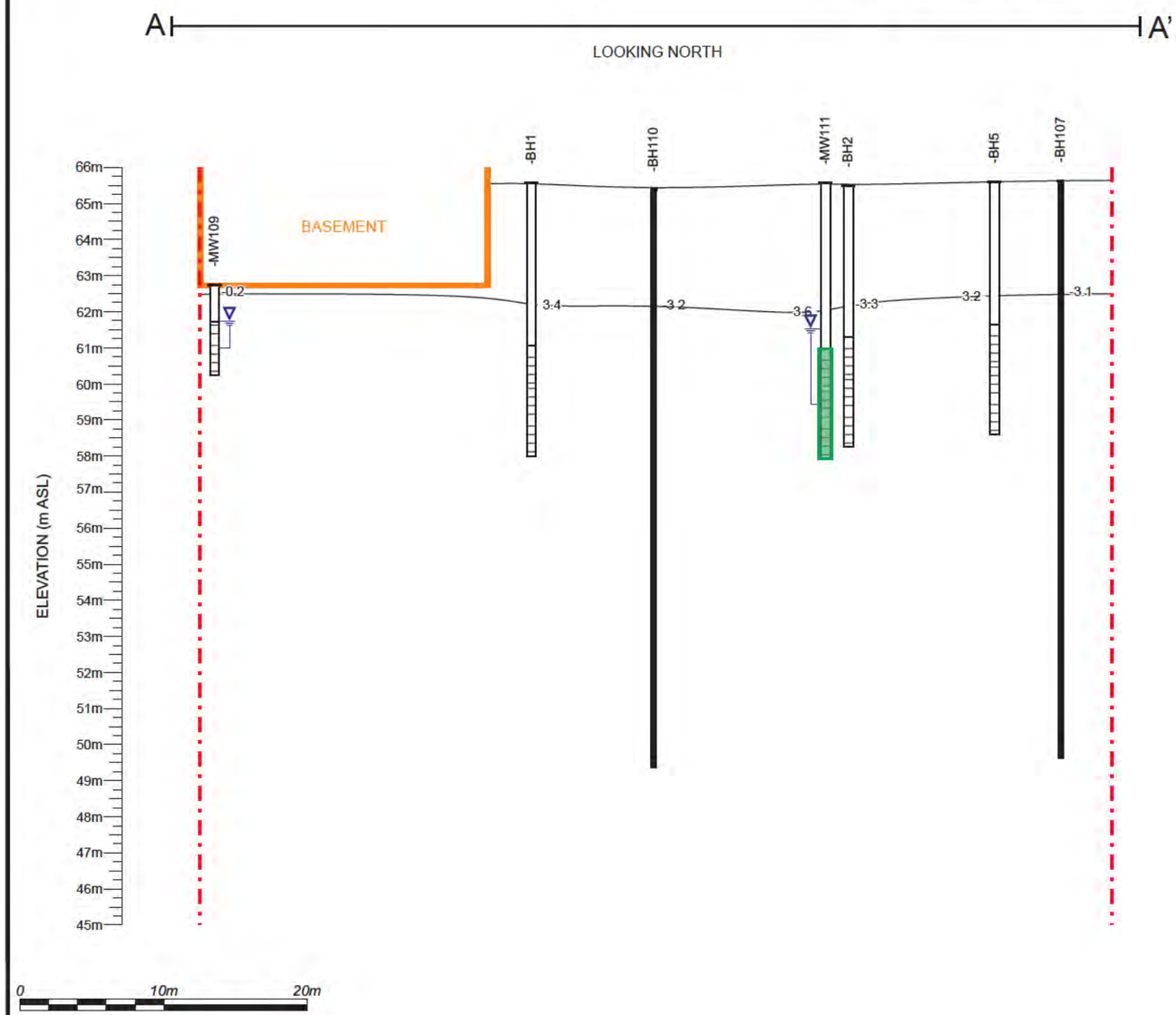
TERRAPEX

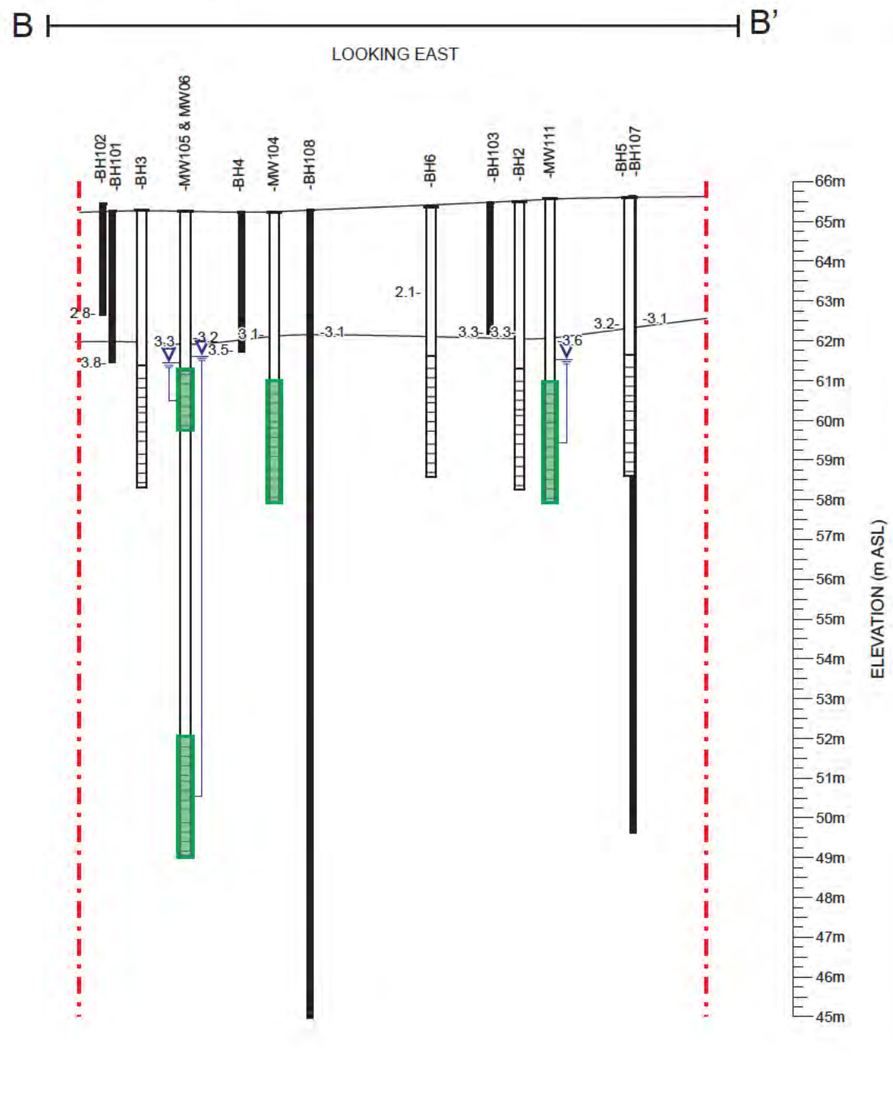
CROSS-SECTIONS- SUMMARY OF GROUNDWATER RESULTS HYDRIDE-FORMING METALS

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Antimony	20000
Arsenic	1900
Selenium	63

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 10B

TERRAPEX

CROSS-SECTIONS- SUMMARY OF GROUNDWATER RESULTS OTHER REGULATED PARAMETERS

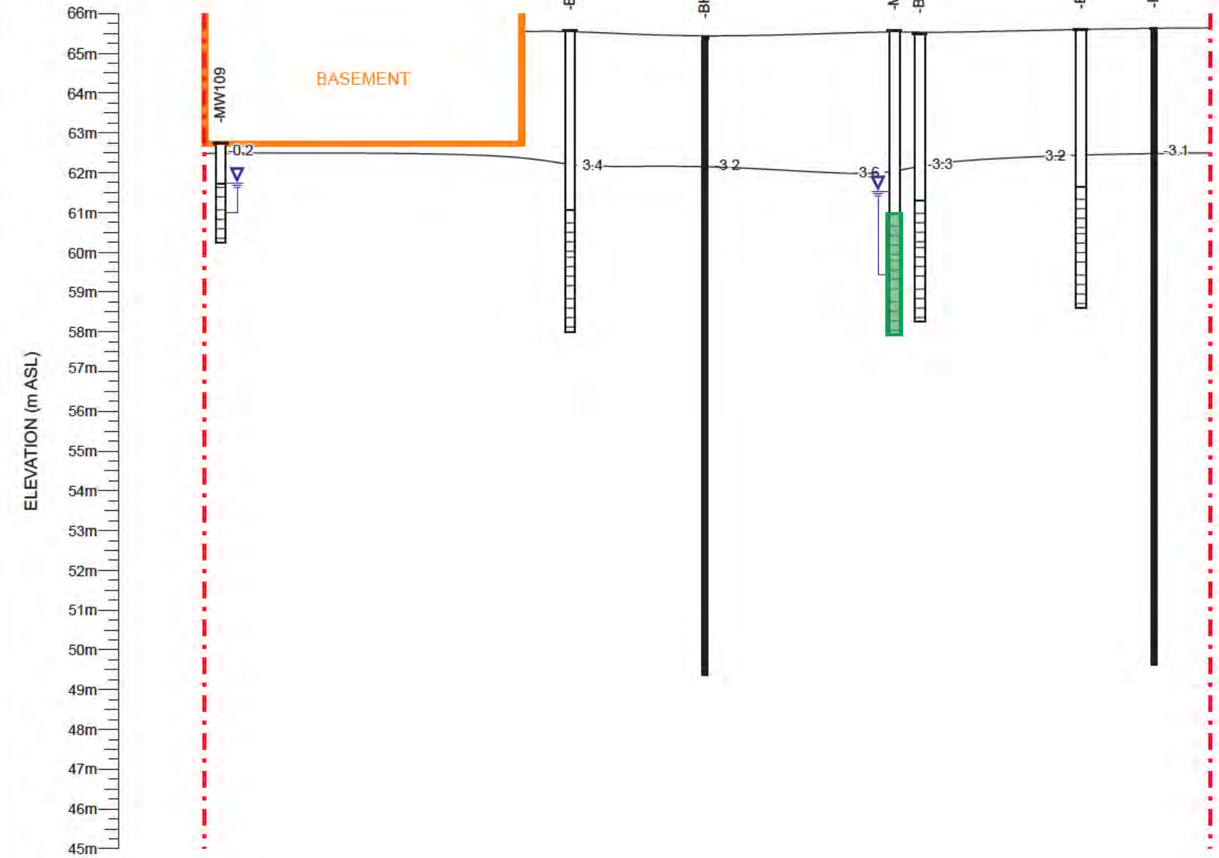
1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP

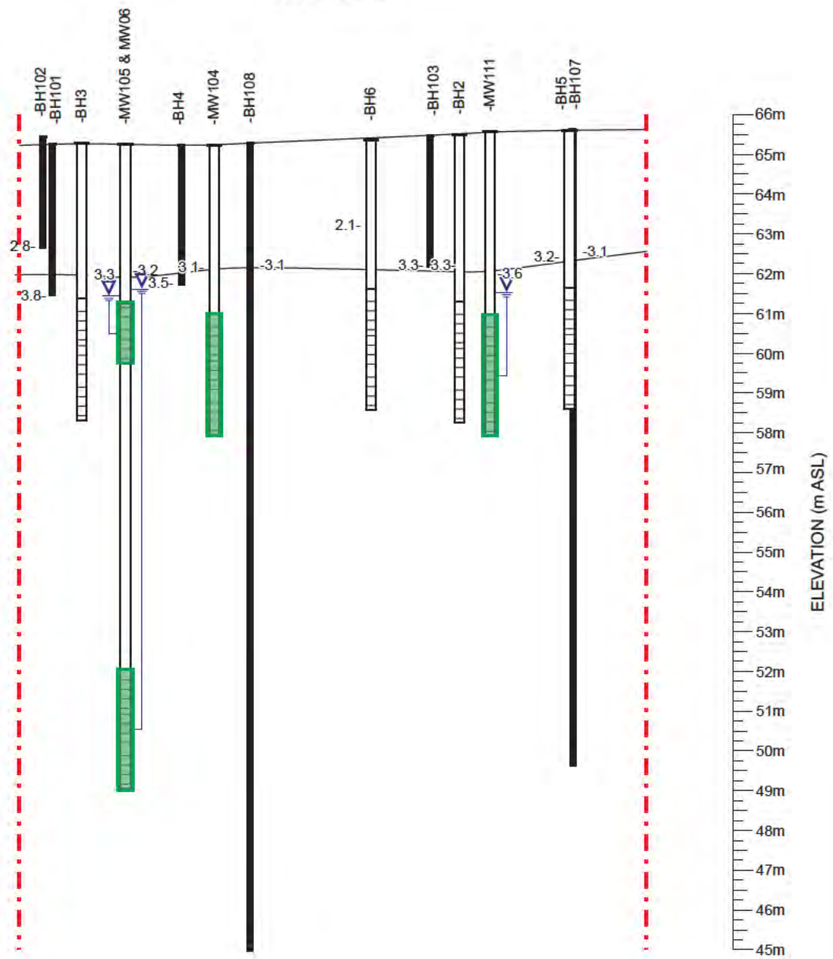
A A'

LOOKING NORTH



B B'

LOOKING EAST



0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Hexavalent Chromium	140
Cyanide (CN-)	66
Mercury	0.29

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 10C

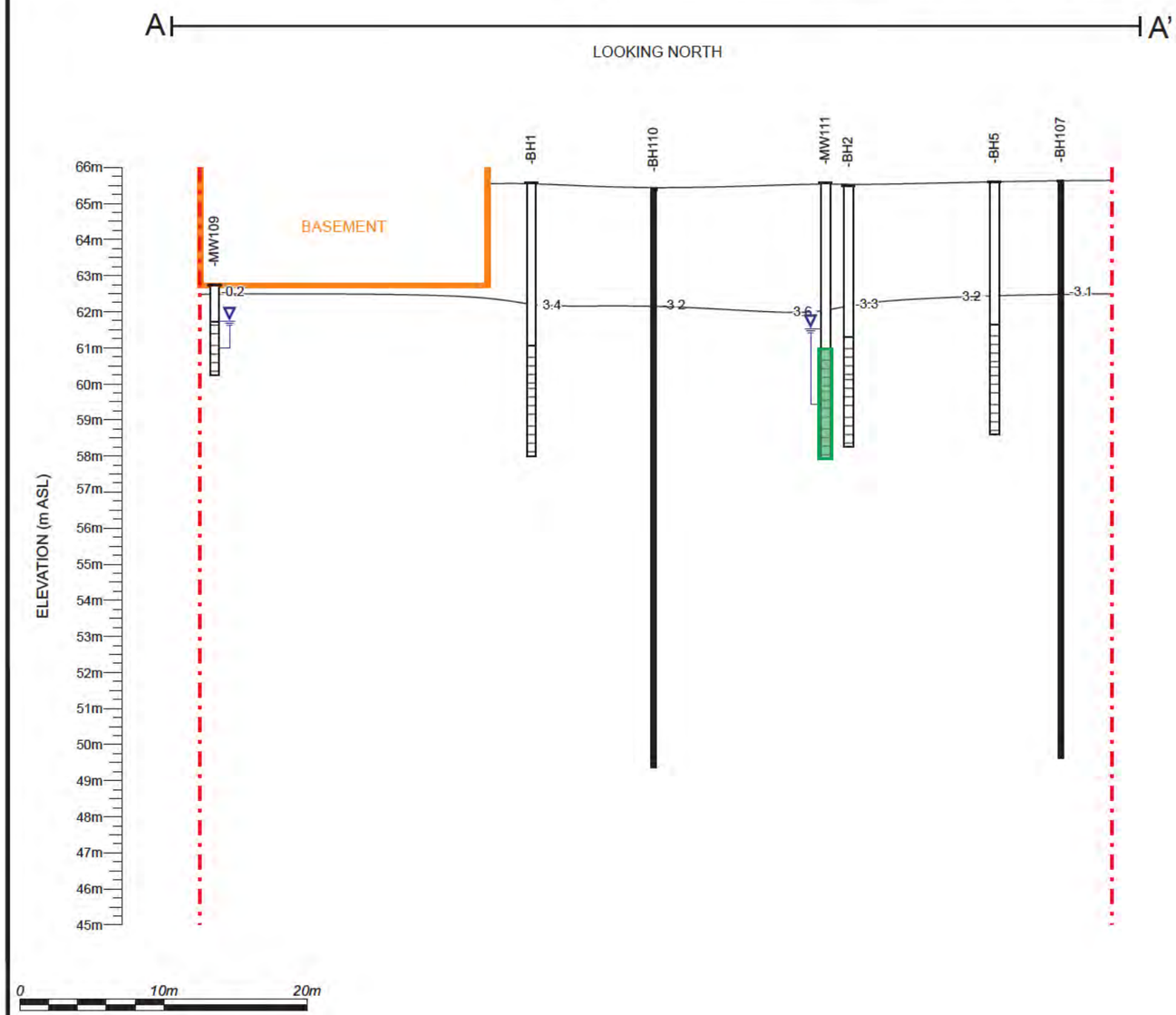
TERRAPEX

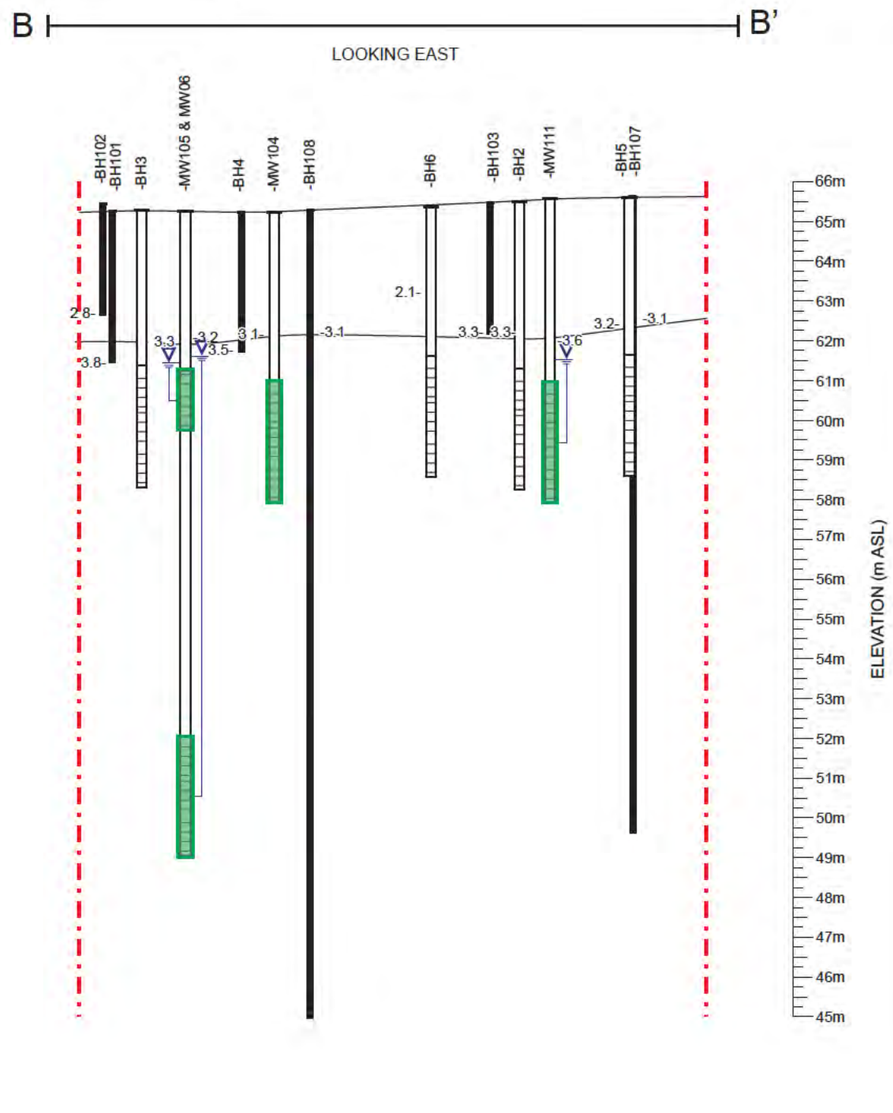
CROSS-SECTIONS- SUMMARY OF GROUNDWATER RESULTS CHLORIDE & SODIUM

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Sodium*	2,300,000
Chloride*	2,300,000

*Not considered contaminants of concern for the purposes of filing a Record of Site Condition per Section 49.1 of O Reg.153/04.

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 10D

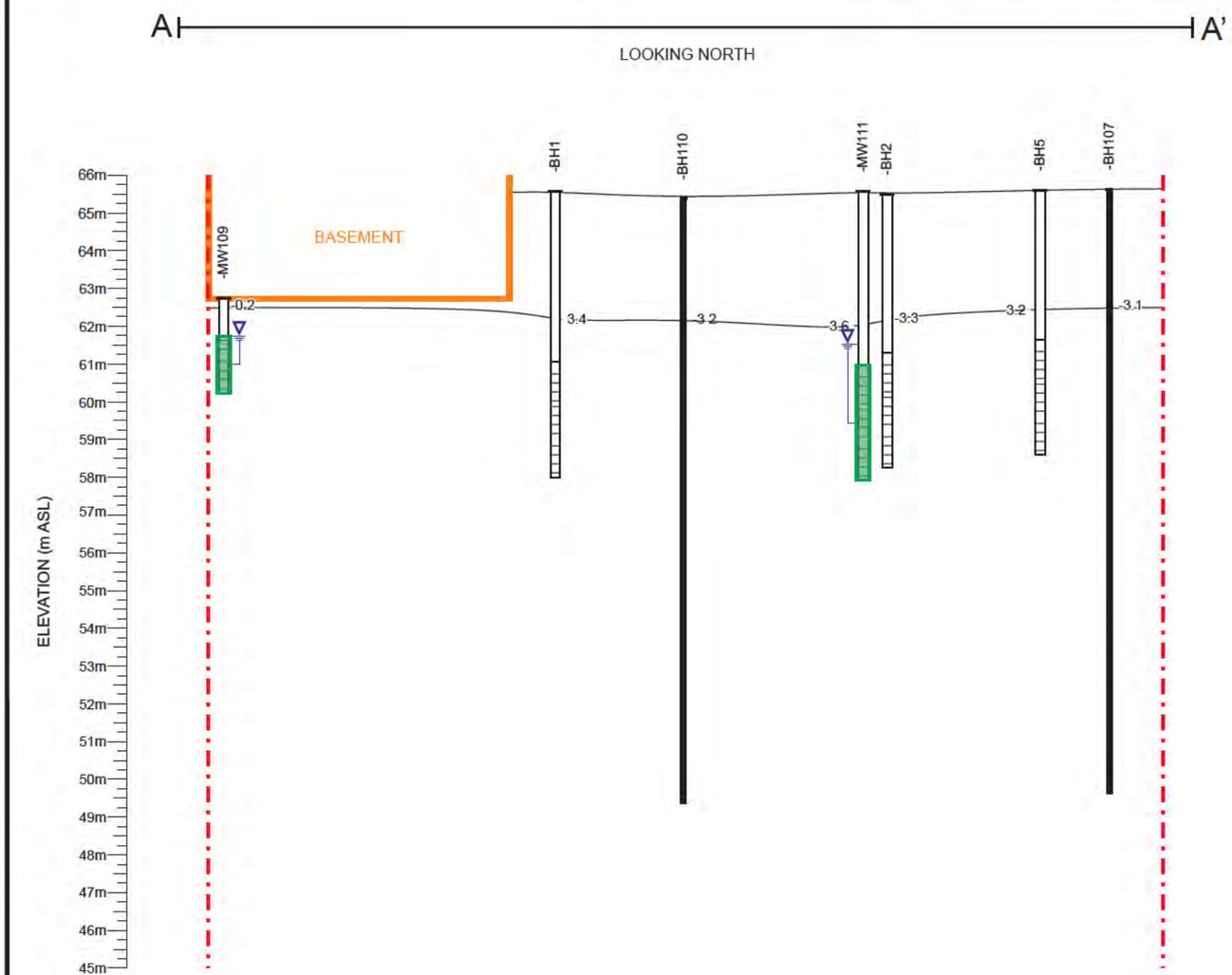
TERRAPEX

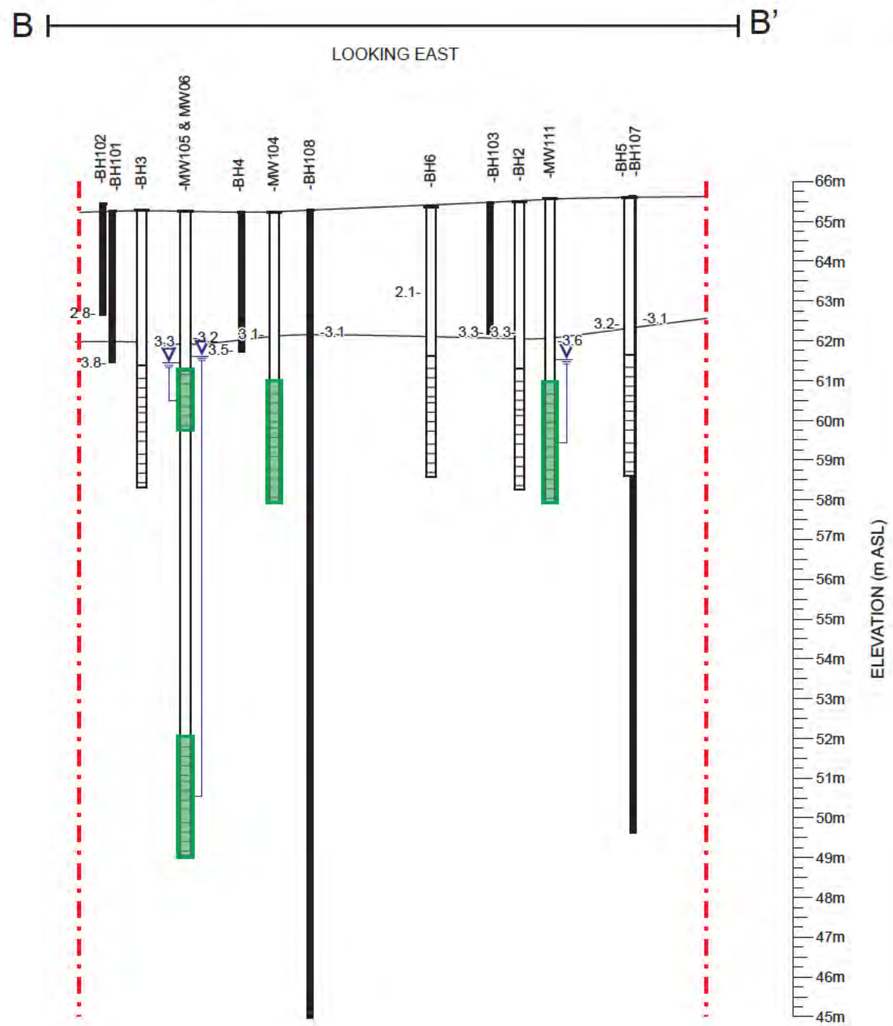
CROSS-SECTIONS- SUMMARY OF GROUNDWATER RESULTS BTEX and PHCs

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP





0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Benzene	44
Toluene	18000
Ethylbenzene	2300
Xylenes (total)	4200
PHC F1	750
PHC F2	150
PHC F3	500
PHC F4	500

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 10E

TERRAPEX

CROSS-SECTIONS- SUMMARY OF GROUNDWATER RESULTS
VOCs excluding BTEX

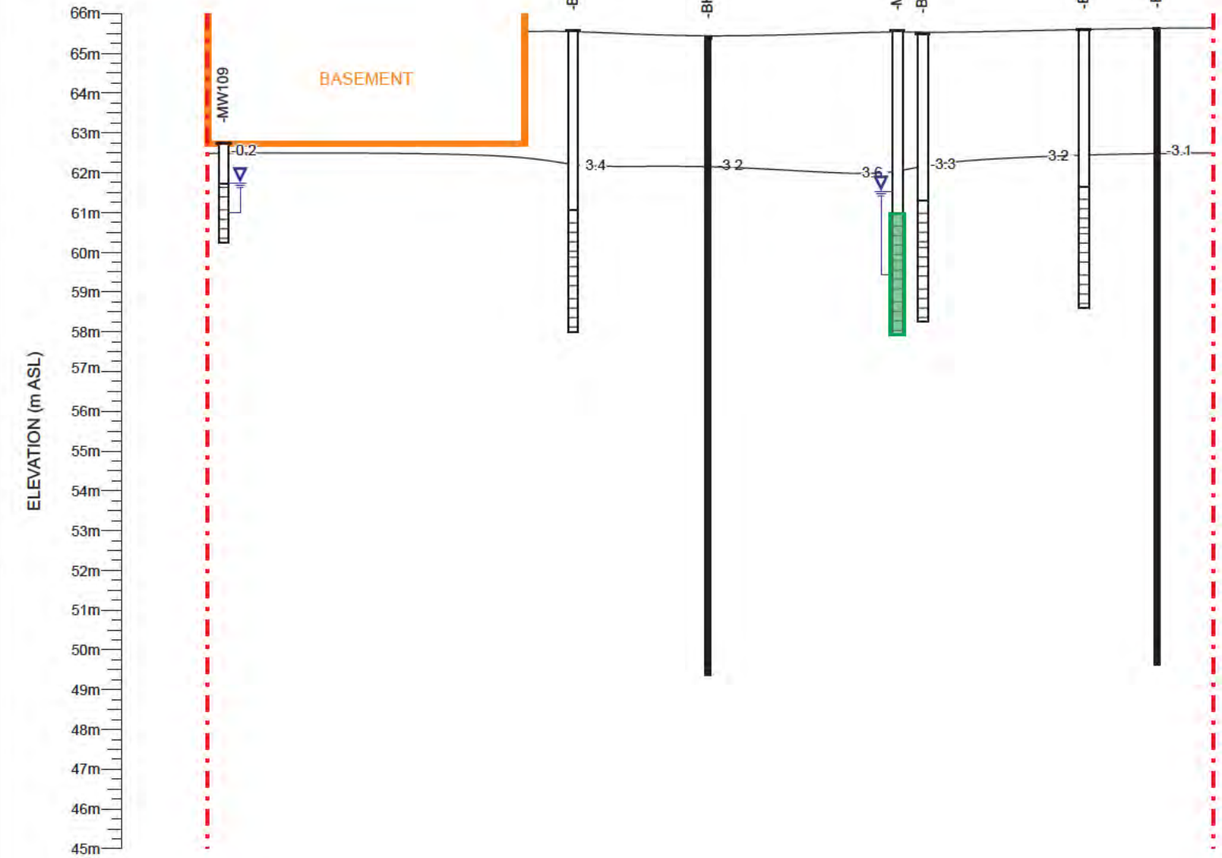
1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP

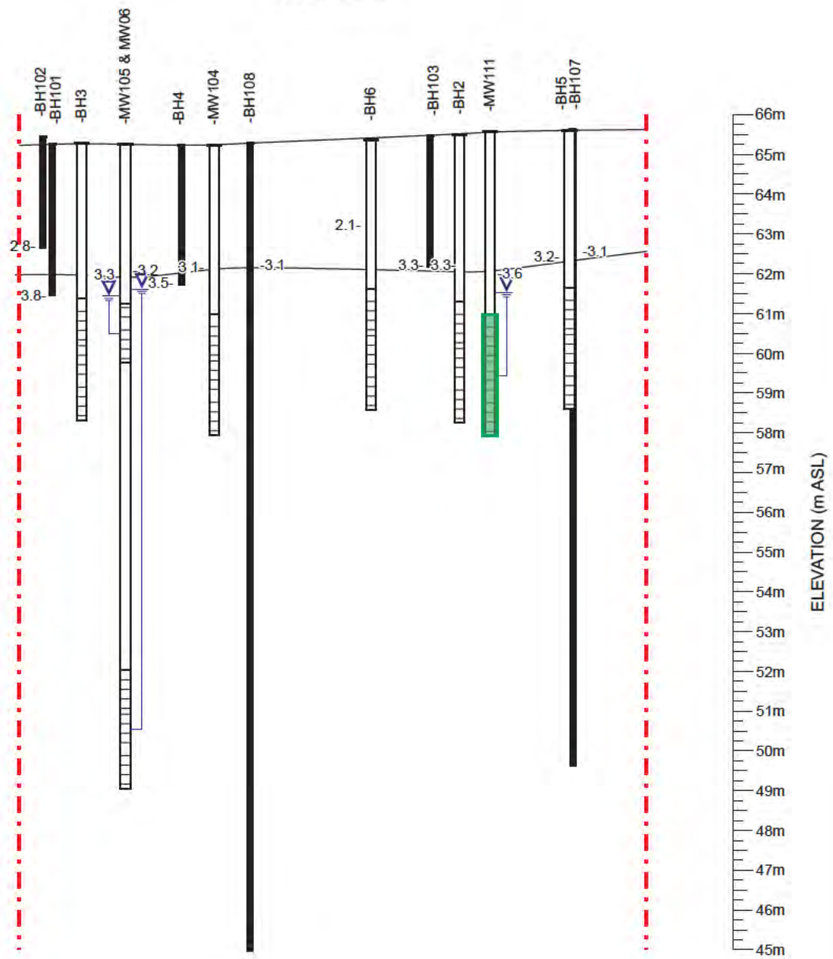
A A'

LOOKING NORTH



B B'

LOOKING EAST



0 10m 20m

LEGEND

GROUNDWATER LEVEL MAY 21, 2021

RISER

SCREEN

BOREHOLE

-3.2 DEPTH OF AUGER REFUSAL ON APPARENT BEDROCK

ANALYSIS INFORMATION

VALUE Less than or equal to Table 3 SCS

VALUE Greater than Table 3 SCS

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011). Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition, Residential, Parkland, Institutional Property-Use, Coarse-Textured Soil.

PARAMETERS ANALYSED

Parameter	Standards
Acetone	130000
Bromodichloromethane	85000
Bromoform	380
Bromomethane	5.6
Carbon tetrachloride	0.79
Chlorobenzene	630
Chloroform	2.4

Parameter	Standards
Dibromochloromethane	82000
Dichlorobenzene 1,2-	4600
Dichlorobenzene, 1,3-	9600
Dichlorobenzene,1,4-	8.0
Dichlorodifluoromethane	4400
Dichloroethane, 1,1-	320
Dichloroethane, 1,2-	1.6
Dichloroethylene, 1,1-	1.6

Parameter	Standards
Dichloroethylene, cis-1,2-	1.6
Dichloroethylene, trans-1,2-	1.6
Dichloropropane, 1,2-	16
Dichloropropene, 1,3-	5.2
Ethylene dibromide	0.25
Hexane	51
Methyl ethyl ketone	470000
Methyl isobutyl ketone	140000

Parameter	Standards
Methyl tert butyl e her	190
Methylene Chloride	610
Styrene	1300
Tetrachloroethane, 1,1,1,2-	3.3
Tetrachloroethane, 1,1,2,2-	3.2
Tetrachloroe hylene	1.6
Trichloroethane, 1,1,1-	640
Trichloroethane, 1,1,2-	4.7

Parameter	Standards
Trichloroe hylene	1.6
Trichlorofluoromethane	2500
Vinyl chloride	0.50

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 10F

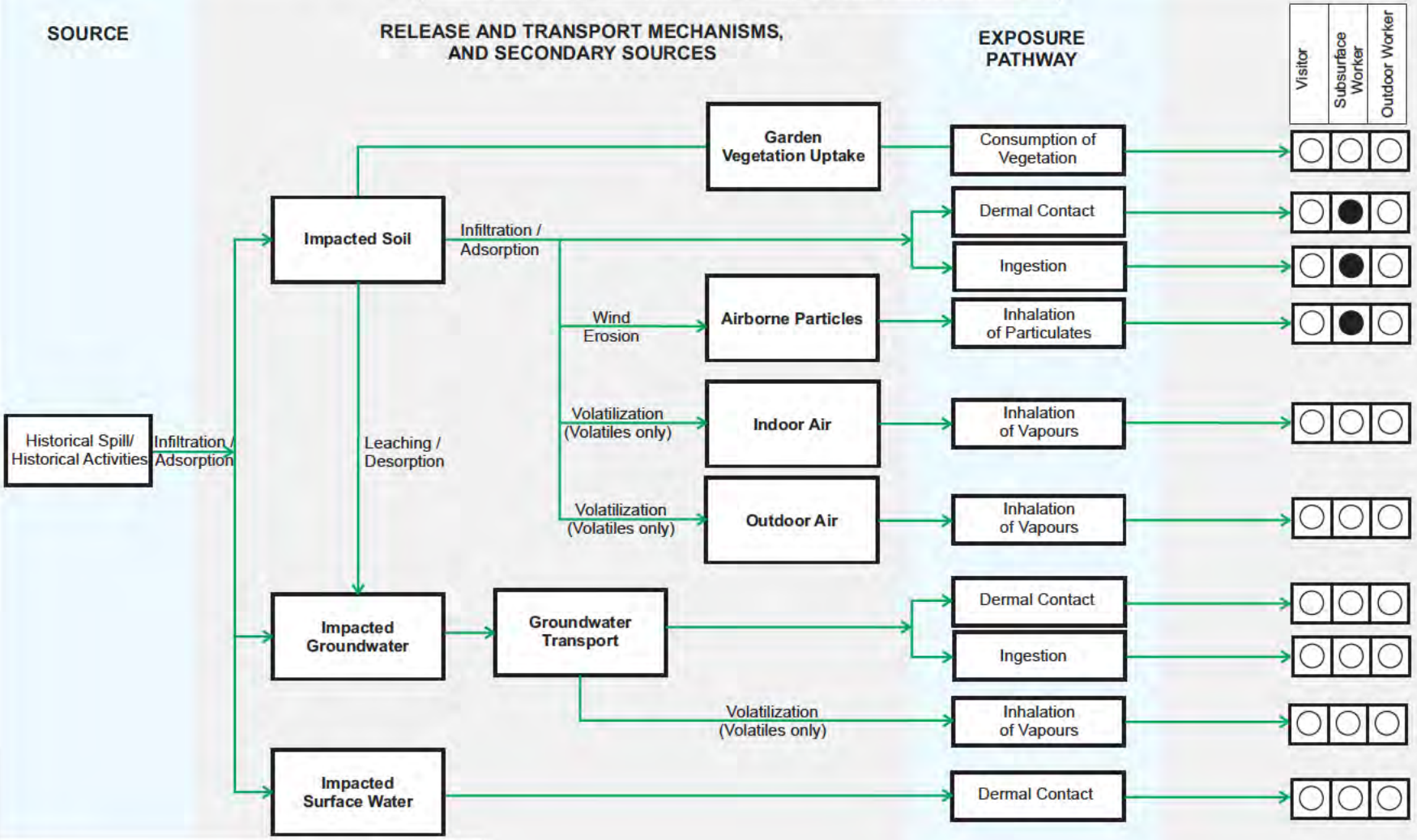
TERRAPEX

CONCEPTUAL MODEL FOR HUMAN HEALTH EXPOSURE

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



LEGEND

- ● Receptor present or anticipated, and exposure pathway is considered complete
- ○ No receptor present or anticipated, and exposure pathway is considered incomplete

PROJECT #	CO810.00
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 11A

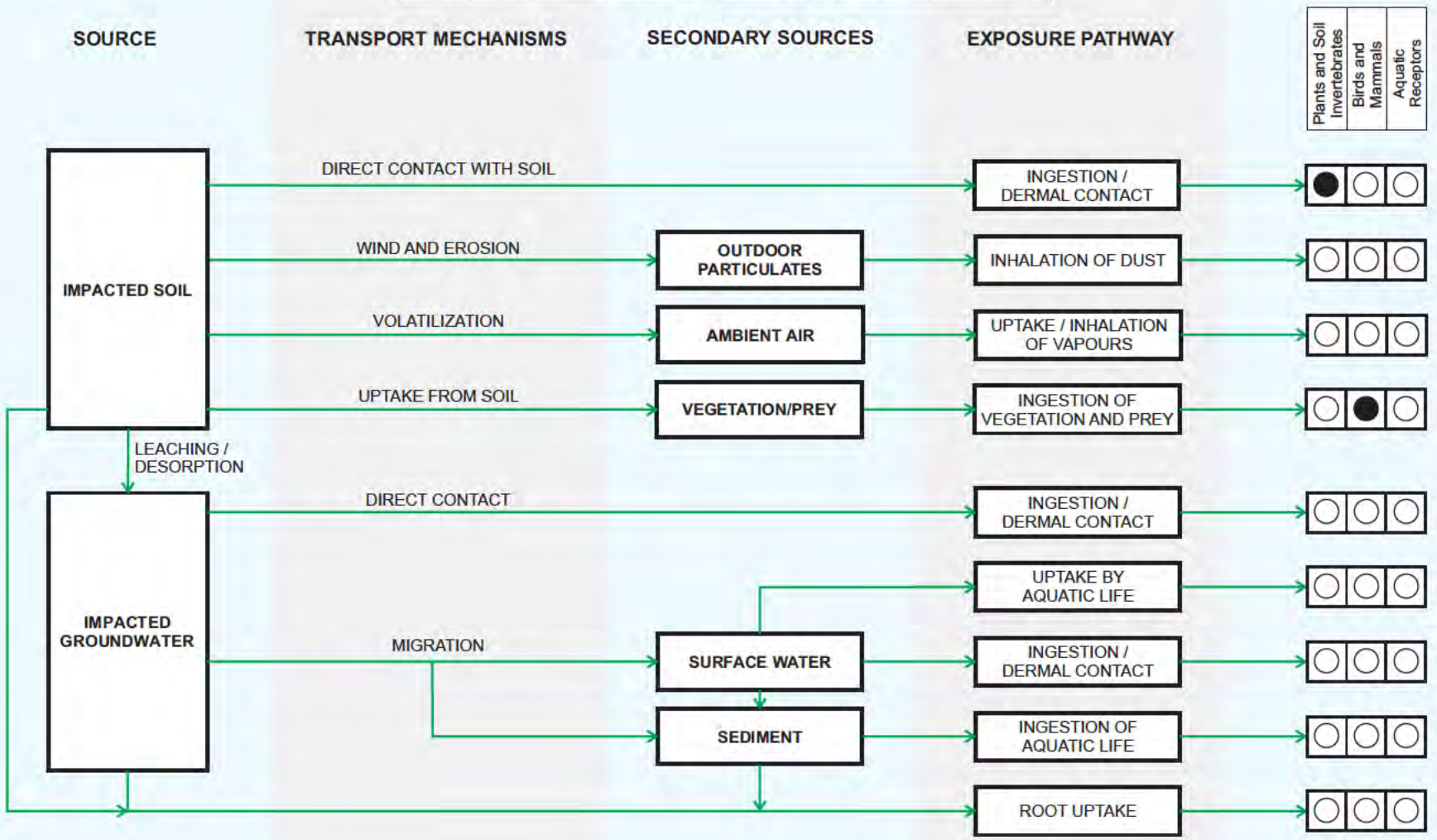
TERRAPEX

CONCEPTUAL MODEL FOR ECOLOGICAL EXPOSURE

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



LEGEND

- ● Exposure pathway is considered complete
- ○ Exposure pathway is considered incomplete

PROJECT #	CO810.00
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 11B

TABLES

TABLE 1 GROUNDWATER MONITORING DATA

1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Well ID	Ground Elevation	TOP Elevation	Bottom of Borehole	Screen Length	Date	CV	Depth to NAPL	Depth to Water	Corrected Groundwater Elevation	Corrected Depth to Water	NAPL Thickness
	m amsl	m amsl	m bg	m	dd-mmm-yy	see note	m bTOP	m bTOP	m amsl	m bg	m
BH1	65.57	65.44	7.6	3 0	7-Jun-21	<10 ppm	-	3 95	61.49	4.08	None
BH2	65.50	65.41	7.3	3 0	7-Jun-21	<10 ppm	-	4 00	61.41	4.09	None
BH3	65.27	65.13	7.0	3 0	7-Jun-21	<10 ppm	-	3.78	61 35	3.92	None
BH5	65.60	65 53	7.0	3 0	7-Jun-21	30 ppm	-	3 97	61 57	4.04	None
BH6	65.35	65 30	6.8	3 0	7-Jun-21	15 ppm	-	4 03	61 27	4.08	None
MW104	65.23	65.11	7.3	3 0	25-May-21	80 ppm	-	3.73	61 39	3.85	None
MW104	65.23	65.11	7.3	3 0	7-Jun-21	10 ppm	-	3 86	61 26	3.98	None
MW105	65.25	65.15	16.1	3 0	25-May-21	<10 ppm	-	3 54	61 61	3.65	None
MW105	65.25	65.15	16.1	3 0	7-Jun-21	10 ppm	-	3 67	61.48	3.78	None
MW106	65.25	65.14	5.5	1 5	25-May-21	<10 ppm	-	3.71	61.43	3.81	None
MW106	65.25	65.14	5.5	1 5	7-Jun-21	45 ppm	-	3 84	61 31	3.94	None
MW109	62.73	62 60	6.1	1 5	25-May-21	<10 ppm	-	0 87	61.73	1.00	None
MW109	62.73	62 60	6.1	1 5	7-Jun-21	-	-	-	-	-	-
MW111	65.57	65.47	7.6	3 0	25-May-21	<10 ppm	-	3 95	61 52	4.05	None
MW111	65.57	65.47	7.6	3 0	7-Jun-21	<10 ppm	-	3 99	61.48	4.09	None

Note:

TOP	Top of well standpipe
CV	Combustible vapour concentration in well headspace in parts per million (ppm) or percent of the lower explosive limit (% LEL)
NAPL	Non-aqueous phase liquid with an assumed specific gravity of: 0.80
amsl	Above mean sea level
bg	Below grade
-	Not measured / not applicable

TABLE 2A SOIL ANALYTICAL RESULTS - INORGANICS

1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 R/P/I coarse	BH102-1	BH103-1	MW104-1	MW105-1	BH107-3	BH108-1	BH110-1	MW111-1	MW111-3
Sample Depth	m bg	-	0.0 - 0.6	0.0 - 0.6	0 0 - 0 6	0.0 - 0.6	1.2 - 1.8	0 0 - 0 6	0.0 - 0.6	0 0 - 0.6	1.2 - 1.8
Sampling Date	dd-mmm-yy	-	19-Apr-21	19-Apr-21	19-Apr-21	19-Apr-21	20-Apr-21	21-Apr-21	21-Apr-21	22-Apr-21	22-Apr-21
Analysis Date (on or before)	dd-mmm-yy	-	3-May-21	3-May-21	3-May-21	3-May-21	3-May-21	3-May-21	3-May-21	3-May-21	13-May-21
Certificate of Analysis No.	-	-	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	21T742988
pH	pH Units	NV	7.74	7 67	7.76	7.95	7 88	8.22	7.90	7.87	7.65
Antimony	ug/g	7 5	<0 8	<0.8	<0.8	<0 8	<0.8	<0.8	<0 8	<0.8	<0 8
Arsenic	ug/g	18	1	3	3	3	3	4	3	3	1
Barium	ug/g	390	47 3	153	256	190	41.5	162	193	**403**	83 2
Beryllium	ug/g	4 0	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron (total)	ug/g	120	<5	8	11	7	7	11	12	14	<5
Boron (Hot Water Soluble)[1]	ug/g	1 5	0.24	0 38	0.56	0.31	0.13	0.33	0.38	0.61	0.36
Cadmium	ug/g	1 2	<0 5	<0.5	<0.5	<0 5	<0.5	<0.5	<0 5	<0.5	<0 5
Chromium Total	ug/g	160	13	10	10	10	11	17	23	11	15
Chromium VI	ug/g	8 0	<0 2	<0.2	<0.2	<0 2	<0.2	<0.2	<0 2	<0.2	<0 2
Cobalt	ug/g	22	3.5	5.1	5.1	4.6	5.4	7.1	7.8	4 5	5.7
Copper	ug/g	140	6.5	9.7	7.4	9.3	14.0	11.9	14 2	5.1	12.7
Cyanide (CN-)	ug/g	0.051	<0.040	<0 040	<0.040	<0.040	<0 040	<0.040	<0.040	<0.040	<0.040
Lead	ug/g	120	8	8	10	7	5	13	43	9	10
Mercury	ug/g	0.27	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl Mercury[2]	ug/g	0.0084	-	-	-	-	-	-	-	-	-
Molybdenum	ug/g	6 9	<0 5	1.2	1.7	0.9	0.5	3 2	1.7	1 0	0.5
Nickel	ug/g	100	6	11	11	9	11	14	18	10	10
Selenium	ug/g	2.4	<0 8	<0.8	<0.8	<0 8	<0.8	<0.8	<0 8	<0.8	<0 8
Silver	ug/g	20	<0 5	<0.5	<0.5	<0 5	<0.5	<0.5	<0 5	<0.5	<0 5
Thallium	ug/g	1 0	<0 5	<0.5	<0.5	<0 5	<0.5	<0.5	<0 5	<0.5	<0 5
Uranium	ug/g	23	0.54	<0.50	<0 50	<0.50	0 55	0.61	<0.50	<0 50	<0.50
Vanadium	ug/g	86	24 3	13.5	10.1	17 0	19.0	23.9	34 5	10.3	21 8
Zinc	ug/g	340	33	18	14	23	25	33	52	11	32
Electrical Conductivity (mS/cm)	mS/cm	0.70	0 243	**1.72**	**2.65**	**1.53**	0.132	**1.28**	**1.12**	**0.710**	**1.50**
Sodium Adsorption Ratio	N/A	5 0	2.07	0.478	0.834	1.73	1 39	**15.2**	**10.9**	0.594	3.48

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011 and as amended)

Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- **Value** Exceeds standard
- *Value* Detection limit exceeds standard
- [1] Hot water soluble boron applies to surface soils (<1.5 m bg).
- [2] Analysis for methyl mercury only applies when mercury standard is exceeded.

TABLE 2B SOIL ANALYTICAL RESULTS - PAHs

1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 R/P/I coarse	BH101-1	BH103-1	MW105-1	BH108-1	BH110-1	MW111-1
Sample Depth	m bg	-	0.0 - 0.6	0.0 - 0.6	0 0 - 0 6	0.0 - 0.6	0.0 - 0.6	0 0 - 0 6
Sampling Date	dd-mmm-yy	-	19-Apr-21	19-Apr-21	19-Apr-21	21-Apr-21	21-Apr-21	22-Apr-21
Analysis Date (on or before)	dd-mmm-yy	-	4-May-21	4-May-21	4-May-21	4-May-21	4-May-21	4-May-21
Certificate of Analysis No.	-	-	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993
Acenaphthene	ug/g	7 9	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Acenaphthylene	ug/g	0.15	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Anthracene	ug/g	0.67	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Benz[a]anthracene	ug/g	0.50	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Benzo[a]pyrene	ug/g	0.30	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Benzo[b]fluoranthene	ug/g	0.78	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Benzo[ghi]perylene	ug/g	6 6	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Benzo[k]fluoranthene	ug/g	0.78	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Chrysene	ug/g	7 0	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Dibenz[a h]anthracene	ug/g	0.10	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Fluoranthene	ug/g	0.69	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Fluorene	ug/g	62	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Indeno[1 2 3-cd]pyrene	ug/g	0.38	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Methlynaphthalene, 2-(1-)[1]	ug/g	0.99	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Naphthalene	ug/g	0.60	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Phenanthrene	ug/g	6 2	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05
Pyrene	ug/g	78	<0.05	<0.05	<0 05	<0.05	<0.05	<0 05

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
m bg meters below grade
RPD Relative percent difference
Value Exceeds standard
Value Detection limit exceeds standard
[1] the sum of 1-methylnaphthalene and 2- methylnaphthalene.

TABLE 2C SOIL ANALYTICAL RESULTS - BTEX and PHCs
1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 R/P/I coarse	BH101-3	BH101-13 duplicate of BH101-3	RPD	BH102-4	BH103-4	MW104-2	MW105-5	BH108-3	BH108-13 duplicate of BH108-3	RPD
Sample Depth	m bg	-	1.2 - 1.8	1 2 - 1 8		1.8 - 2.4	1 8 - 2.4	0.6 - 1.2	2.4 - 3.0	1 2 - 1 8	1.2 - 1.8	
Sampling Date	dd-mmm-yy	-	19-Apr-21	19-Apr-21		19-Apr-21	19-Apr-21	19-Apr-21	19-Apr-21	21-Apr-21	21-Apr-21	
Analysis Date (on or before)	dd-mmm-yy	-	30-Apr-21	30-Apr-21		30-Apr-21	30-Apr-21	30-Apr-21	30-Apr-21	30-Apr-21	30-Apr-21	
Certificate of Analysis No.	-	-	21Z737993	21Z737993		21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	21Z737993	
Benzene	ug/g	0.21	0.03	<0.02	-	<0.02	<0 02	<0.02	<0.02	<0 02	<0 02	-
Toluene	ug/g	2 3	<0.05	<0.05	-	<0.05	<0 05	<0.05	<0.05	<0 05	<0 05	-
Ethylbenzene	ug/g	2 0	0.06	<0.05	-	<0.05	<0 05	<0.05	<0.05	<0 05	<0 05	-
Xylene Mixture	ug/g	3.1	0.13	<0.05	-	<0.05	<0 05	<0.05	<0.05	<0 05	<0 05	-
Petroleum Hydrocarbons F1[1]	ug/g	55	<5	<5	-	<5	<5	<5	<5	<5	<5	-
Petroleum Hydrocarbons F2	ug/g	98	<10	<10	-	<10	<10	<10	<10	<10	<10	-
Petroleum Hydrocarbons F3	ug/g	300	<50	<50	-	<50	<50	88	<50	<50	<50	-
Petroleum Hydrocarbons F4	ug/g	2,800	<50	<50	-	<50	103	122	<50	222	198	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
m bg meters below grade
RPD Relative percent difference
Value Exceeds standard
Value Detection limit exceeds standard
[1] F1 fraction does not include BTEX.

TABLE 2C SOIL ANALYTICAL RESULTS - BTEX and PHCs (CONT'D)

1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 R/P/I coarse	MW109-1	MW111-5	MW111-6
Sample Depth	m bg	-	3.3 - 3.5	2.4 - 3.0	3 0 - 3 3
Sampling Date	dd-mmm-yy	-	21-Apr-21	22-Apr-21	20-May-21
Analysis Date (on or before)	dd-mmm-yy	-	30-Apr-21	30-Apr-21	31-May-21
Certificate of Analysis No.	-	-	21Z737993	21Z737993	21Z750733
Benzene	ug/g	0.21	<0.02	<0.02	<0 02
Toluene	ug/g	2 3	<0.05	<0.05	<0 05
Ethylbenzene	ug/g	2 0	<0.05	<0.05	<0 05
Xylene Mixture	ug/g	3.1	<0.05	<0.05	<0 05
Petroleum Hydrocarbons F1[1]	ug/g	55	<5	<5	<5
Petroleum Hydrocarbons F2	ug/g	98	<10	<10	<10
Petroleum Hydrocarbons F3	ug/g	300	64	<50	<50
Petroleum Hydrocarbons F4	ug/g	2,800	155	<50	<50

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011 and as amended)

Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

-	Not analyzed
m bg	meters below grade
RPD	Relative percent difference
Value	Exceeds standard
Value	Detection limit exceeds standard
[1]	F1 fraction does not include BTEX.

TABLE 2D SOIL ANALYTICAL RESULTS - VOCS excluding BTEX
1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 R/P/I coarse	MW111-6
Sample Depth	m bg	-	3.0 - 3.3
Sampling Date	dd-mmm-yy	-	20-May-21
Analysis Date (on or before)	dd-mmm-yy	-	31-May-21
Certificate of Analysis No.	-	-	21Z750733
Acetone	ug/g	16	<0.50
Bromodichloromethane	ug/g	13	<0.05
Bromoform	ug/g	0.27	<0.05
Bromomethane	ug/g	0.050	<0.05
Carbon Tetrachloride	ug/g	0.050	<0.05
Chlorobenzene	ug/g	2.4	<0.05
Chloroform	ug/g	0.050	<0.04
Dibromochloromethane	ug/g	9.4	<0.05
Dichlorobenzene, 1,2-	ug/g	3.4	<0.05
Dichlorobenzene, 1,3-	ug/g	4 8	<0.05
Dichlorobenzene, 1,4-	ug/g	0.083	<0.05
Dichlorodifluoromethane	ug/g	16	<0.05
Dichloroethane, 1,1-	ug/g	3 5	<0.02
Dichloroethane, 1,2-	ug/g	0.050	<0.03
Dichloroethylene, 1,1-	ug/g	0.050	<0.05
Dichloroethylene, 1,2-cis-	ug/g	3.4	<0.02
Dichloroethylene, 1,2-trans-	ug/g	0.084	<0.05
Dichloropropane, 1,2-	ug/g	0.050	<0.03
Dichloropropene,1,3-	ug/g	0.050	<0.04
Ethylene dibromide	ug/g	0.050	<0.04
Hexane (n)	ug/g	2 8	<0.05
Methyl Ethyl Ketone	ug/g	16	<0.50
Methyl Isobutyl Ketone	ug/g	1.7	<0.50
Methyl tert-Butyl Ether (MTBE)	ug/g	0.75	<0.05
Methylene Chloride	ug/g	0.10	<0.05
Styrene	ug/g	0.70	<0.05
Tetrachloroethane, 1,1,1,2-	ug/g	0.058	<0.04
Tetrachloroethane, 1,1,2,2-	ug/g	0.050	<0.05
Tetrachloroethylene	ug/g	0.28	<0.05
Trichloroethane, 1,1,1-	ug/g	0.38	<0.05
Trichloroethane, 1,1,2-	ug/g	0.050	<0.04
Trichloroethylene	ug/g	0.061	<0.03
Trichlorofluoromethane	ug/g	4 0	<0.05
Vinyl Chloride	ug/g	0.020	<0.02

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
m bg meters below grade
RPD Relative percent difference
Value Exceeds standard

TABLE 3A GROUNDWATER ANALYTICAL RESULTS - METALS AND INORGANICS
1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 coarse	MW104	MW114 duplicate of MW104	RPD	MW105	MW106	MW111
Screened Interval	m bg	-	4 3 - 7.3	4 3 - 7.3		13.1 - 16.1	4.0 - 5.5	4.6 - 7.6
Sampling Date	dd-mmm-yy	-	25-May-21	25-May-21		25-May-21	25-May-21	25-May-21
Analysis Date (on or before)	dd-mmm-yy	-	3-Jun-21	3-Jun-21		3-Jun-21	3-Jun-21	3-Jun-21
Certificate of Analysis No.	-	-	21Z752731	21Z752731		21Z752731	21Z752731	21Z752731
pH	pH Units	NV	7.53	7.50	-	7.43	7.53	7.56
Antimony	ug/L	20,000	<1 0	<1.0	-	<1.0	<1.0	<1 0
Arsenic	ug/L	1,900	5 5	1 6	-	<1.0	3.9	4.5
Barium	ug/L	29,000	140	133	5%	13.0	140	138
Beryllium	ug/L	67	<0.50	<0 50	-	<0.50	<0.50	<0.50
Boron (total)	ug/L	45,000	128	118	8%	20.6	144	95.1
Cadmium	ug/L	2.7	<0.20	<0 20	-	<0.20	<0.20	<0.20
Chromium Total	ug/L	810	<2 0	<2.0	-	<2.0	<2.0	<2 0
Chromium VI	ug/L	140	<2.000	<2.000	-	<2 000	<2.000	<2.000
Cobalt	ug/L	66	1.00	0.80	-	<0.50	0.98	0.54
Copper	ug/L	87	<1 0	2.4	-	2.7	1.2	<1 0
Cyanide (CN-)	ug/L	66	<2	<2	-	<2	<2	<2
Lead	ug/L	25	<0.50	<0 50	-	<0.50	<0.50	<0.50
Mercury	ug/L	0.29	<0.02	<0 02	-	<0.02	<0.02	<0.02
Methyl Mercury[1]	ug/L	0.15	-	-	-	-	-	-
Molybdenum	ug/L	9,200	3.64	4.87	29%	2 07	11.2	3.68
Nickel	ug/L	490	3.7	<3.0	-	<3.0	4.4	<3 0
Selenium	ug/L	63	<1 0	<1.0	-	<1.0	<1.0	<1 0
Silver	ug/L	1.5	<0.20	<0 20	-	<0.20	<0.20	<0.20
Thallium	ug/L	510	<0.30	<0 30	-	<0.30	<0.30	<0.30
Uranium	ug/L	420	2.33	2.19	-	<0.50	2.45	1.10
Vanadium	ug/L	250	0.52	<0.40	-	<0.40	0.40	<0.40
Zinc	ug/L	1,100	6 6	8 9	-	46.5	<5.0	<5 0
Chloride	ug/L	2,300,000	**3,230,000**	**3,230,000**	0%	17,600	**2,930,000**	972,000
Sodium	ug/L	2,300,000	1,620,000	1,620,000	0%	23,800	1,630,000	706,000

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
m bg meters below grade
RPD Relative percent difference
Value Exceeds standard
Value Detection limit exceeds standard
[1] Analysis for methyl mercury only applies when mercury standard is exceeded.

TABLE 3B GROUNDWATER ANALYTICAL RESULTS - BTEX and PHCs
1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

Sample Name	Units	STANDARDS Table 3 coarse	MW104	MW114 duplicate of MW104	RPD	MW105	MW106	MW109	MW111	Trip Spike % recovery	Trip Blank
Screened Interval	m bg	-	4 3 - 7.3	4 3 - 7.3		13.1 - 16.1	4.0 - 5.5	4.6 - 6.1	4.6 - 7.6	-	-
Sampling Date	dd-mmm-yy	-	25-May-21	25-May-21		25-May-21	25-May-21	25-May-21	25-May-21	-	-
Analysis Date (on or before)	dd-mmm-yy	-	3-Jun-21	3-Jun-21		3-Jun-21	3-Jun-21	3-Jun-21	3-Jun-21	3-Jun-21	3-Jun-21
Certificate of Analysis No.	-	-	21Z752731	21Z752731		21Z752731	21Z752731	21Z752731	21Z752731	21Z752731	21Z752731
Benzene	ug/L	44	0.33	0.26	-	<0.20	<0.20	<0.20	<0.40	105	<0 20
Toluene	ug/L	18,000	<0.20	<0 20	-	<0.20	<0.20	<0.20	<0.40	95	<0 20
Ethylbenzene	ug/L	2,300	1.26	0.97	26%	<0.10	<0.10	<0.10	<0.20	96	<0.10
Xylene Mixture	ug/L	4,200	<0.20	<0 20	-	<0.20	<0.20	<0.20	<0.40	105	<0 20
Petroleum Hydrocarbons F1[1]	ug/L	750	48	51	-	<25	<25	<25	84	-	<25
Petroleum Hydrocarbons F2	ug/L	150	<100	<100	-	<100	<100	<100	<100	-	-
Petroleum Hydrocarbons F3	ug/L	500	<100	<100	-	<100	<100	<100	<100	-	-
Petroleum Hydrocarbons F4	ug/L	500	<100	<100	-	<100	<100	<100	<100	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1
of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
m bg meters below grade
RPD Relative percent difference
Value Exceeds standard
Value Detection limit exceeds standard
[1] F1 fraction does not include BTEX.

TABLE 3C GROUNDWATER ANALYTICAL RESULTS - VOCs excluding BTEX
1186, 1188, 1194, and 1196 Wellington St. West, Ottawa, ON

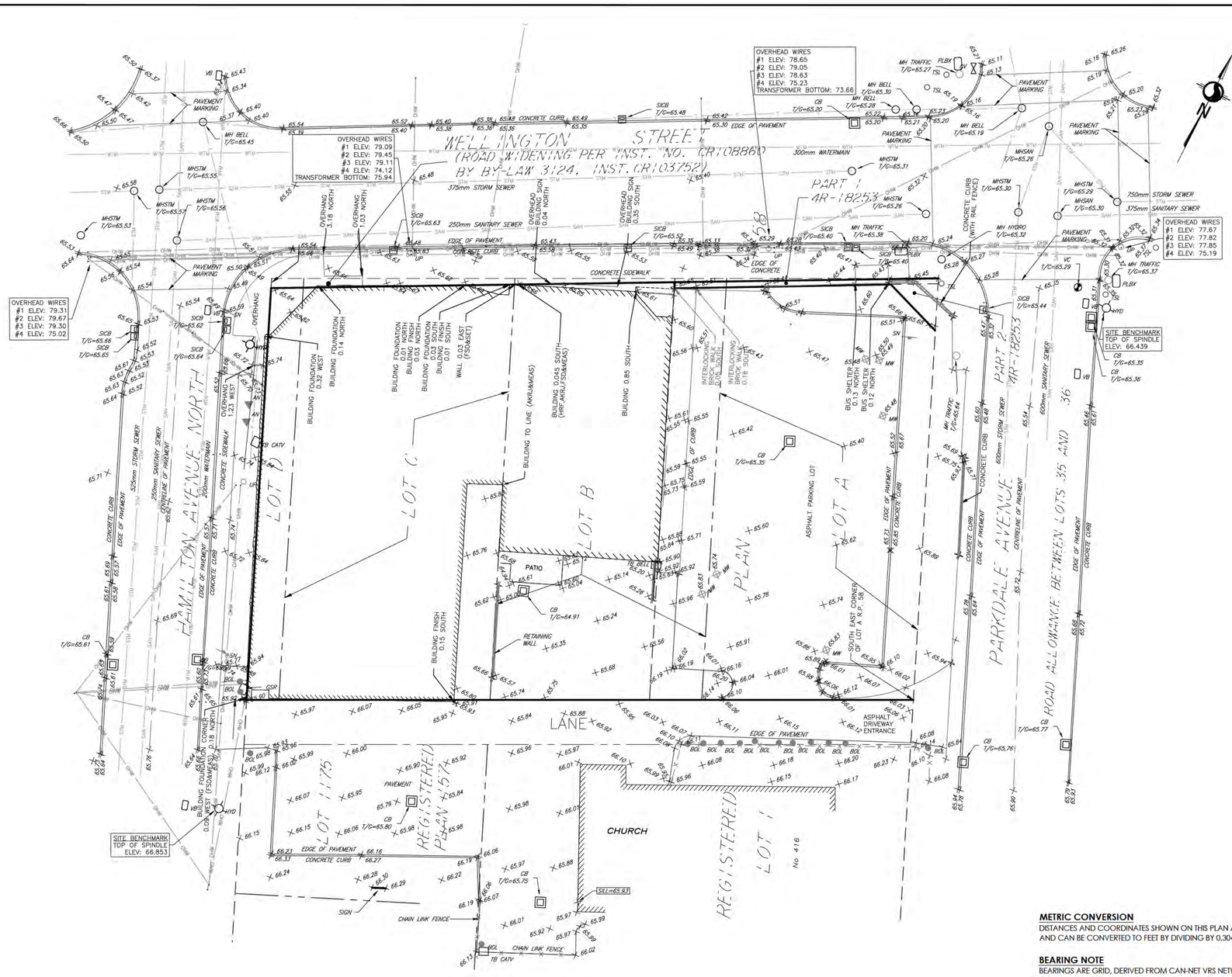
Sample Name	Units	STANDARDS Table 3 coarse	MW111
Screened Interval	m bg	-	4 6 - 7.6
Sampling Date	dd-mmm-yy	-	25-May-21
Analysis Date (on or before)	dd-mmm-yy	-	3-Jun-21
Certificate of Analysis No.	-	-	21Z752731
Acetone	ug/L	130,000	<2 0
Bromodichloromethane	ug/L	85,000	<0.40
Bromoform	ug/L	380	<0.20
Bromomethane	ug/L	5.6	<0.40
Carbon Tetrachloride	ug/L	0.79	<0.40
Chlorobenzene	ug/L	630	<0.20
Chloroform	ug/L	2.4	<0.40
Dibromochloromethane	ug/L	82,000	<0.20
Dichlorobenzene, 1,2-	ug/L	4,600	<0.20
Dichlorobenzene, 1,3-	ug/L	9,600	<0.20
Dichlorobenzene, 1,4-	ug/L	8.0	<0.20
Dichlorodifluoromethane	ug/L	4,400	<0.40
Dichloroethane, 1,1-	ug/L	320	<0.60
Dichloroethane, 1,2-	ug/L	1.6	<0.40
Dichloroethylene, 1,1-	ug/L	1.6	<0.60
Dichloroethylene, 1,2-cis-	ug/L	1.6	<0.40
Dichloroethylene, 1,2-trans-	ug/L	1.6	<0.40
Dichloropropane, 1,2-	ug/L	16	<0.40
Dichloropropene,1,3-	ug/L	5.2	<0.60
Ethylene dibromide	ug/L	0.25	<0.20
Hexane (n)	ug/L	51	<0.40
Methyl Ethyl Ketone	ug/L	470,000	<2 0
Methyl Isobutyl Ketone	ug/L	140,000	<2 0
Methyl tert-Butyl Ether (MTBE)	ug/L	190	<0.40
Methylene Chloride	ug/L	610	<0.60
Styrene	ug/L	1,300	<0.20
Tetrachloroethane, 1,1,1,2-	ug/L	3.3	<0.20
Tetrachloroethane, 1,1,2,2-	ug/L	3.2	<0.20
Tetrachloroethylene	ug/L	1.6	<0.40
Trichloroethane, 1,1,1-	ug/L	640	<0.60
Trichloroethane, 1,1,2-	ug/L	4.7	<0.40
Trichloroethylene	ug/L	1.6	<0.40
Trichlorofluoromethane	ug/L	2,500	<0.80
Vinyl Chloride	ug/L	0.50	<0.34

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (April 15, 2011 and as amended)
Table 3: Full Depth Generic SCS in a Non-Potable Ground Water Condition
All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
m bg meters below grade
RPD Relative percent difference
Value Exceeds standard
Value Detection limit exceeds standard

APPENDIX I

PLAN OF SURVEY, PROPOSED DEVELOPMENT PLAN



METRIC CONVERSION
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

BEARING NOTE
BEARINGS ARE GRID, DERIVED FROM CAN-NET VRS NETWORK GPS OBSERVATIONS ON NCC HORIZONTAL CONTROL MONUMENTS 19773035 AND 19680191, CENTRAL MERIDIAN, 76° 30' WEST LONGITUDE MTM ZONE 9, NAD83 (ORIGINAL).

19773035 N:5006060.42 E:324888.04
19680191 N:5033564.26 E:388064.94

ROTATION NOTE
A BEARING ROTATION OF 0°33'35" COUNTERCLOCKWISE WAS APPLIED TO FSD PLAN DATED JANUARY 14, 2002 & JULY 19, 2000.

Stantec

Stantec Geomatics Ltd.
400-1331 Clyde Avenue
Ottawa ON
Tel. 613.722.4420
www.stantec.com

TOPOGRAPHIC SKETCH OF
PART OF LOTS A, B, C, & D
REGISTERED PLAN 58
(GEOGRAPHIC TOWNSHIP OF NEPEAN)

CITY OF OTTAWA

Scale 1:250
5 0 5 10 15 METRES

Stantec Geomatics Ltd.

BOUNDARY NOTE
BOUNDARY LINEWORK AND INFORMATION IS COMPILED FROM REGISTERED PLAN 58 AND IS NOT BASED ON ACTUAL SURVEY.

VERTICAL DATUM NOTE
ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA ELEVATION=95.230.

UTILITY NOTE
LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE AND PER THE CITY OF OTTAWA SHEETS, AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.

LEGEND

■	DENOTES	FOUND MONUMENTS
□	"	SET MONUMENTS
IB	"	IRON BAR
IB⊠	"	ROUND IRON BAR
SIB	"	STANDARD IRON BAR
SSIB	"	SHORT STANDARD IRON BAR
CC	"	CUT CROSS
CP	"	CONCRETE PIN
WIT	"	WITNESS
PIN	"	PROPERTY IDENTIFICATION NUMBER
M/MEAS	"	MEASURED
PROP	"	PROPORTIONED
OU	"	ORIGIN UNKNOWN
STANTEC	"	STANTEC GEOMATICS LTD.
BOL	"	BOLLARD
CB	"	CATCH BASIN
SICB	"	SIDE INLET CB
GSR	"	GAS SERVICE REGULATOR
GV	"	GAS VALVE
HYD	"	FIRE HYDRANT
MH	"	MAINTENANCE HOLE UNIDENTIFIED
MHB	"	MAINTENANCE HOLE BELL
MHH	"	MAINTENANCE HOLE HYDRO
MHSA	"	MAINTENANCE HOLE SANITARY
MHST	"	MAINTENANCE HOLE STORM
MHT	"	MAINTENANCE HOLE TRAFFIC
MW	"	MONITORING WELL
PLBX	"	PULL BOX
SN	"	SIGN
TB CATV	"	TERMINAL BOX - CABLE
TSL	"	TRAFFIC SIGNAL LIGHT
UP	"	UTILITY POLE
VB	"	VALVE BOX

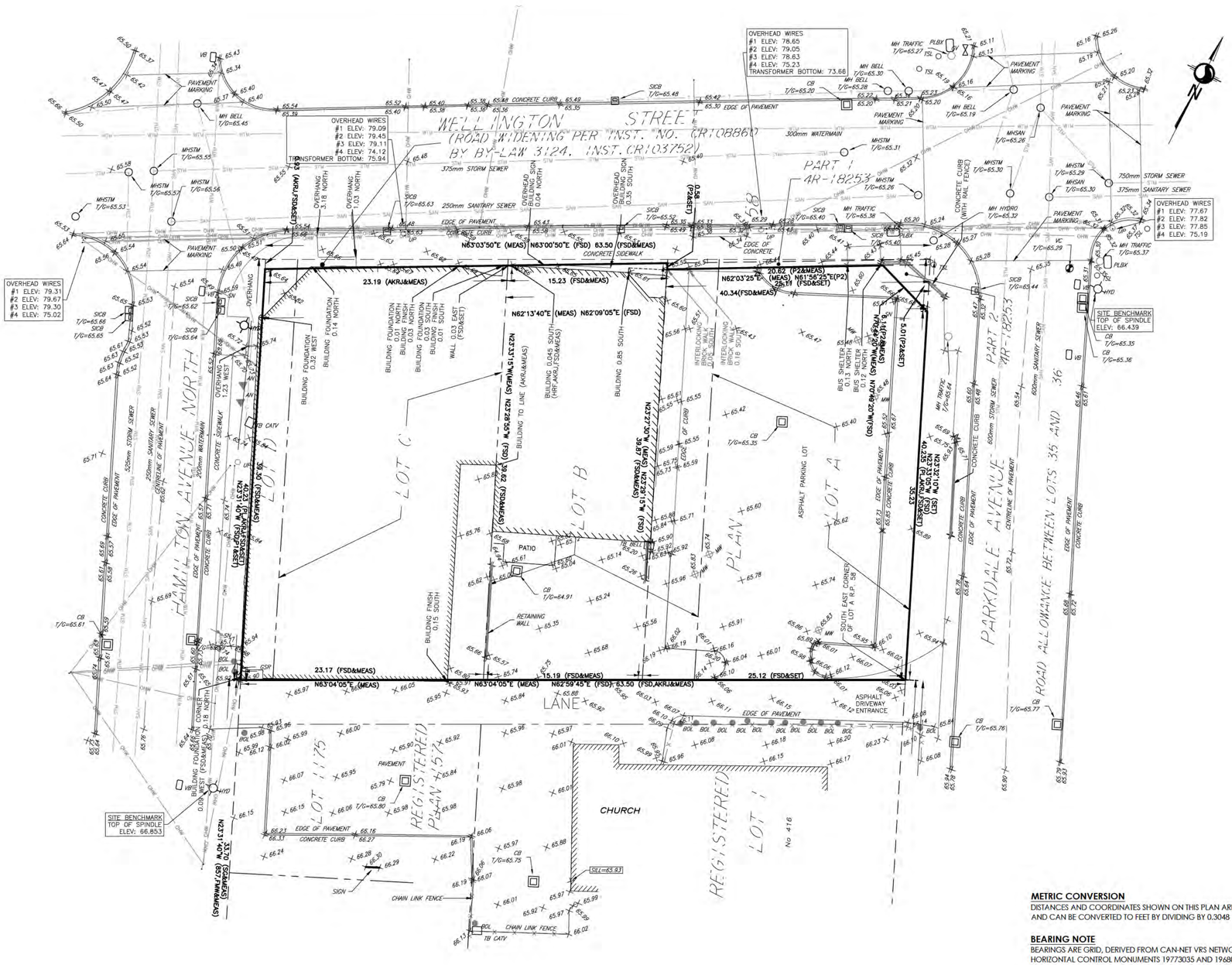
OVERHEAD WIRE
SANITARY SEWER
STORM SEWER
UNDERGROUND TELEPHONE
WATERMAIN

SURVEYOR'S CERTIFICATE
I CERTIFY THAT :
1. THE SURVEY WAS COMPLETED ON THE 26th DAY OF APRIL, 2021.

DATE

FRANCIS LAU
ONTARIO LAND SURVEYOR

DRAWN: TMT CHECKED: CT PM: CT FIELD: AW PROJECT No.: 161614215-111



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BEARING NOTE

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19773035 N:5006060.42 E:324888.04
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TOPOGRAPHIC SKETCH OF

PART OF LOTS A, B, C, & D REGISTERED PLAN 58

(GEOGRAPHIC TOWNSHIP OF NEPEAN)

CITY OF OTTAWA

Scale 1:250

5 0 5 10 15 METRES

Stantec Geomatics Ltd.

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LEGEND

■	DENOTES	FOUND MONUMENTS
□	"	SET MONUMENTS
IB	"	IRON BAR
IBø	"	ROUND IRON BAR
SIB	"	STANDARD IRON BAR
SSIB	"	SHORT STANDARD IRON BAR
CC	"	CUT CROSS
CP	"	CONCRETE PIN
WIT	"	WITNESS
PIN	"	PROPERTY IDENTIFICATION NUMBER
M/MEAS	"	MEASURED
PROP	"	PROPORTIONED
OU	"	ORIGIN UNKNOWN
STANTEC	"	STANTEC GEOMATICS LTD.
BOL	"	BOLLARD
CB	"	CATCH BASIN
SICB	"	SIDE INLET CB
GSR	"	GAS SERVICE REGULATOR
GV	"	GAS VALVE
HYD	"	FIRE HYDRANT
MH	"	MAINTENANCE HOLE UNIDENTIFIED
MHB	"	MAINTENANCE HOLE BELL
MHH	"	MAINTENANCE HOLE HYDRO
MHSA	"	MAINTENANCE HOLE SANITARY
MHST	"	MAINTENANCE HOLE STORM
MHT	"	MAINTENANCE HOLE TRAFFIC
MW	"	MONITORING WELL
PLBX	"	PULL BOX
SN	"	SIGN
TB CATV	"	TERMINAL BOX - CABLE
TSL	"	TRAFFIC SIGNAL LIGHT
UP	"	UTILITY POLE
VB	"	VALVE BOX

OVERHEAD WIRE

SANITARY SEWER

STORM SEWER

UNDERGROUND TELEPHONE

WATERMAIN

SURVEYOR'S CERTIFICATE

I CERTIFY THAT :

1. THE SURVEY WAS COMPLETED ON THE 26th DAY OF APRIL, 2021.

DATE

FRANCIS LAU
ONTARIO LAND SURVEYOR

DRAWN: TMT CHECKED: CT PM: CT FIELD: AW PROJECT No.: 161614215-111

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
2121639

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29(3)

SURVEYOR'S REAL PROPERTY REPORT

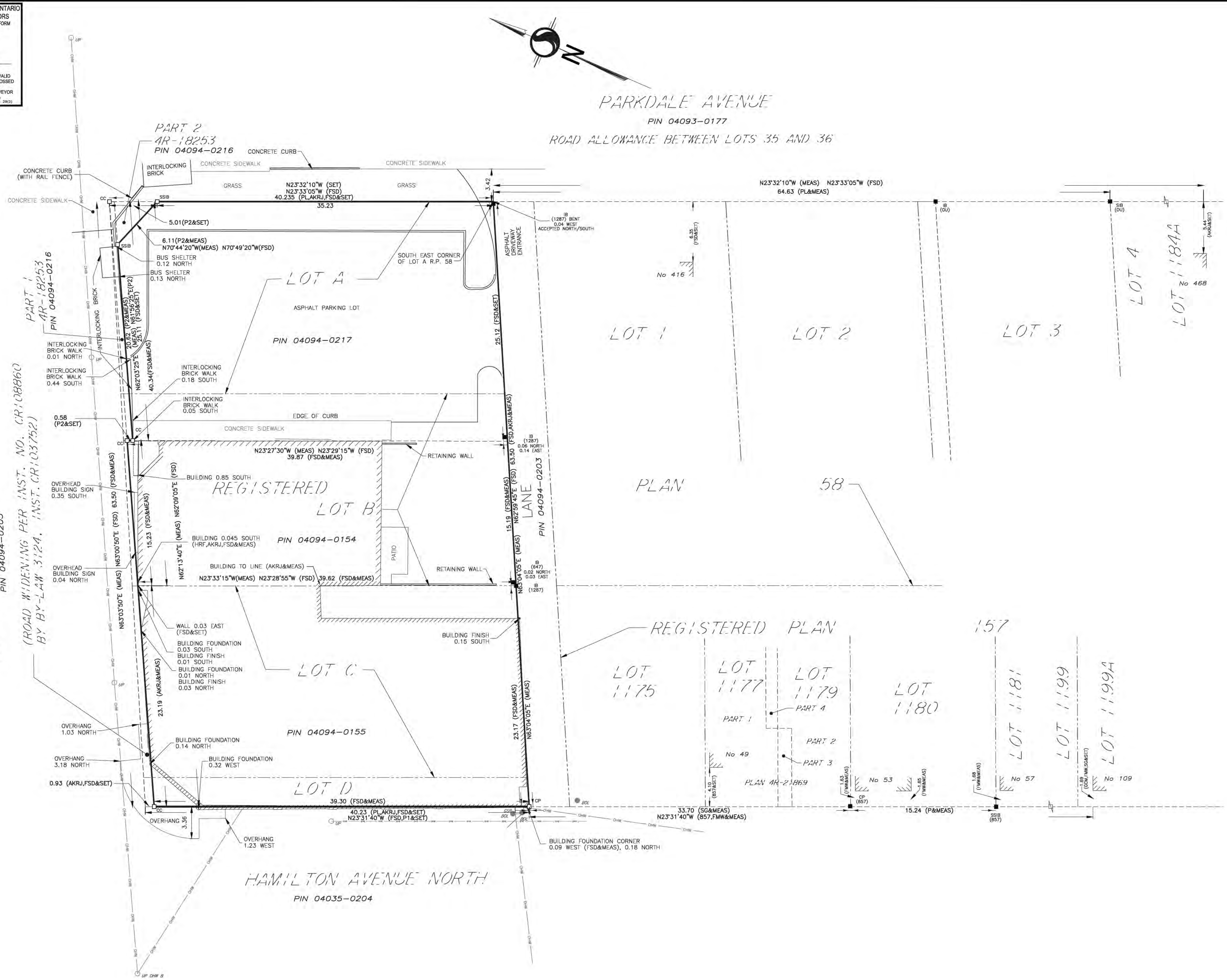
PART 1 - PLAN OF SURVEY

PART OF LOTS A, B, C & D REGISTERED PLAN 58

(GEOGRAPHIC TOWNSHIP OF NEPEAN)

CITY OF OTTAWA

Scale 1:200



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19773035 N:5006060.42 E:324888 04
19680191 N:5033564 26 E:388064.94

ROTATION NOTE

A BEARING ROTATION OF 0°33'35" COUNTERCLOCKWISE WAS APPLIED TO FSD PLAN DATED JANUARY 14 2002 & JULY 19 2000.

NOTE

THIS PLAN OF SURVEY IS TO BE READ IN CONJUNCTION WITH THE REPORT SUMMARY NOTED AS PART 2 HEREON.
THIS REPORT CAN ONLY BE UPDATED BY THIS OFFICE. NO ADDITIONAL PRINTS OF THIS ORIGINAL REPORT WILL BE ISSUED SUBSEQUENT TO THE DATE OF CERTIFICATION.
ALL TIES ARE MINIMUM UNLESS OTHERWISE NOTED.
ALL TIES TO CURVED BOUNDARY ARE RADIAL TO ARC.
RISK OF UNDERGROUND SERVICES, MONUMENTATION PLANTED ACCORDINGLY.

PART 2

This Report was prepared for Minto Commun ties Inc. and the undersigned accepts no responsibility for the use by other parties.

1. REGISTERED RIGHTS-OF-WAY/EASEMENTS

No rights-of-way or easements were found to be registered against the subject property.

2. PROPERTY IMPROVEMENTS

This is a foundat on survey only.

3. COMPLIANCE WITH MUNICIPAL ZONING BYLAWS

Compliance is not certified by this report.

4. ADDITIONAL REMARKS

The building ties are to the unpargeted concrete foundation walls.

LEGEND

■	DENOTES	FOUND MONUMENTS
□	"	SET MONUMENTS
IB	"	IRON BAR
IBø	"	ROUND IRON BAR
SIB	"	STANDARD IRON BAR
SSIB	"	SHORT STANDARD IRON BAR
CC	"	CUT CROSS
CP	"	CONCRETE PIN
WIT	"	WITNESS
PIN	"	PROPERTY IDENTIFICATION NUMBER
MEAS	"	MEASURED
PROP	"	PROPORTIONED
OU	"	ORIGIN UNKNOWN
SG	"	STANTEC GEOMATICS LTD.
GCM	"	G.C MCROSTIE OLS
(857)FMW	"	FAIRHALL MOFFATT & WOODLAND LTD.
PL	"	REGISTERED PLAN 58
P1	"	REGISTERED PLAN 157
UP	"	UTILITY POLE
HYD	"	FIRE HYDRANT
AKRJ	"	ARNETT KENNEDY RIDDELL & JASON LTD.
FSD	"	FARLEY SMITH & DENIS
P2	"	PLAN 4R-18253

SURVEYOR'S CERTIFICATE

I CERTIFY THAT :

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE DAY OF , 2020.

July 2, 2020
DATE

BRIAN J. WEBSTER
ONTARIO LAND SURVEYOR

SRO MAP COORD.= 365125.5 5029228.2

Stantec Geomatics Ltd.
CANADA LANDS SURVEYORS
ONTARIO LAND SURVEYORS
1331 CLYDE AVENUE, SUITE 400
OTTAWA, ONTARIO, K2C 3G4
TEL. 613.722.4420
stantec.com

DRAWN: TMT	CHECKED: AB	PM: CT	FIELD: CK	PROJECT No.: 161614215-114

This plan was signed with a scanned signature as a result of the Emergency Order related to the COVID-19 pandemic.

WELLINGTON ST W

HAMILTON AVE N

PARKDALE AVE

1 STOREY

18 STOREY

6 STOREY

MECH PH

4500

2000
SETBACK

2000
SETBACK

3 STOREY

19200

1 STOREY

ENTRANCE

1 STOREY

EXIT

LOADING SPACE 13 x 4m

5750

EXIT

3250

EXIT

3250

6000

7500
SETBACK

EXISTING LANE

±4270
EXISTING LANE
WIDTH

6000
PROPOSED LANE
WIDTH

N

1:250

SITE PLAN

APPENDIX II

NON-POTABLE GROUNDWATER NOTIFICATION

May 21, 2021
CO810.00

City of Ottawa
Planning, Infrastructure and Economic Development
110 Laurier Avenue West
Ottawa, ON
K1P 1J1

Attention: Michel Kearney, P.Geo.
Senior Hydrogeologist

Via Email: Michel.Kearney@ottawa.ca

Re: Notification of Environmental Standards
1186-1196 Wellington Street West, Ottawa, ON

Dear Mr. Kearney:

Terrapex Environmental Ltd. (Terrapex) is conducting a Phase Two Environmental Site Assessment (ESA) per Ontario Regulation (O. Reg.) 153/04 (*Records of Site Condition – Part XV.1 of the Act*) at 1186-1196 Wellington Street West, Ottawa, Ontario (the site) for the purpose of obtaining a Record of Site Condition (RSC).

Terrapex has determined that the site meets the technical requirements outlined in Section 35 of O. Reg. 153/04. Consequently, the Qualified Person per Section 6 of O. Reg. 153/04 intends to submit the RSC with the assumption that groundwater under the site does not and will not serve as a raw water supply for a drinking water system. In accordance with the requirements of O. Reg. 153/04, Terrapex hereby requests that the City of Ottawa respond to this notice and indicate whether the municipality objects to the assumption outlined above, and if there is an objection the reasons for it.

If you have any questions or concerns regarding this matter, please do not hesitate to contact the undersigned.

Sincerely,
TERRAPEX ENVIRONMENTAL LTD.

Keith Brown, PEng
Senior Project Manager

14 June 2021

Mr. Keith Brown, P.Eng.
Terrapex Environmental Ltd.
20 Gurdwara Road, Unit 1
Ottawa, Ontario
K2E 8B3

Dear Mr. Brown,

Re: Record of Site Condition – 1186-1196 Wellington Street West

As per your letter of May 21, 2021 requesting to use non-potable standards, this is to advise that the City of Ottawa does not object to the use of non-potable groundwater standards for the properties identified as 1186-1196 Wellington Street West, Ottawa, ON, as part the filing of a Record of Site Condition.

Best Regards,

Michel Kearney, P.Geo.

Senior Hydrogeologist
Asset Management
Planning, Infrastructure and Economic Development Department

Hydrogéologue principal
Gestion des actifs
Services de la planification, de l'infrastructure et du développement économique
City of Ottawa | Ville d'Ottawa

613.580.2424 ext./poste 22872
ottawa.ca/planning / ottawa.ca/urbanisme

APPENDIX III

SAMPLING AND ANALYSIS PLAN

SAMPLING AND ANALYSIS PLAN
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

Site: 1186-1196 Wellington Street West, Ottawa, Ontario
Project No: CO810.00
Date: April 15, 2021

OBJECTIVES

On behalf of Welldale Limited Partnership, Terrapex Environmental Ltd. (Terrapex) has prepared this sampling and analysis plan for a Phase Two Environmental Site Assessment (ESA) at 1186-1194 Wellington Street West, Ottawa, Ontario, the "Phase Two Property". The Phase Two ESA is to be conducted for the purposes of filing a Record of Site Condition per Ontario Regulation (O. Reg.) 153/04, *Records of Site Condition - Part XV.1 of the Act* on the basis of future development for residential use. The objective of this ESA is to determine the location and concentration of contaminants in the land or water on, in or under the Phase Two Property.

The Phase Two ESA will investigate all Areas of Potential Environmental Concern (APECs) which were identified in a Phase One ESA of the property conducted by Paterson Group Inc., dated July 16, 2020, and updated by Terrapex. The APECs are shown on Figure 1 and listed in Table 1.

SAMPLING PROGRAM

The media to be investigated and the contaminants of concern have been determined based on findings from previous investigations and potential environmental concerns identified from on-site and off-site activities. The media, contaminants, investigation and sampling methods are summarized on Table 2. The rationale for each sampling location, and the proposed laboratory analytical program for each location, is shown on Table 3. Modifications may be made to the program during the course of implementation, based on field observations, and will be documented in the Phase Two ESA report.

STANDARD OPERATING PROCEDURES

The following Terrapex Standard Operating Procedures (SOPs) will be used:

SOP E01.00 – Field Meter Calibration
SOP E03.00 – Borehole Advancement Using Rotary Auger
SOP E03.03 – Borehole Advancement Using Direct Push Methodology
SOP E03.05 – Borehole Advancement into Bedrock using Diamond Drilling
SOP E04.00 – Monitoring Well Installation
SOP E05.00 – Monitoring Well Development
SOP E06.00 – Groundwater Monitoring
SOP E07.01 – Groundwater Sampling, Low Volume Purge, Using Peristaltic Pump
SOP E09.00 – Soil Sample Handling
SOP E10.00 – Soil Classification
SOP E11.00 – Measuring and Surveying Using Rod and Level
SOP E12.00 – Field Program Quality Assurance & Quality Control
SOP E14.00 – Hydraulic Conductivity Slug Testing

DATA QUALITY OBJECTIVES

The investigation will be completed following Terrapex SOP *E12.00 - Field Program Quality Assurance & Quality Control*, which specifies requirements for minimizing cross-contamination, record-keeping, sample storage, sample submission, field QA/QC samples and data quality objectives. If the data quality objectives are not met, the Qualified Person for the project will review the results and determine whether the deviation affects decision-making or the overall objectives of the investigation.

LABORATORY PROGRAM

Project Laboratory: AGAT Laboratories Ltd.

Accreditation: Canadian Association for Laboratory Accreditation Inc. (CALA) in accordance with the International Standard ISO/IEC17025-2005 – *General Requirements for the Competence of Testing and Calibration Laboratories*

Proposed Analytical Program: See Table 3, attached.

Analytical Methods: The laboratory will use the methods specified in the *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011 (Analytical Protocol).*

Sample Containers and Preservatives: See Table 4, attached.

AGAT's Quality Assurance/Quality Control (QA/QC) program will consist of the analysis of method blanks, laboratory control samples, matrix spikes, sample duplicates, and surrogates, as appropriate for the particular analysis protocol and as specified in the *Analytical Protocol.*

SUB-CONTRACTORS

All sub-contractors used in the Phase Two ESA will be approved suppliers according to Terrapex's ISO 9001:2008 system. The following sub-contractors will be retained for this project:

Private utility locates: USL-1
Borehole drilling and well installation: George Downing Drilling Ltd. and Strata Soil Sampling
Laboratory analyses: AGAT Laboratories Ltd.
Waste disposal: Clean Water Works Inc.

ATTACHMENTS

Figure 1 – Areas of Potential Environmental Concern and Proposed Sampling Locations
Table 1 – Areas of Potential Environmental Concern
Table 2 – Media to be Investigated and Chemicals of Concern
Table 3 – Proposed Sampling Plan
Table 4 – Sample Containers and Preservation Plan

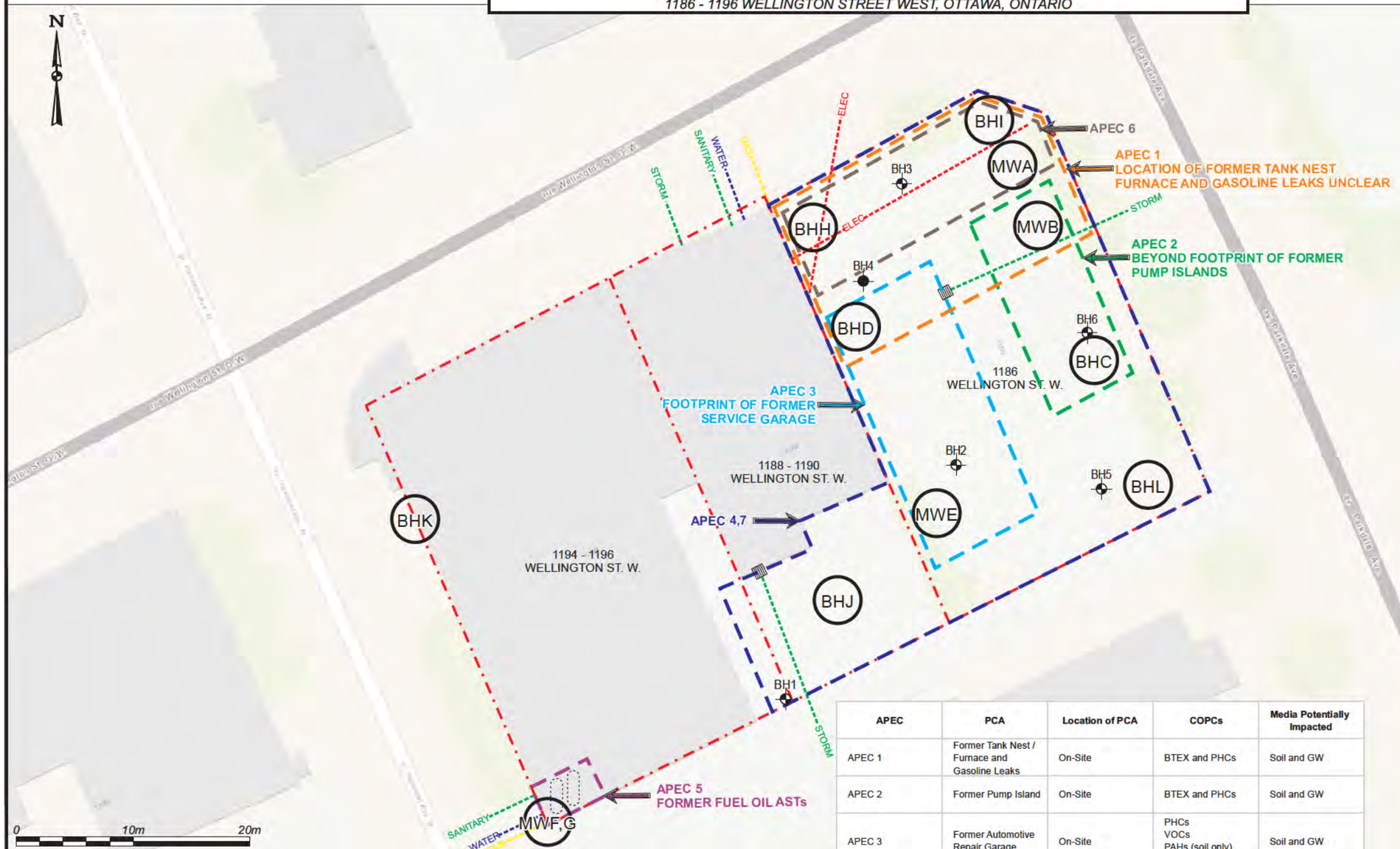
TERRAPEX

PROPOSED SAMPLING LOCATIONS
AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

1186 - 1196 WELLINGTON STREET WEST, OTTAWA, ONTARIO

CLIENT

WELLDALE LIMITED PARTNERSHIP



SOURCE: GeoOTTAWA IMAGERY

LEGEND

- PATERSON GROUP MONITORING WELL
- PATERSON GROUP BOREHOLE
- (BHK) PROPOSED SAMPLING LOCATION

APEC	PCA	Location of PCA	COPCs	Media Potentially Impacted
APEC 1	Former Tank Nest / Furnace and Gasoline Leaks	On-Site	BTEX and PHCs	Soil and GW
APEC 2	Former Pump Island	On-Site	BTEX and PHCs	Soil and GW
APEC 3	Former Automotive Repair Garage	On-Site	PHCs VOCs PAHs (soil only) M & I	Soil and GW
APEC 4	Untested Fill Material	On-Site	PAHs M&I	Soil
APEC 5	Former Heating Oil ASTs	On-Site	BTEX and PHCs	Soil and GW
APEC 6	Retail Fuel Outlet	Off-Site	BTEX and PHCs	Soil and GW
APEC 7	Parking Lot Deicing	On-Site	EC / SAR	Soil
			Cl / Na	Groundwater

PROJECT #	CO810.00
SCALE	AS SHOWN
DATE	JUNE 2021
DRAWN	JOB
CHECKED	KWB
DRAWING #	FIGURE 1

TABLE 1 AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Area of Potential Environmental Concern[1]	Location Of Area of Potential Environmental Concern On Phase One Property	Potentially Contaminating Activity[2]	Location of PCA (On-Site Or Off-Site)	Contaminants Of Potential Concern[3]	Media Potentially Impacted (Ground water, Soil, and/or Sediment)
APEC 1	Northeastern Portion of the Site Former Tank Nest / Furnace and Gasoline Leaks	28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	- BTEX - PHCs	- Soil - Groundwater
APEC 2	Eastern Portion of the Site Former Pump Island	28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	- BTEX - PHCs	- Soil - Groundwater
APEC 3	Eastern Portion of the Site Former Automotive Repair Garage	52 – Storage, Maintenance, Fuelling and Repair of Equipment, Vehicles, and Material Used To Maintain Transportation Systems	On-Site	- BTEX - PHCs - VOCs - PAHs (soil only unless impacts found) - Metals - AS, SB, Se - Boron HWS - CN- - Cr (VI) & Hg	- Soil - Groundwater
APEC 4	Eastern and Southern Portions of the Site	30 – Importation of Fill Material of Unknown Quality	On-Site	- PAHs (soil only unless impacts found) - Metals - EC & SAR - AS, SB, Se - Boron HWS - CN- - Cr (VI) & Hg	- Soil
APEC 5	Southwestern Portion of the Site Former Heating Oil ASTs	28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	- BTEX - PHCs	- Soil - Groundwater
APEC 6	Northeastern Portion of the Site Off-Site Retail Fuel Outlet	28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	- BTEX - PHCs	- Soil - Groundwater
APEC 7	Eastern and Southern Portions of the Site Parking Lots	Other – The current and historical use of substances for the removal of snow and ice (de-icing activities).	On-Site	- EC/SAR (Soil only) - Cl/Na (Groundwater only)	- Soil - Groundwater

[1] Areas of potential environmental concern means the area on, in or under a Phase One property where one or more contaminants are potentially present, as determined through the Phase One environmental site assessment, including through,
(a) identification of past or present uses on, in or under the Phase One property, and
(b) identification of potentially contaminating activity.

[2] Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a Phase One study area.

[3] Contaminants of potential concern according to the Method Groups as identified in the "Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act", March 9, 2004, amended as of July 1, 2011:

BTEX: benzene, toluene, ethylbenzene, xylenes	Hg: mercury	As: arsenic	Cl: chloride
PHCs: petroleum hydrocarbons (F1-F4)	B (hws): boron, hot water soluble	Sb: antimony	EC: electrical conductivity
VOCs: volatile organic compounds	Cr (VI): chromium (hexavalent)	Se: selenium	SAR: sodium adsorption ratio
PAHs: polycyclic aromatic hydrocarbons	CN-: cyanide	Na: sodium	PCBs: polychlorinated biphenyls

TABLE 2 - MEDIA INVESTIGATED, CONTAMINANTS OF CONCERN AND METHODS

Media	Contaminants of Concern	Investigation Method	Equipment	Sample Collection Method
Soil	Petroleum hydrocarbons Polycyclic aromatic hydrocarbons Volatile organic compounds Benzene, toluene, ethylbenzene, xylenes Metals, metal hydrides Mercury Cyanide Chromium VI Hot water soluble boron Electrical conductivity Sodium absorption ratio (SAR)	Boreholes	GeoProbe 420M portable drill rig CME 55 rotary auger rig	Dedicated PVC dual tube sampling method, continuous sampling Split spoon sampler, sample every 0.75 m
Groundwater	Petroleum hydrocarbons Polycyclic aromatic hydrocarbons Volatile organic compounds Benzene, toluene, ethylbenzene, xylenes Metals, metal hydrides Mercury Cyanide Chromium VI Sodium, chloride Nitrite, nitrate	Monitoring wells	GeoProbe 420M portable drill rig CME 55 rotary auger rig	Low-flow sampling using peristaltic pump, target top 0.5 m of water column

TABLE 3 PROPOSED SAMPLING PLAN AND RATIONALE
1186-1196 Wellington Street West, Ottawa, ON

Borehole No.	Location	APEC	Depth (m)	Screened Interval (m)	Soil Sampling Interval	Rationale	Lab Analyses							
							Soil				Groundwater			
							BTEX, F1-F4	VOCs	Inorg.	PAHs	BTEX, F1-F4	VOCs	PAHs	Inorg.
MWA (shallow and deep)	Northeast corner of parking lot	APEC 1 APEC 4 APEC 6 APEC 7	16	2 0-5.0 (shallow) 12.0-15 0 (deep)	Fill	- Assess fill quality - Assess soil and groundwater conditions in the former UST nest - Deep (geotechnical) drilling location			1	1	2		2	2
					Worst-Case		1							
MWB	East-central portion of parking lot	APEC 2 APEC 4 APEC 7	7 5	4.5-7 5	Fill	- Assess fill quality - Assess soil and groundwater conditions in the vicinity of former pump island			1	1	1		1	1
					Worst-Case		1							
BHC	East-central portion of parking lot	APEC 2 APEC 4 APEC 7	3 5	N/A	Fill	- Assess fill quality			1	1				
					Worst-Case	- Assess soil and groundwater conditions in the former UST nest	1							
BHD	West-central portion of parking lot	APEC 3 APEC 4 APEC 7	20	N/A	Fill	- Assess fill quality - Assess soil and groundwater conditions in the vicinity of former automotive repair garage			1	1				
					Worst-Case		1							
MWE	Southwest corner of parking lot	APEC 3 APEC 4 APEC 7	7 5	4.5-7 5	Fill	- Assess fill quality - Assess soil and groundwater conditions in the vicinity of former automotive repair garage			1	1	1	1	1	1
					Worst-Case		1	1						
MWF	Southwest corner of church	N/A	16	12.0-15 0	N/A	- Geotechnical								
MWG	Church basement	APEC 5	5	2.0-5 0	Worst-Case	- Assess soil and groundwater conditions in the vicinity of former ASTs	1				1			
BHH	Northern property limit	APEC 4 APEC 6 APEC 7	3 5	N/A	Fill	- Assess fill quality - Assess soil conditions in the vicinity of active retail fuel outlet			1	1				
					Worst-Case		1							
BJI	Northern property limit	APEC 4 APEC 6 APEC 7	3 5	N/A	Fill	- Assess fill quality - Assess soil conditions in the vicinity of active retail fuel outlet			1	1				
					Worst-Case		1							
BHJ	South parkling lot	APEC 4 APEC 7	16	12.0-15 0	Fill	- Assess fill quality			1	1				
MWK	Northwest corner of church	N/A	16	12.0-15 0	N/A	- Geotechnical								
BHL	Southeast corner of parking lot	APEC 4 APEC 7	16	N/A	Fill	- Assess fill quality			1	1				
Total Before QA/QC Samples							**8**	**1**	**8**	**8**	**5**	**1**	**4**	**4**
QA/QC field duplicate						One duplicate per 10 samples	2		1	2	1	1		
QA/QC field blank (methanol blank for soil, deionized water blank for water)						One per sampling round (volatiles only)	1	1			1	1		
QA/QC trip blank						One per sampling round (volatiles in groundwater only)					1	1		
QA/QC trip spike						One per sampling round (volatiles in groundwater only)					1	1		
Total Laboratory Analyses							**11**	**2**	**9**	**10**	**9**	**5**	**4**	**4**

Notes: APEC = Area of Potential Concern, refer to phase one ESA
VOCs = volatile organic compounds (O. Reg. 153/04)
BTEX/F1-F4 = benzene, toluene, ethybenzene, xylenes and petroleum hydrocarbons in the F1 to F4 fractions
Inorg. = metals and general inorganic parameters (O. Reg. 153/04)
PAHs = polycyclic aromatic hydrocarbons (O. Reg. 153/04)
PCBs = polychlorinated biphenyls

TABLE 4 - SAMPLE CONTAINERS AND PRESERVATION

Media	Analytical Parameter	Field Filtered	Sample Container	Preservation	Holding Time (preserved)
Soil	Metals, metal hydrides, hot water soluble boron, chromium VI, SAR, EC, pH	Not applicable	250 mL glass jar	5 ± 3 °C	180 days
	Cyanide	Not applicable	250 mL glass jar, teflon lined lid	5 ± 3 °C	14 days
	BTEX, PHC F1	Not applicable	40 mL glass vial and 60 mL glass jar, no headspace	10 mL methanol, 5 ± 3 °C	14 days
	BTEX, PHC F1	Not applicable	Hermetic sampler (Encore™)	5 ± 3 oC	Extract within 48 hrs
	PHCs F2-F4	Not applicable	120 mL glass jar, teflon lined lid	5 ± 3 °C	14 days
	VOCs	Not applicable	40 mL glass vial and 60 mL glass jar, no headspace	10 mL methanol, 5 ± 3 °C	14 days
	PAHs	Not applicable	120 mL glass jar, teflon lined lid	5 ± 3 °C	60 days
Groundwater	Metals, metal hydrides, sodium	Yes	250 mL HDPE bottle	HNO_3 to pH < 2 5 ± 3 oC	60 days
	Mercury	Yes	125 mL clear glass bottle	HCl to pH < 2 5 ± 3 oC	28 days
	Chromium VI	Yes	250 mL HDPE bottle	$(NH_4)_2SO_4/HN_4OH$ 5 ± 3 oC	28 days
	Cyanide	No	250 mL HDPE bottle	NaOH to pH > 12 5 ± 3 °C	14 days
	BTEX, PHC F1	No	3 x 40 mL clear glass septum vial, no headspace	$NaHSO_4$ to pH < 2 5 ± 3 $_o$C	14 days
	PHCs F2-F4	No	2 x 500 mL amber glass bottle	$NaHSO_4$ to pH < 2 5 ± 3 $_o$C	40 days
	VOCs	No	3 x 40 mL clear glass septum vial, no headspace	$NaHSO_4$ to pH < 2 5 ± 3 $_o$C	14 days

SAR = sodium absorption ratio
EC = electrical conductivity
BTEX = benzene, toluene, e hylbenzene, xylenes
PHC F1 - F4 = petroleum hydrocarbons F1 to F4 fractions
VOCs = volatile organic compounds
PAHs = polycyclic aromatic hydrocarbons (O. Reg. 153/04)
PCBs = polychlorinated biphenyls
TCLP = toxicity characteriza ion leachate procedure
HDPE = high density polyethylene

APPENDIX IV

BOREHOLE LOGS

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH101**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029245	EASTING (m): 365127 ELEV. (m) 65.3
CONTRACTOR: George Downing Estate Drilling Ltd.	METHOD: GEORGE DOWNING ESTATE DRILLING LTD.	
BOREHOLE DIAMETER (cm): 20	WELL DIAMETER (cm):	SCREEN SLOT #: SAND TYPE: SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALTIC (50 mm)	0				-						
		COMPACT, DAMP, BROWN, SAND AND GRAVEL (FILL)	0.5	65	12		1		33	15 ppm	PAHs		
		STIFF TO VERY STIFF, DAMP, BROWN/GREY SILTY CLAY WITH TRACE SAND	1	64.5	11		2		83	<10 ppm			pp=196 kPa
			1.5	64	13		3		75	20 ppm	PHCs		(Duplicate BH101-13)
		DENSE, DAMP, BROWN SILTY SAND WITH SOME GRAVEL	2	63.5	-		4		54	<10 ppm			
		VERY DENSE, DAMP, BROWN, SILTY SAND WITH SOME GRAVEL	2.5	63	36		5		75	<10 ppm			
		TRACE CLAY	3	62.5									
			3.5	62	15		6		42	<10 ppm			
				61.5									
		END OF BOREHOLE REFUSAL ON ASSUMED BEDROCK											AUGER REFUSAL AT 3.81m

TERRAPEX

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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH102**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029253	EASTING (m): 365142 — ELEV. (m) 65.4
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #:	SAND TYPE: — SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ● 40 80 120 160 / N-VALUE (Blows/300mm) ▲ 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		VERY LOOSE, DAMP, BROWN, TOPSOIL (FILL) WITH TRACE SAND AND GRAVEL	0	65	3		1		63	<10 ppm	M+I		
		VERY STIFF, DAMP, BROWN, SILTY CLAY, TRACE SAND	0.5										
			1	64.5	12		2		58	<10 ppm			PP=209 kPa
			1.5	64	0		3		100	<10 ppm			PP=232 kPa
			2	63.5	12		4		33	<10 ppm	PHCs		PP=232 kPa
		VERY STIFF, DAMP, BROWN, CLAYEY SILT WITH TRACE GRAVEL AND SOME SAND	2.5	63	-		5		66	<10 ppm			PP=196 kPa
		END OF BOREHOLE REFUSAL ON ASSUMED BEDROCK											AUGER REFUSAL AT 2.84m

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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH103**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029231	EASTING (m): 365153 — ELEV. (m) 65.5
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #: — SAND TYPE:	SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (130mm)	0	65.5									
		COMPACT, DAMP, BROWN, SAND AND GRAVEL (FILL)	0.5	65	23		1		58	<10 ppm	PAHs; M+I		
		VERY STIFF, DAMP, BROWN, SANDY SILT, TRACE GRAVEL AND TRACE CLAY	1	64.5	23		2		67	<10 ppm			
			1.5	64	13		3		38%	<10 ppm			PP=147 kPa
		COMPACT, DAMP, BROWN, SANDY SILT WITH TRACE GRAVEL	2	63.5	0		4		63	<10 ppm	PHCs		PP=196 kPa
		VERY STIFF, DAMP, BROWN, CLAYEY SILT WITH SOME SAND AND TRACE GRAVEL	2.5	63	8		5		83	<10 ppm			
			3	62.5			6		-	<10 ppm			
		END OF BOREHOLE REFUSAL ON ASSUMED BEDROCK											AUGER REFUSAL AT 3.28m

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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: MW104**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029243	EASTING (m): 365147 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 — SAND TYPE: QUARTZ	SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ● / N-VALUE (Blows/300mm) ▲	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (63 mm)	0	65									
		COMPACT, DAMP, GREY, SAND AND GRAVEL (FILL)	0.5				1		63	<10 ppm	M+I		
		VERY STIFF, DAMP, BROWN, SILT WITH TRACE CLAY, SOME SAND AND TRACE GRAVEL (FILL)	1	64.5	▲ 20		2		67	<10 ppm	PHCs		PP=171 kPa
		SOME GRAVEL	1.5	64	▲ 0		3		58	<10 ppm			
		VERY STIFF, DAMP, BROWN, CLAY AND SILT WITH SOME GRAVEL AND TRACE SAND (FILL)	2	63.5	▲ 9		4		46	<10 ppm			PP=172 kPa
		VERY STIFF, DAMP, BROWN, SILTY CLAY WITH TRACE SAND AND GRAVEL (FILL)	2.5	63	▲ 15		5		42	<10 ppm			PP=172 kPa
		REFUSL ON ASSUMED BEDROCK VERY STRONG, SLIGHTY WEATHERED, LIMESTONE, GOOD QUALITY BASED ON RQD	3	62.5			1						AUGER REFUSAL AT 3.15m TCR: 100% SCR: 53% RQD: 35%
		STRONG, GOOD QUALITY	3.5	62									
			4	61.5									
			4.5	61			2						TCR: 91% SCR: 88% RQD: 87%
			5	60.5									
			5.5	60									
			6	59.5			3						TCR: 100% SCR: 82% RQD: 75%
			6.5	59									
			7	58.5									
		END OF BOREHOLE		58									

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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: MW105**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029248	EASTING (m): 365144 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 — SAND TYPE: QUARTZ	SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (65 mm)	0	65	13		1		50	<10 ppm	PAHs; M+I		
		COMPACT, DAMP, GREY SAND AND GRAVEL (FILL)	0.5										
		COMPACT, DAMP, BROWN, SAND (FILL)	1	64.5	16	2.9	2		67	<10 ppm			
		TRACE GRAVEL	1.5	64	11	4.6	3		63	<10 ppm			
		LOOSE	2	63.5	6	5.6	4		67	<10 ppm			
		MOIST	2.5	63									
		AUGER REFUSAL ON ASSUMED BEDROCK	3	62.5	8	8.3	5		71	<10 PPM	PHCs		
		VERY STRONG, SLIGHTLY WEATHERED LIMESTONE, POOR QUALITY BASED ON RQD	3.5	62			6		40	<10 ppm			
		STRONG, GOOD QUALITY BASED ON RQD	4	61.5			1						TCR: 100% SCR: 85% RQD: 48% GROUNDWATER MEASURED AT 3.7 m.
			4.5	61									
			5	60.5			2						TCR: 97% SCR: 90% RQD: 90%
		VERY STRONG	5.5	60									
			6	59.5									
			6.5	59			3						TCR: 97% SCR: 90% RQD: 90%
		STRONG, EXCELLENT QUALITY BASED ON RQD	7	58.5									
			7.5	58									
			8	57.5			4						TCR: 100% SCR: 100% RQD: 100%
		VERY STRONG	8.5	57									
			9	56.5									
				56									

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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: MW105**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029248	EASTING (m): 365144 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 — SAND TYPE: QUARTZ	SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) ▲ PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		STRONG	9.5	55.5			5						TCR: 100% SCR: 100% RQD: 100%
			10	55									
			10.5	54.5									
			11	54			6						TCR: 100% SCR: 100% RQD: 100%
			11.5	53.5									
		FAIR QUALITY BASED ON RQD	12	53									UCS = 63.7 MPa
			12.5	52.5			7						TCR: 66% SCR: 66% RQD: 66%
			13	52									
		EXCELLENT QUALITY BASED ON RQD	13.5	51.5									
			14	51			8						TCR: 98% SCR: 98% RQD: 98% UCS = 67.0 MPa
			14.5	50.5									
			15	50									
			15.5	49.5			9						TCR: 100% SCR: 100% RQD: 100%
			16										
		END OF BOREHOLE											

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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: MW106**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029247	EASTING (m): 365143 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 — SAND TYPE: QUARTZ	SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		NO SAMPLING	0	65									
			0.5	64.5									
			1	64									
			1.5	63.5									
			2	63									
			2.5	62.5									
		STRONG, SLIGHTLY WEATHERED LIMESTONE, FAIR QUALITY BASED ON RQD	3	62									AUGER REFUSAL AT 2.90m
			3.5	61.5			1						TCR: 97% SCR: 59% RQD: 67%
		STRONG, GOOD QUALITY	4	61									
			4.5	60.5									
			5	60			2						TCR: 98% SCR: 81% RQD: 98%
			5.5										
		END OF BOREHOLE											

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INPUT BY: JM	MONITORING DATE: 07-JUN-21
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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH107**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029222	EASTING (m): 365157 ELEV. (m) 65.6
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20	WELL DIAMETER (cm):	SCREEN SLOT #: SAND TYPE: SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (76 mm)	0	65.5									
		COMPACT, DAMP, BROWN, SAND AND GRAVEL (FILL)	0.5	65	25	2.2	1		45	-			
		COMPACT, MOIST, BROWN, SAND (FILL), TRACE GRAVEL	1	64.5	13	5.5	2		67	-			
		LOOSE	1.5	64	8	4.9	3		75	-	M+I		
		VERY STIFF, MOIST, BROWN, SANDY SILT, TRACE CLAY, TRACE GRAVEL (FILL)	2	63.5	0	8.3	4		63				PP=171 kPa
		SOME GRAVEL	2.5	63		5.7	5						PP=171 kPa
		AUGER REFUSAL ON ASSUMED BEDROCK	3	62.5									
		MEDIUM STRONG, SLIGHTLY WESTHERED LIMESTONE, GOOD QUALITY BASED ON RQD	3.5	62			1						TCR: 100% SCR: 80% RQD: 75%
		STRONG, FAIR QUALITY BASED ON RQD	4	61.5									
			4.5	61			2						TCR: 95% SCR: 55% RQD: 73%
			5	60.5									
		EXCELLENT QUALITY BASED ON RQD	5.5	60									
			6	59.5			3						TCR: 98% SCR: 93% RQD: 93%
			6.5	59									
			7	58.5									
			7.5	58			4						TCR: 100% SCR: 100% RQD: 100%
			8	57.5									
		FRESH	8.5	57									
			9	56.5									

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 20-APR-21
INPUT BY: JM	MONITORING DATE:
REVIEWED BY: AM	PAGE 1 OF 2

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH107**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029222	EASTING (m): 365157 ELEV. (m) 65.6
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20	WELL DIAMETER (cm):	SCREEN SLOT #: SAND TYPE: SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) ▲ PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		STRONG, SLIGHTLY WEATHERED	9.5	56			5						TCR: 100% SCR: 100% RQD: 100% UCS = 81.6 MPa
			10	55.5									
			10.5	55			6						TCR: 100% SCR: 98% RQD: 98%
			11	54.5									
		VERY STRONG, GOOD QUALITY BASED ON RQD	11.5	54									
			12	53.5									UCS = 103.4 MPa
			12.5	53			7						TCR: 100% SCR: 95% RQD: 90%
		EXCELLENT QUALITY BASED ON RQD	13	52.5									
			13.5	52									
			14	51.5			8						TCR: 100% SCR: 100% RQD: 95%
		GOOD QUALITY BASED ON RQD	14.5	51									
			15	50.5									
			15.5	50			9						TCR: 91% SCR: 89% RQD: 83%
		END OF BOREHOLE											

TERRAPEX	LOGGED BY: EB	DRILLING DATE: 20-APR-21
	INPUT BY: JM	MONITORING DATE:
	REVIEWED BY: AM	PAGE 2 OF 2

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH108**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029234	EASTING (m): 365131 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #: — SAND TYPE:	SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (76 mm)	0	65	17		1		25	<10 ppm	PAHs; M+I		
		COMPACT, DAMP, BROWN, SAND AND GRAVEL (FILL)	0.5										
		STIFF, DAMP, BROWN, SANDY SILT (FILL) TRACE CLAY, TRACE GRAVEL	1	64.5	8	8.6	2		46	<10 ppm			PP=98 kPa
		VERY STIFF	1.5	64	8		3		58	<10 ppm	PHCs		BLACK STAINING PP=196 kPa (duplicate BH108-13)
		VERY STIFF, DAMP, BROWN, SILT, SOME SAND, TRACE CLAY, SOME GRAVEL (FILL)	2	63.5	8	7.5	4		58	<10 ppm			PP=171 kPa
		AUGER REFUSAL ON ASSUMED BEDROCK	2.5	63	3	11.1	5		21	<10 ppm			PP=171 kPa
		STRONG, SLIGHTLY WEATHERED, LIMESTONE, FAIR QUALITY BASED ON RQD	3	62.5		10.7	6						
		MODERATLY WEATHERED	3.5	62			1						TCR: 97% RQD: 64% SCR: 47%
		SLIGHTLY WEATHERED, GOOD QUALITY BASED ON RQD	5	61			2						TCR: 88% RQD: 67% SCR: 29%
		FRESH, EXCELLENT QUALITY BASED ON RQD	6.5	59.5			3						TCR: 96% RQD: 89% SCR: 81%
		SLIGHTLY WEATHERED	8	57.5			4						TCR: 100% RQD: 100% SCR: 100%
			9	56									

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 21-APR-21
INPUT BY: JM	MONITORING DATE:
REVIEWED BY: AM	PAGE 1 OF 3

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH108**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029234	EASTING (m): 365131 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #: — SAND TYPE:	SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) ▲ PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		VERY STRONG, GOOD QUALITY BASED ON RQD	9.5	55.5			5						TCR: 100% RQD: 100% SCR: 100%
			10	55									
			10.5	54.5			6						TCR: 97% RQD: 97% SCR: 97%
			11	54									
			11.5	53.5									
			12	53			7						TCR: 100% RQD: 100% SCR: 100%
			12.5	52.5									
			13	52									
			13.5	51.5			8						TCR: 98% RQD: 94% SCR: 98%
			14	51									
			14.5	50.5									
			15	50			9						TCR: 88% RQD: 88% SCR: 88%
			15.5	49.5									
		STRONG, EXCELLENT QUALITY BASED ON RQD	16	49									UCS=52.3 MPa
			16.5	48.5			10						TCR: 98% RQD: 98% SCR: 98%
			17	48									
			17.5	47.5									
			18	47			11						UCS=73.0 MPa TCR: 100% RQD: 95% SCR: 92%
			18.5										

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 21-APR-21
INPUT BY: JM	MONITORING DATE:
REVIEWED BY: AM	PAGE 2 OF 3

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH108**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029234	EASTING (m): 365131 — ELEV. (m) 65.3
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #: — SAND TYPE:	SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) ▲ PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		VERY STRONG, GOOD QUALITY BASED ON RQD	19 – 19.5	46.5 – 46 – 45.5			12						TCR: 92% RQD: 83% SCR: 59%
		END OF BOREHOLE	20										

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 21-APR-21
INPUT BY: JM	MONITORING DATE:
REVIEWED BY: AM	PAGE 3 OF 3

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: MW109**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): EASTING (m):	ELEV. (m)
CONTRACTOR: STRATA DRILLING GROUP	METHOD: PORTABLE 420	
BOREHOLE DIAMETER (cm): 7	WELL DIAMETER (cm): 3	SCREEN SLOT #: 10 SAND TYPE: NO.2 SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		CONCRETE	0										
		GREY, SILTY CLAY, SOME SAND, SOME GRAVEL	0.5				-						
			1				1			<10	PHCs		CORED THROUGH APPARENT BOULDERS/ COBBLES NO ADDITIONAL SOIL SAMPLING
			1.5				-						
			2										
		END OF BOREHOLE	2.5										

TERRAPEX

LOGGED BY: JM	DRILLING DATE: 21-APR-21
INPUT BY: JM	MONITORING DATE: 25-MAY-21
REVIEWED BY: AM	PAGE 1 OF 1

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH110**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029209	EASTING (m): 365132 — ELEV. (m) 65.4
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #: — SAND TYPE:	SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT (100 mm)	0	65	29		1		63	-	PAHs; M+I		
		COMPACT, DAMP, BROWN, SAND AND GRAVEL (FILL)	0.5										
		VERY STIFF, DAMP, BROWN, SILTY CLAY, TRACE SAND, TRACE GRAVEL	1	64.5	18	20	2		75	-			PP=196 kPa
		VERY STIFF, MOIST, BROWN, SILT, SOME CLAY, TRACE SAND	1.5	64	11	15.6	3		63	-			PP=196 kPa
		VERY STIFF, MOIST, BROWN, CLAYEY SILT, SOME SAND, SOME GRAVEL	2	63.5	13	5.0	4		67	-			PP=196 kPa
		VERY STIFF, DAMP	2.5	63									
		AUGER REFUSAL ON ASSUMED BEDROCK	3	62.5	38	5.7	5		67	-			PP=196 kPa
		VERY STRONG, SLIGHTLY WEATHERED LIMESTONE, POOR QUALITY BASED ON RQD	3.5	62		8.7	6						
		STRONG, GOOD QUALITY BASED ON RQD	4	61.5			1						TCR: 95% RQD: 37% SCR: 42%
			4.5	61									
			5	60.5			2						TCR: 89% RQD: 77% SCR: 86%
		EXCELLENT QUALITY BASED ON RQD	5.5	60									
			6	59.5			3						TCR: 96% RQD: 91% SCR: 57%
			6.5	59									
			7	58.5									
			7.5	58			4						TCR: 100% RQD: 95% SCR: 67%
			8	57.5									
			8.5	57									
			9	56.5			5						

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 21-APR-21
INPUT BY: JM	MONITORING DATE:
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CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: BH110**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029209	EASTING (m): 365132 — ELEV. (m) 65.4
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm):	SCREEN SLOT #: — SAND TYPE:	SEALANT TYPE:

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) 40 80 120 160 / N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) ▲ PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		VERY STRONG	9.5	56									TCR: 100% RQD: 100% SCR: 30% UCS=77.1 MPa
			10	55.5									
			10.5	55			6						TCR: 100% RQD: 97% SCR: 100%
			11	54.5									
			11.5	54									
			12	53.5			7						TCR: 100% RQD: 100% SCR: 100%
			12.5	53									
			13	52.5									
			13.5	52			8						TCR: 100% RQD: 100% SCR: 100%
			14	51.5									
			14.5	51									
			15	50.5			9						TCR: 97% RQD: 91% SCR: 100%
			15.5	50									
				49.5									
		END OF BOREHOLE											

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 21-APR-21
INPUT BY: JM	MONITORING DATE:
REVIEWED BY: AM	PAGE 2 OF 2

CLIENT: WELLDALE LIMITED PARTNERSHIP	PROJECT NO.: CO810.00	**RECORD OF: MW111**
ADDRESS: 1186 - 1196 WELLINGTON STREET WEST	STATION:	
CITY/PROVINCE: OTTAWA, ONTARIO	NORTHING (m): 5029221	EASTING (m): 365139 — ELEV. (m) 65.6
CONTRACTOR: GEORGE DOWNING ESTATE DRILLING	METHOD: CME 55 HOLLOW STEM AUGER	
BOREHOLE DIAMETER (cm): 20 — WELL DIAMETER (cm): 5	SCREEN SLOT #: 10 — SAND TYPE: QUARTZ	SEALANT TYPE: BENTONITE

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALT	0	65.5									
		COMPACT, DAMP, BROWN, SAND AND GRAVEL (FILL)	0.5	65	16		1		46%	<10 ppm	PAHs; M+I		
		LOOSE, MOIST, BROWN, SAND (FILL)	1	64.5	5		2		42	<10 ppm			
		TRACE SILT AND GRAVEL	1.5	64	6		3		33	<10 ppm	M+I		
		VERY STIFF, DAMP, BROWN, SILT WITH SOME SAND AND TRACE GRAVEL (FILL)	2	63.5	7		4		42	<10 ppm			PP=122 kPa
		STIFF, MOIST, TRACE CLAY	2.5	63	4		5		54	<10 ppm	PHCs		PP=73.5 kPa
			3	62.5			6		46	60 ppm	PHCs, VOCs		
			3.5	62									AUGER REFUSAL AT 3.58m
		STRONG, SLIGHTLY WEATHERED LIMESTONE, GOOD QUALITY BASED ON RQD	4	61.5			1						TCR: 89% SCR: 22% RQD: 85%
		VERY STRONG, EXCELLENT QUALITY	4.5	61									
			5	60.5			2						TCR: 99% SCR: 91% RQD: 91%
		GOOD QUALITY	5.5	60									
			6	59.5									
			6.5	59			3						TCR: 97% SCR: 66% RQD: 80%
			7	58.5									
		EXCELLENT QUALITY	7.5				4						TCR: 100% SCR: 100% RQD: 100%
		END OF BOREHOLE											

TERRAPEX

LOGGED BY: EB	DRILLING DATE: 22-APR-21
INPUT BY: JM	MONITORING DATE: 07-JUN-21
REVIEWED BY: AM	PAGE 1 OF 1

APPENDIX V

WASTE MANIFESTS

MOVEMENT DOCUMENT / MANIFEST
DOCUMENT DE MOUVEMENT / MANIFESTE

This Movement document/manifest conforms to all federal and provincial environmental legislation.
Ce document de mouvement/manifeste est conforme aux législations fédérale et provinciale sur l'environnement.

TERRAPEX JOB. #104439

MX111571-0

Movement Document / Manifest Reference No.
N° de référence du document de mouvement/manifeste

A Generator / consignor — Producteur / expéditeur

Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial (1): ON5729564

Company name / Nom de l'entreprise: Welldale Limited Partnership

Mailing address / Adresse postale	City / Ville	Province	Postal code / Code postal
1186 - 1194 Wellington	Ottawa	ON	K1Y 2Z1

E-mail / Courrier électronique:
Tel. No. / N° de tél. ( )

Shipping site address / Adresse du lieu de l'expédition: 1186 - 1194 Wellington Street West

City / Ville	Province	Postal code / Code postal
Ottawa	ON	K1Y 2Z1

Intended Receiver / consignee — Réceptionnaire / destinataire prévu (2): Clean Water Works

Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial: 1857-6Z8PGH

Mailing address / Adresse postale	City / Ville	Province	Postal code / Code postal
1800 Bantree St	Ottawa	ON	K1B 5L6

E-mail / Courrier électronique:
Tel. No. / N° de tél. (613)745-2444

Receiving site address / Adresse du lieu de destination: 1800 Bantree St.

City / Ville	Province	Postal code / Code postal
Ottawa	ON	K1B 5L6

B Carrier — Transporteur

Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial (23): 3664-6GGPRM

Company name / Nom de l'entreprise: Clean Water Works

Mailing address / Adresse postale	City / Ville	Province	Postal code / Code postal
1800 Bantree St	Ottawa	ON	K1B 5L6

E-mail / Courrier électronique:
Tel. No. / N° de tél. (613)745-2444

Vehicle / Véhicule	Registration No. / N° d'immatriculation	Prov. (24)
Trailer - Rail car No. 1 / 1re remorque - wagon	BL 86801	ON
Trailer - Rail car No. 2 / 2e remorque - wagon		

Port of entry / Point d'entrée: International use only — Port of exit / Point de sortie: International use only (25)

Carrier Certification : I certify that I have received waste or recyclable material from the generator / consignor for delivery to the receiver / consignee as set out in Part A and that the information contained in Part B is complete and correct. (26)
Attestation du transporteur : J'atteste avoir reçu les déchets ou matières recyclables du producteur / expéditeur en vue de leur livraison au réceptionnaire / destinataire, tels qu'ils figurent à la partie A et que les renseignements inscrits à la partie B sont exacts et complets.

Name of authorized person (print): / Nom de l'agent autorisé (caractères d'imprimerie) : Jerome C. Saumure — Tel. No. / N° de tél. (613)745-2444

Year / Année	Month / Mois	Day / Jour	Signature :
21	05	31	[signature]

C Receiver / consignee — Réceptionnaire / destinataire

Reference Nos. of other movement document(s)/manifest(s) used / N° de référence des autres documents de mouvement/manifestes utilisés (27)

Registration No. / Provincial ID No. / N° d'immatriculation - d'id. provincial (28)

Receiver / consignee information same as in Part A
Les renseignements du réceptionnaire / destinataire sont les mêmes qu'à la Partie A
☐ Yes / Oui ☐ No, complete the box below / Non, remplir la case ci-dessous

Company name / Nom de l'entreprise
Mailing address / Adresse postale
City / Ville — Province — Postal code / Code postal
E-mail / Courrier électronique — Tel. No. / N° de tél. ( )
Receiving site address / Adresse du lieu de destination

Date received / Date de réception: Year / Année — Month / Mois — Day / Jour; Time / Heure ☐ A.M. ☐ P.M. (29)

If waste or recyclable material to be transferred, specify intended company name/ Si les dechets ou matières recyclables doivent être transférés, préciser le nom du destinataire (30) — Registration No./Provincial ID No. / N° d'immatriculation/d'id provincial

	Prov. code / Code prov. (3)	Shipping name / Appellation réglementaire (4)	Class / Classe Sub. class(es) / Classe(s) sub. (5)	UN No. / N° NU (6)	Packing / risk gr. / Gr. d'emballage/ de risque (7)	Quantity shipped / Quantité expédiée	Units L or / ou Kg / Unités (8)	Packaging/Contenant No. / N° (9)	Codes Int.– ext.	Phys. state / État phys. (10)	Quantity received / Quantité reçue	Units L or / ou kg / Unités (31)	Comments / Commentaires (32)	Handling Code / Code de manutention (33)	Shipment / Envoi Accepted / Accepté (34)	Refused / Refusé	Decont. Pack. / Cont. (35)	Veh. / Véh.
(i)	221L	Waste Water and Light Fuel	N/R	N/R	N/R	700	L	1	01	1								
(ii)	000N	Non Hazardous Solid Waste (soil cuttings)	NR	NR	NR	250	Kg	1	01	S								
(iii)																		
(iv)																		

	Notice No. / N° de notification (11)	Notice Line No / N° de ligne de la notification	Shipment / Envoi (12)	Of / De	D or R code / Code D ou R (13)	C code / Code C (14)	Basel Annex VIII or OECD Code / Annexe VIII de Bâle ou Code OCDE (15)	H code / Code H (16)	Y code / Code Y (17)	National code in country of / Code du pays: Export / Exportation (18)	Import / Importation	Customs code(s) / Code(s) de douanes (19)
(i)												
(ii)												
(iii)												
(iv)												

International use only

If handling code "Other" (specify) / Si code de manutention « autre » (spécifier) (36)

Receiver / consignee certification : I certify that the information contained in Part C is correct and complete. / Attestation du réceptionnaire / destinataire : J'atteste que tous les renseignements à la partie C sont exacts et complets. (37)

Name of authorized person (print) / Nom de l'agent autorisé (caractère d'imprimerie)

Signature — Tel. No. / N° de tél. ( )

Special handling / Manutention spéciale (22)
☐ Attached /Ci-joint: ☐ As follows/ Ci-contre : 24 Hr. Emergency (613)745-2444

Generator / consignor certification: I certify that the information contained in Part A is correct and complete. I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.
Attestation du producteur / expéditeur: J'atteste que tous les renseignements à la partie A sont exacts et complets. Je déclare que le contenu de ce chargement est décrit ci-dessus de façon complète et exacte par la désignation officielle de transport et qu'il est convenablement classé, emballé, marqué, étiqueté, muni de plaques-étiquettes et à tous égards bien conditionné pour être transporté conformément aux réglementations internationales et nationales applicables.

Name of authorized person (print) / Nom de l'agent autorisé (caractère d'imprimerie): For Client
Signature: [signature]
Tel. No. / N° de tél. ( ) (20)

Date shipped / Date d'expédition (21): Year / Année 21 — Month / Mois 05 — Day / Jour 21 — Time / Heure ☐ A.M. ☐ P.M. 1400
Scheduled arrival date / Date d'arrivée prévue: Year / Année 21 — Month / Mois 05 — Day / Jour 31

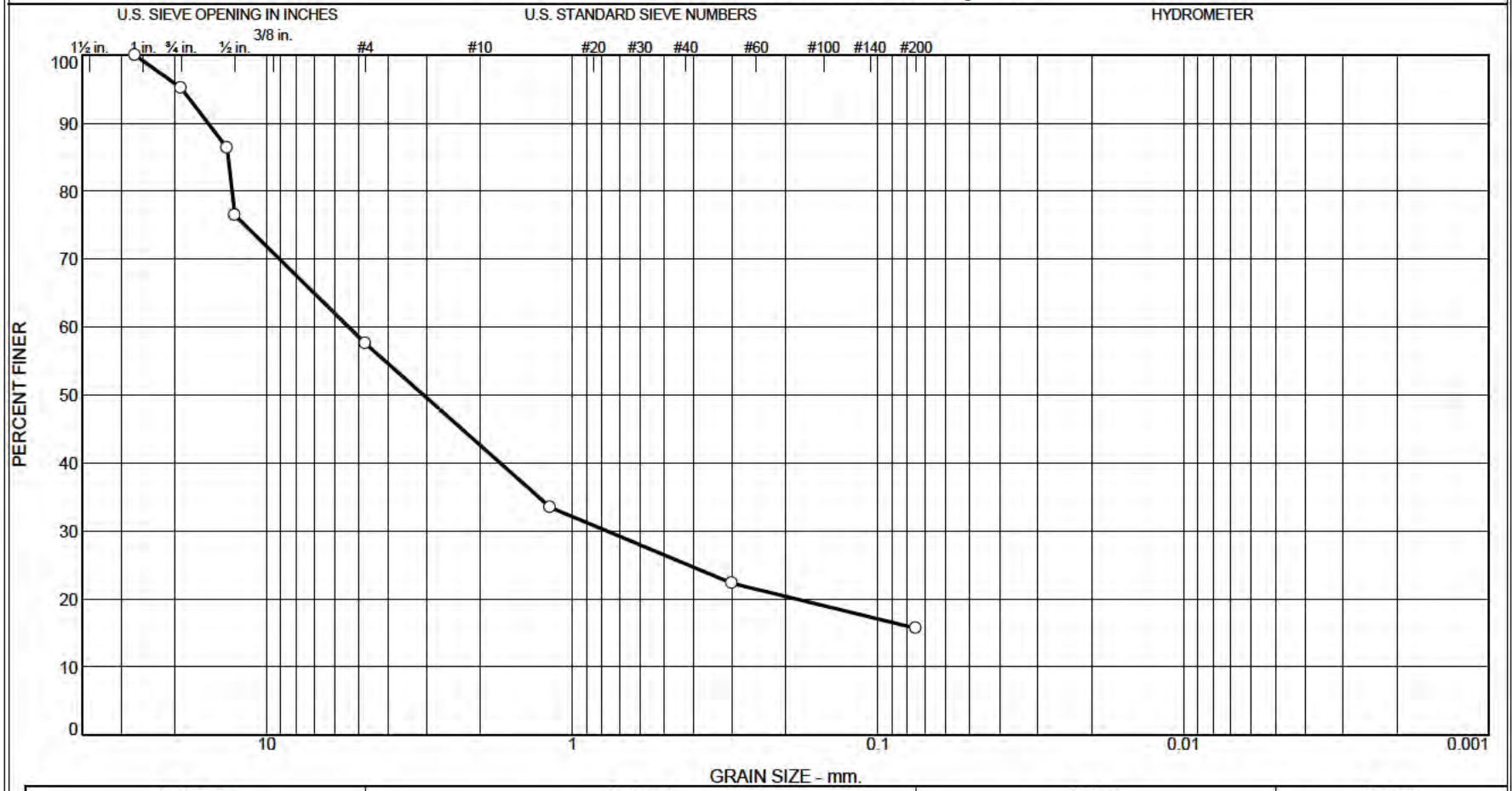
Retained by Consignor
Gardée par l'expéditeur

Copy / Copie 2 (green / verte)

APPENDIX VI

GRAIN SIZE ANALYSES

Particle Size Distribution Report



% Gravel	% Sand	% Silt	% Clay
42	42	16	

Identification			Date Sampled	Date Received	Date Tested
Loc.: 1186-1194 Wellington Street West, Ottawa, ON.	Depth: 0.2 - 0.8 m	Sample No.: MW112, SS1	May 20, 2021	May 20, 2021	June 2, 2021

Client Welldale Limited Partnership

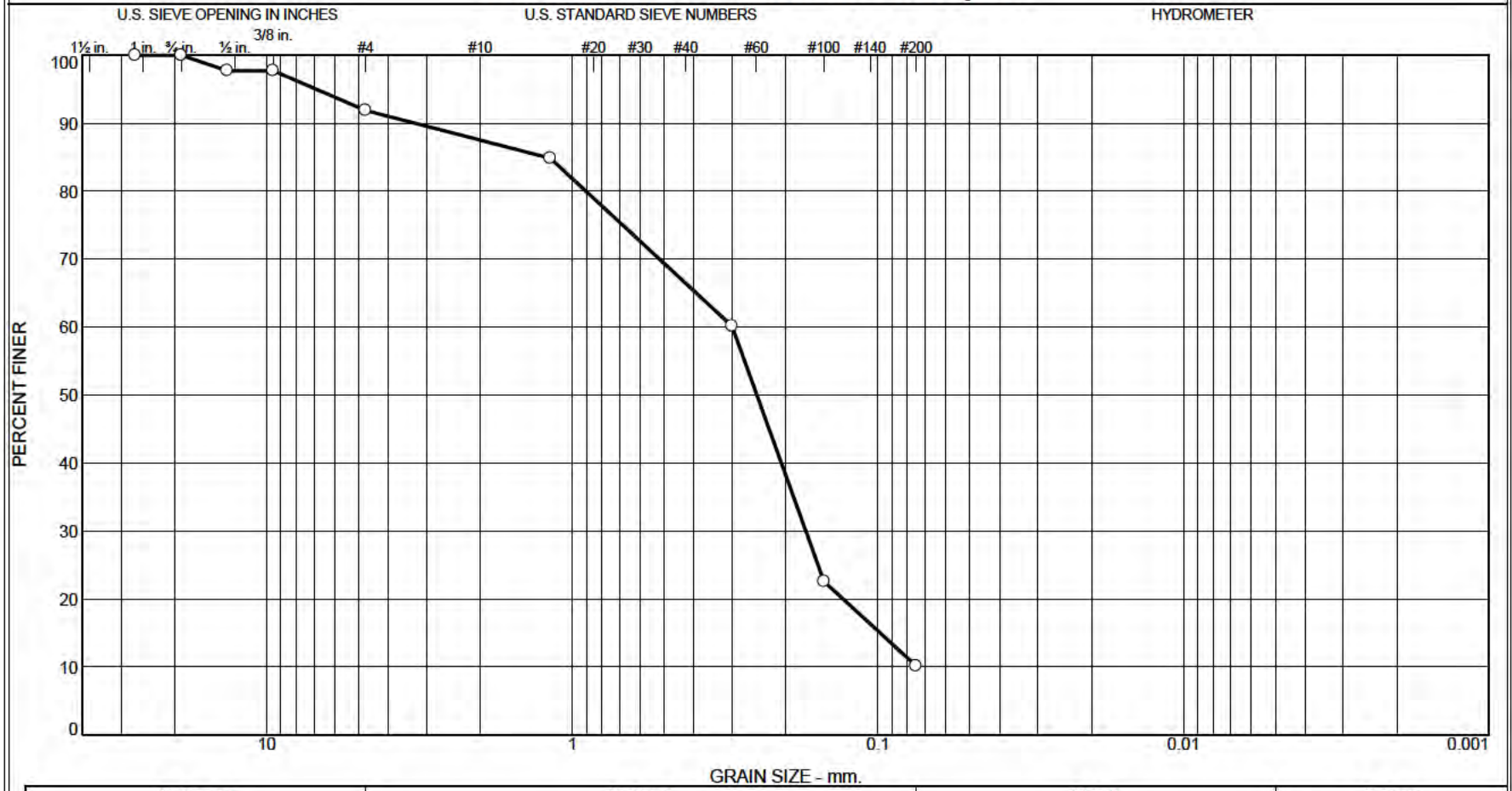
Project 1186-1194 Wellington Street West

Project No. CO810.00 Figure 2

Terrapex

Tested By: AM

Particle Size Distribution Report



% Gravel	% Sand	% Silt	% Clay
8	82	10	

Identification	Date Sampled	Date Received	Date Tested
Loc.: 1186-1194 Wellington Street West, Ottawa, ON. Depth: 1.2 - 1.8 m Sample No.: MW105, SS3	April 20, 2021	April 20, 2021	June 2, 2021

Client Welldale Limited Partnership

Project 1186-1194 Wellington Street West

Project No. CO810.00 Figure 1

Terrapex

Tested By: AM

APPENDIX VII

LABORATORY CERTIFICATES OF ANALYSIS

AGAT Laboratories

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

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
(613) 745-6471

ATTENTION TO: Keith Brown

PROJECT: CO810.00

AGAT WORK ORDER: 21T742988

SOIL ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician

DATE REPORTED: May 13, 2021

PAGES (INCLUDING COVER): 9

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 21T742988

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2021-05-06

DATE REPORTED: 2021-05-13

		SAMPLE DESCRIPTION:		MWIII-3
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-04-22 08:10
Parameter	Unit	G / S	RDL	2432337
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	1
Barium	µg/g	390	2.0	83.2
Beryllium	µg/g	5	0.4	<0.4
Boron	µg/g	120	5	<5
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.36
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	15
Cobalt	µg/g	22	0.5	5.7
Copper	µg/g	180	1.0	12.7
Lead	µg/g	120	1	10
Molybdenum	µg/g	6.9	0.5	0.5
Nickel	µg/g	130	1	10
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	25	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	<0.50
Vanadium	µg/g	86	0.4	21.8
Zinc	µg/g	340	5	32
Chromium, Hexavalent	µg/g	10	0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040
Mercury	µg/g	1.8	0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	1.50
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	3.48
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.65

Certified By:

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21T742988

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2021-05-06

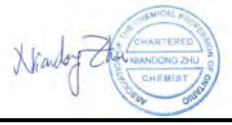
DATE REPORTED: 2021-05-13

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2432337 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:



AGAT Laboratories

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http://www.aga labs.com

Exceedance Summary

AGAT WORK ORDER: 21T742988

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2432337	MWIII-3	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.50

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

Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
AGAT WORK ORDER: 21T742988
PROJECT: CO810.00
ATTENTION TO: Keith Brown
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: May 13, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2435052		<0.8	<0.8	NA	< 0.8	124%	70%	130%	105%	80%	120%	100%	70%	130%
Arsenic	2435052		<1	<1	NA	< 1	113%	70%	130%	102%	80%	120%	105%	70%	130%
Barium	2435052		21.4	20.7	3.3%	< 2.0	107%	70%	130%	100%	80%	120%	104%	70%	130%
Beryllium	2435052		<0.4	<0.4	NA	< 0.4	78%	70%	130%	103%	80%	120%	98%	70%	130%
Boron	2435052		<5	<5	NA	< 5	92%	70%	130%	97%	80%	120%	90%	70%	130%
Boron (Hot Water Soluble)	2437654		0.65	0.65	0.0%	< 0.10	99%	60%	140%	97%	70%	130%	105%	60%	140%
Cadmium	2435052		<0.5	<0.5	NA	< 0.5	97%	70%	130%	103%	80%	120%	107%	70%	130%
Chromium	2435052		20	23	NA	< 5	101%	70%	130%	110%	80%	120%	113%	70%	130%
Cobalt	2435052		6.8	7.3	7.1%	< 0.5	98%	70%	130%	104%	80%	120%	104%	70%	130%
Copper	2435052		25.0	24.1	3.7%	< 1.0	92%	70%	130%	114%	80%	120%	110%	70%	130%
Lead	2435052		6	6	0.0%	< 1	104%	70%	130%	96%	80%	120%	98%	70%	130%
Molybdenum	2435052		1.7	1.7	NA	< 0.5	111%	70%	130%	112%	80%	120%	114%	70%	130%
Nickel	2435052		10	11	9.5%	< 1	99%	70%	130%	108%	80%	120%	106%	70%	130%
Selenium	2435052		<0.8	<0.8	NA	< 0.8	97%	70%	130%	104%	80%	120%	108%	70%	130%
Silver	2435052		<0.5	<0.5	NA	< 0.5	96%	70%	130%	107%	80%	120%	106%	70%	130%
Thallium	2435052		<0.5	<0.5	NA	< 0.5	104%	70%	130%	103%	80%	120%	104%	70%	130%
Uranium	2435052		<0.50	<0.50	NA	< 0.50	106%	70%	130%	101%	80%	120%	105%	70%	130%
Vanadium	2435052		12.2	12.3	0.8%	< 0.4	103%	70%	130%	100%	80%	120%	105%	70%	130%
Zinc	2435052		70	69	1.4%	< 5	101%	70%	130%	112%	80%	120%	112%	70%	130%
Chromium, Hexavalent	2281014		<0.2	<0.2	NA	< 0.2	105%	70%	130%	96%	80%	120%	90%	70%	130%
Cyanide, Free	2433317		<0.040	<0.040	NA	< 0.040	98%	70%	130%	93%	80%	120%	87%	70%	130%
Mercury	2435052		<0.10	<0.10	NA	< 0.10	133%	70%	130%	100%	80%	120%	99%	70%	130%
Electrical Conductivity (2:1)	2437654		0.851	0.856	0.6%	< 0.005	97%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2437654		2.00	1.96	2.0%	NA									
pH, 2:1 CaCl2 Extraction	2443482		7.77	7.75	0.3%	NA	100%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.
For a mul i-element scan for lab control standards and matrix spikes, up to 10% of analytes may exceed the quoted limits by up to 10% absolute and it is considered acceptable.

Certified By:

AGAT Laboratories

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

QA Violation

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21T742988

PROJECT: CO810.00

ATTENTION TO: Keith Brown

RPT Date: May 13, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)											
Mercury		MWIII-3	133%	70%	130%	100%	80%	120%	99%	70%	130%

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.
For a mul i-element scan for lab control standards and matrix spikes, up to 10% of analytes may exceed the quoted limits by up to 10% absolute and it is considered acceptable.

AGAT Laboratories

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MISSISSAUGA, ONTARIO
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FAX (905)712-5122
http://www.aga labs.com

Time Markers

AGAT WORK ORDER: 21T742988

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2432337	MWIII-3	Soil	22-APR-2021	06-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	10-MAY-2021	10-MAY-2021	SE
Arsenic	10-MAY-2021	10-MAY-2021	SE
Barium	10-MAY-2021	10-MAY-2021	SE
Beryllium	10-MAY-2021	10-MAY-2021	SE
Boron	10-MAY-2021	10-MAY-2021	SE
Boron (Hot Water Soluble)	10-MAY-2021	10-MAY-2021	ZK
Cadmium	10-MAY-2021	10-MAY-2021	SE
Chromium	10-MAY-2021	10-MAY-2021	SE
Cobalt	10-MAY-2021	10-MAY-2021	SE
Copper	10-MAY-2021	10-MAY-2021	SE
Lead	10-MAY-2021	10-MAY-2021	SE
Molybdenum	10-MAY-2021	10-MAY-2021	SE
Nickel	10-MAY-2021	10-MAY-2021	SE
Selenium	10-MAY-2021	10-MAY-2021	SE
Silver	10-MAY-2021	10-MAY-2021	SE
Thallium	10-MAY-2021	10-MAY-2021	SE
Uranium	10-MAY-2021	10-MAY-2021	SE
Vanadium	10-MAY-2021	10-MAY-2021	SE
Zinc	10-MAY-2021	10-MAY-2021	SE
Chromium, Hexavalent	07-MAY-2021	07-MAY-2021	XL
Cyanide, Free	13-MAY-2021	13-MAY-2021	BG
Mercury	10-MAY-2021	10-MAY-2021	SE
Electrical Conductivity (2:1)	10-MAY-2021	10-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	10-MAY-2021	10-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	12-MAY-2021	12-MAY-2021	MM

AGAT Laboratories

5835 COOPERS AVENUE
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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21T742988

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

LT (ice-packs) - 5.4

AGAT Laboratories

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

Chain of Custody Record

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

Report Information:

Company: Terrapex Environmental Ltd.
Contact: ~~Greg Benton~~ Keith Brown
Address: 20 Gurdwara Road
Ottawa, ON K2E 8B3
Phone: 613-745-6471 Fax: 613-745-0796
Reports to be sent to:
1. Email: ~~G.Benton@terrapex.com~~ K.brown@terrapex.com
2. Email:

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☒ Regulation 153/04
Table 3 (Indicate One)
☐ Ind/Com
☒ Res/Park
☐ Agriculture
Soil Texture (Check One)
☐ Coarse
☒ Fine

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

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

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

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

Laboratory Use Only

Work Order #: 21T742988
Cooler Quantity: 1
Arrival Temperatures: 3.5 | 3.4 | 3.4
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: Ice

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

Project Information:

Project: ~~C0811.03~~ C0810.00
Site Location: ~~2630 Innes Road, Ottawa~~ 1186 1188 1194 and 1196 Wellington St West, Ottawa, ON
Oullet #: ~~03731~~
Sampled By: EB
AGAT Quote #: ~~19[redacted]~~ PO: ~~[redacted]~~ 6474

Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

~~Terrapex Environmental Ltd.~~ Bill To Same: Yes ☐ No ☐
Company: ~~Sunoco Energy Products Partnership (45837-11)~~
Contact: ~~Rick Lemoine~~ Accounts Payable
Address:
Email: ~~Rlemoine@sunoco.com~~

Activity

Assessment (circle one)
☐ A1 ☒ A2 ☐ AR ☐ AV

Remediation (circle one)
☐ RE ☐ RX ☐ RI ☐ RA

Contaminant Management (circle one)
☐ M ☐ MW ☐ MV

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	O. Reg 153: Metals and Inorganics (☐ All Metals ☐ 153 Metals (excl. Hydrides) ☐ Hydride Metals ☐ 153 Metals (incl. Hydrides))	O. Reg 153: ORPs (☐ B-HWS ☐ Cl⁻ ☐ CN⁻ ☐ Cr⁶⁺ ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR)	Full Metals Scan	Regulation/Custom Metals	Nutrients: (☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_3+NO_2)	Volatiles: (☒ VOC ☐ BTEX ☐ THM)	PHCs F1 - F4	ABNs	PAHs	PCBs: (☐ Total ☐ Aroclors)	Organochlorine Pesticides	TCLP: (☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs)	Sewer Use							Potentially Hazardous or High Concentration (Y/N)
MW111-3	Apr 22 2021	8:10	1	S		N	X					X	X												

Samples Relinquished By (Print Name and Sign): Eric Boonstra — Date: May 5/21 — Time: 15:00
Samples Received By (Print Name and Sign): Jeff Jones — Date: 5 May 21 — Time: 1315
Samples Relinquished By (Print Name and Sign): — Date: — Time:
Samples Received By (Print Name and Sign): SUKRAN — Date: May 6/21 — Time: 9:45am
Samples Relinquished By (Print Name and Sign): — Date: — Time:
Samples Received By (Print Name and Sign): — Date: — Time:

jars used and not returned:

N°:

AGAT Laboratories

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

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
(613) 745-6471

ATTENTION TO: Keith Brown

PROJECT: CO810.00

AGAT WORK ORDER: 21Z737993

SOIL ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: May 28, 2021

PAGES (INCLUDING COVER): 33

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

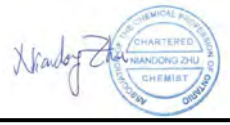
O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2021-04-23

DATE REPORTED: 2021-05-28

SAMPLE DESCRIPTION:				BH102-1	BH103-1	MW104-1	MW105-1	BH107-3	BH108-1	BH110-1	MW111-1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-04-19 08:45	2021-04-19 11:00	2021-04-19 12:15	2021-04-19 14:00	2021-04-20 15:00	2021-04-21 08:00	2021-04-21 14:00	2021-04-22 08:00
Parameter	Unit	G / S	RDL	2386583	2386585	2386589	2386590	2386593	2386594	2386598	2386599
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	1	3	3	3	3	4	3	3
Barium	µg/g	390	2.0	47.3	153	256	190	41.5	162	193	403
Beryllium	µg/g	5	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Boron	µg/g	120	5	<5	8	11	7	7	11	12	14
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.24	0.38	0.56	0.31	0.13	0.33	0.38	0.61
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	13	10	10	10	11	17	23	11
Cobalt	µg/g	22	0.5	3.5	5.1	5.1	4.6	5.4	7.1	7.8	4.5
Copper	µg/g	180	1.0	6.5	9.7	7.4	9.3	14.0	11.9	14.2	5.1
Lead	µg/g	120	1	8	8	10	7	5	13	43	9
Molybdenum	µg/g	6.9	0.5	<0.5	1.2	1.7	0.9	0.5	3.2	1.7	1.0
Nickel	µg/g	130	1	6	11	11	9	11	14	18	10
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	25	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.54	<0.50	<0.50	<0.50	0.55	0.61	<0.50	<0.50
Vanadium	µg/g	86	0.4	24.3	13.5	10.1	17.0	19.0	23.9	34.5	10.3
Zinc	µg/g	340	5	33	18	14	23	25	33	52	11
Chromium, Hexavalent	µg/g	10	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	1.8	0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.243	1.72	2.65	1.53	0.132	1.28	1.12	0.710
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	2.07	0.478	0.834	1.73	1.39	15.2	10.9	0.594
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.74	7.67	7.76	7.95	7.88	8.22	7.90	7.87

Certified By:



AGAT Laboratories

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http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2021-04-23

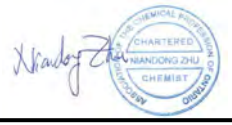
DATE REPORTED: 2021-05-28

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2386583-2386599 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:



AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

Moisture

DATE RECEIVED: 2021-04-23

DATE REPORTED: 2021-05-28

SAMPLE DESCRIPTION:				BH101-3	BH101-13	BH102-4	BH103-4	MW104-2	MW105-5	BH108-3	BH108-13
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-04-19 08:00	2021-04-19 08:00	2021-04-19 09:00	2021-04-19 11:30	2021-04-19 12:30	2021-04-19 14:30	2021-04-21 08:30	2021-04-21 08:30
Parameter	Unit	G / S	RDL	2386581	2386582	2386584	2386587	2386588	2386591	2386595	2386596
% Moisture	%		1	19	23	23	11	14	8	9	12

SAMPLE DESCRIPTION:				MW109-1	MW111-5
SAMPLE TYPE:				Soil	Soil
DATE SAMPLED:				2021-04-21 13:10	2021-04-22 08:15
Parameter	Unit	G / S	RDL	2386597	2386600
% Moisture	%		1	18	13

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

Analysis perfomed at AGAT Halifax (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PAHs (Soil)

DATE RECEIVED: 2021-04-23

DATE REPORTED: 2021-05-28

SAMPLE DESCRIPTION:				BH101-1	BH103-1	MW105-1	BH108-1	BH110-1	MW111-1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-04-19 07:30	2021-04-19 11:00	2021-04-19 14:00	2021-04-21 08:00	2021-04-21 14:00	2021-04-22 08:00
Parameter	Unit	G / S	RDL	2386578	2386585	2386590	2386594	2386598	2386599
Naphthalene	µg/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.17	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	58	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.74	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.63	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.48	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	3.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	2.4	8.6	4.1	2.8	26.8	3.7
Surrogate	Unit	Acceptable Limits							
Naphthalene-d8	%	50-140		109	89	86	80	92	75
Acenaphthene-d10	%	50-140		102	83	80	82	88	75
Chrysene-d12	%	50-140		118	76	74	87	99	81

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2386578-2386599 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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CANADA L4Z 1Y2
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http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

DATE RECEIVED: 2021-04-23

DATE REPORTED: 2021-05-28

SAMPLE DESCRIPTION:				BH101-3	BH101-13	BH102-4	BH103-4	MW104-2	MW105-5	BH108-3	BH108-13
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-04-19 08:00	2021-04-19 08:00	2021-04-19 09:00	2021-04-19 11:30	2021-04-19 12:30	2021-04-19 14:30	2021-04-21 08:30	2021-04-21 08:30
Parameter	Unit	G / S	RDL	2386581	2386582	2386584	2386587	2386588	2386591	2386595	2386596
Benzene	µg/g		0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	µg/g		0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	µg/g		0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C6 - C10 (F1)	µg/g		5	<5	<5	<5	<5	<5	<5	<5	<5
C6 - C10 (F1 minus BTEX)	µg/g		5	<5	<5	<5	<5	<5	<5	<5	<5
>C10 - C16 (F2)	µg/g		10	<10	<10	<10	<10	<10	<10	<10	<10
>C16 - C34 (F3)	µg/g		50	<50	<50	<50	<50	88	<50	<50	<50
>C34 - C50 (F4)	µg/g		50	<50	<50	<50	103	122	<50	222	198
Gravimetric Heavy Hydrocarbons (F4G)	µg/g		50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reporting TO - NS				Y	Y	Y	Y	Y	Y	Y	Y
Surrogate	Unit	Acceptable Limits									
o-terphenyl	%	50-140		103	100	106	100	92	109	98	98

Certified By:

AGAT Laboratories

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TEL (905)712-5100
FAX (905)712-5122
http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

DATE RECEIVED: 2021-04-23

DATE REPORTED: 2021-05-28

				SAMPLE DESCRIPTION:	MW109-1	MW111-5
				SAMPLE TYPE:	Soil	Soil
				DATE SAMPLED:	2021-04-21 13:10	2021-04-22 08:15
Parameter	Unit	G / S	RDL		2386597	2386600
Benzene	µg/g		0.02		<0.02	<0.02
Toluene	µg/g		0.05		<0.05	<0.05
Ethylbenzene	µg/g		0.05		<0.05	<0.05
Xylenes (Total)	µg/g		0.05		<0.05	<0.05
C6 - C10 (F1)	µg/g		5		<5	<5
C6 - C10 (F1 minus BTEX)	µg/g		5		<5	<5
>C10 - C16 (F2)	µg/g		10		<10	<10
>C16 - C34 (F3)	µg/g		50		64	<50
>C34 - C50 (F4)	µg/g		50		155	<50
Gravimetric Heavy Hydrocarbons (F4G)	µg/g		50		N/A	N/A
Reporting TO - NS					Y	Y
Surrogate	Unit	Acceptable Limits				
o-terphenyl	%	50-140			112	115

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

2386581-2386600 Results are based on sample dry weight.
Xylene(Total)and C6-C10(F1 minus BTEX) are calculated parameters. The calculated parameter is non-accredited. The component parameters of the calculation are accredited.
The C6-C10 fraction is calculated using toluene response factor.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
Total C6 - C50 results are corrected for BTEX contributions.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis perfomed at AGAT Halifax (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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Exceedance Summary

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2386585	BH103-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.72
2386589	MW104-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	2.65
2386590	MW105-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.53
2386594	BH108-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.28
2386594	BH108-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	15.2
2386598	BH110-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.12
2386598	BH110-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	10.9
2386599	MW111-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Barium	µg/g	390	403
2386599	MW111-1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	0.710

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00
ATTENTION TO: Keith Brown
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: May 28, 2021

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2406419		<0.8	<0.8	NA	< 0.8	123%	70%	130%	103%	80%	120%	85%	70%	130%
Arsenic	2406419		2	2	NA	< 1	118%	70%	130%	100%	80%	120%	104%	70%	130%
Barium	2406419		84.1	85.5	1.7%	< 2.0	91%	70%	130%	100%	80%	120%	90%	70%	130%
Beryllium	2406419		<0.4	<0.4	NA	< 0.4	102%	70%	130%	96%	80%	120%	93%	70%	130%
Boron	2406419		8	8	NA	< 5	88%	70%	130%	108%	80%	120%	98%	70%	130%
Boron (Hot Water Soluble)	2386583	2386583	0.24	0.25	NA	< 0.10	101%	60%	140%	101%	70%	130%	109%	60%	140%
Cadmium	2406419		<0.5	<0.5	NA	< 0.5	111%	70%	130%	104%	80%	120%	99%	70%	130%
Chromium	2406419		14	13	NA	< 5	97%	70%	130%	93%	80%	120%	87%	70%	130%
Cobalt	2406419		5.4	5.3	1.9%	< 0.5	103%	70%	130%	94%	80%	120%	93%	70%	130%
Copper	2406419		11.1	11.9	7.0%	< 1.0	87%	70%	130%	94%	80%	120%	83%	70%	130%
Lead	2406419		5	5	0.0%	< 1	100%	70%	130%	95%	80%	120%	85%	70%	130%
Molybdenum	2406419		<0.5	<0.5	NA	< 0.5	116%	70%	130%	105%	80%	120%	108%	70%	130%
Nickel	2406419		10	10	0.0%	< 1	105%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	2406419		<0.8	<0.8	NA	< 0.8	136%	70%	130%	105%	80%	120%	107%	70%	130%
Silver	2406419		<0.5	<0.5	NA	< 0.5	110%	70%	130%	102%	80%	120%	94%	70%	130%
Thallium	2406419		<0.5	<0.5	NA	< 0.5	99%	70%	130%	108%	80%	120%	101%	70%	130%
Uranium	2406419		0.51	<0.50	NA	< 0.50	101%	70%	130%	96%	80%	120%	92%	70%	130%
Vanadium	2406419		24.4	23.5	3.8%	< 0.4	113%	70%	130%	96%	80%	120%	94%	70%	130%
Zinc	2406419		33	33	0.0%	< 5	105%	70%	130%	104%	80%	120%	95%	70%	130%
Chromium, Hexavalent	2393475		<0.2	<0.2	NA	< 0.2	98%	70%	130%	98%	80%	120%	86%	70%	130%
Cyanide, Free	2386598	2386598	<0.040	<0.040	NA	< 0.040	105%	70%	130%	104%	80%	120%	108%	70%	130%
Mercury	2406419		<0.10	<0.10	NA	< 0.10	108%	70%	130%	96%	80%	120%	93%	70%	130%
Electrical Conductivity (2:1)	2386583	2386583	0.243	0.260	6.8%	< 0.005	99%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2386583	2386583	2.07	2.02	2.4%	NA									
pH, 2:1 CaCl2 Extraction	2399618		7.47	7.58	1.5%	NA	100%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.
For a mul i-element scan for lab control standards and matrix spikes, up to 10% of analytes may exceed the quoted limits by up to 10% absolute and it is considered acceptable.

Certified By:

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00
ATTENTION TO: Keith Brown
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis

RPT Date: May 28, 2021

PARAMETER	Batch	Sample Id	DUPLICATE Dup #1	DUPLICATE Dup #2	DUPLICATE RPD	Method Blank	REFERENCE MATERIAL Measured Value	REFERENCE MATERIAL Acceptable Limits Lower	REFERENCE MATERIAL Acceptable Limits Upper	METHOD BLANK SPIKE Recovery	METHOD BLANK SPIKE Acceptable Limits Lower	METHOD BLANK SPIKE Acceptable Limits Upper	MATRIX SPIKE Recovery	MATRIX SPIKE Acceptable Limits Lower	MATRIX SPIKE Acceptable Limits Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2387904		< 0.05	< 0.05	NA	< 0.05	115%	50%	140%	105%	50%	140%	78%	50%	140%
Acenaphthylene	2387904		< 0.05	< 0.05	NA	< 0.05	113%	50%	140%	117%	50%	140%	84%	50%	140%
Acenaphthene	2387904		< 0.05	< 0.05	NA	< 0.05	110%	50%	140%	109%	50%	140%	76%	50%	140%
Fluorene	2387904		< 0.05	< 0.05	NA	< 0.05	113%	50%	140%	117%	50%	140%	85%	50%	140%
Phenanthrene	2387904		< 0.05	< 0.05	NA	< 0.05	95%	50%	140%	90%	50%	140%	84%	50%	140%
Anthracene	2387904		< 0.05	< 0.05	NA	< 0.05	108%	50%	140%	106%	50%	140%	75%	50%	140%
Fluoranthene	2387904		< 0.05	< 0.05	NA	< 0.05	80%	50%	140%	75%	50%	140%	89%	50%	140%
Pyrene	2387904		< 0.05	< 0.05	NA	< 0.05	73%	50%	140%	69%	50%	140%	86%	50%	140%
Benz(a)anthracene	2387904		< 0.05	< 0.05	NA	< 0.05	93%	50%	140%	91%	50%	140%	85%	50%	140%
Chrysene	2387904		< 0.05	< 0.05	NA	< 0.05	90%	50%	140%	85%	50%	140%	84%	50%	140%
Benzo(b)fluoranthene	2387904		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	113%	50%	140%	86%	50%	140%
Benzo(k)fluoranthene	2387904		< 0.05	< 0.05	NA	< 0.05	82%	50%	140%	98%	50%	140%	85%	50%	140%
Benzo(a)pyrene	2387904		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	105%	50%	140%	84%	50%	140%
Indeno(1,2,3-cd)pyrene	2387904		< 0.05	< 0.05	NA	< 0.05	64%	50%	140%	75%	50%	140%	78%	50%	140%
Dibenz(a,h)anthracene	2387904		< 0.05	< 0.05	NA	< 0.05	64%	50%	140%	80%	50%	140%	89%	50%	140%
Benzo(g,h,i)perylene	2387904		< 0.05	< 0.05	NA	< 0.05	72%	50%	140%	87%	50%	140%	86%	50%	140%

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

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)															
Benzene	1	2389990	< 0.02	< 0.02	NA	< 0.02	104%	60%	140%	97%	60%	140%			
Toluene	1	2389990	< 0.05	< 0.05	NA	< 0.05	103%	60%	140%	85%	60%	140%			
Ethylbenzene	1	2389990	< 0.05	< 0.05	NA	< 0.05	107%	60%	140%	88%	60%	140%			
Xylenes (Total)	1	2389990	< 0.05	< 0.05	NA	< 0.05	108%	60%	140%	96%	60%	140%			
C6 - C10 (F1 minus BTEX)	1	2389990	< 5	< 5	NA	< 5	109%	60%	140%	113%	60%	140%	93%	60%	140%
>C10 - C16 (F2)	1	2392444	< 10	< 10	NA	< 10	98%	60%	140%	103%	60%	140%	106%	60%	140%
>C16 - C34 (F3)	1	2392444	< 50	< 50	NA	< 50	95%	60%	140%	103%	60%	140%	106%	60%	140%
>C34 - C50 (F4)	1	2392444	< 50	< 50	NA	< 50	91%	60%	140%	103%	60%	140%	106%	60%	140%

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution.
If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)															
Benzene	1	2392379	<0.02	<0.02	0	< 0.02	87%	60%	140%	134%	60%	140%			
Toluene	1	2392379	<0.08	<0.08	0	< 0.05	88%	60%	140%	104%	60%	140%			
Ethylbenzene	1	2392379	<0.05	<0.05	0	< 0.05	97%	60%	140%	105%	60%	140%			
Xylenes (Total)	1	2392379	<0.05	<0.05	0	< 0.05	96%	60%	140%	112%	60%	140%			
C6 - C10 (F1)	1	2392379	<5	<5	0	< 5		60%	140%		60%	140%		60%	140%
C6 - C10 (F1 minus BTEX)	1	2392379	<5	<5	0	< 5	93%	60%	140%	126%	60%	140%	77%	60%	140%

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

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

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution.
If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.

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QA Violation

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

ATTENTION TO: Keith Brown

RPT Date: May 28, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)											
Selenium		BH102-1	136%	70%	130%	105%	80%	120%	107%	70%	130%

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.
For a mul i-element scan for lab control standards and matrix spikes, up to 10% of analytes may exceed the quoted limits by up to 10% absolute and it is considered acceptable.

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Time Markers

AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386578	BH101-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	01-MAY-2021	01-MAY-2021	NS
Acenaphthylene	01-MAY-2021	01-MAY-2021	NS
Acenaphthene	01-MAY-2021	01-MAY-2021	NS
Fluorene	01-MAY-2021	01-MAY-2021	NS
Phenanthrene	01-MAY-2021	01-MAY-2021	NS
Anthracene	01-MAY-2021	01-MAY-2021	NS
Fluoranthene	01-MAY-2021	01-MAY-2021	NS
Pyrene	01-MAY-2021	01-MAY-2021	NS
Benz(a)anthracene	01-MAY-2021	01-MAY-2021	NS
Chrysene	01-MAY-2021	01-MAY-2021	NS
Benzo(b)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(k)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(a)pyrene	01-MAY-2021	01-MAY-2021	NS
Indeno(1,2,3-cd)pyrene	01-MAY-2021	01-MAY-2021	NS
Dibenz(a,h)anthracene	01-MAY-2021	01-MAY-2021	NS
Benzo(g,h,i)perylene	01-MAY-2021	01-MAY-2021	NS
1 and 2 Methlynaphthalene	01-MAY-2021	01-MAY-2021	SYS
Naphthalene-d8	01-MAY-2021	01-MAY-2021	NS
Acenaphthene-d10	01-MAY-2021	01-MAY-2021	NS
Chrysene-d12	01-MAY-2021	01-MAY-2021	NS
Moisture Content	28-APR-2021	28-APR-2021	VB

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386581	BH101-3	Soil	19-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR

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Time Markers

AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386581	BH101-3	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386582	BH101-13	Soil	19-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386583	BH102-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE

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Time Markers

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386583	BH102-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386584	BH102-4	Soil	19-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

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Time Markers

AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386585	BH103-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	01-MAY-2021	01-MAY-2021	NS
Acenaphthylene	01-MAY-2021	01-MAY-2021	NS
Acenaphthene	01-MAY-2021	01-MAY-2021	NS
Fluorene	01-MAY-2021	01-MAY-2021	NS
Phenanthrene	01-MAY-2021	01-MAY-2021	NS
Anthracene	01-MAY-2021	01-MAY-2021	NS
Fluoranthene	01-MAY-2021	01-MAY-2021	NS
Pyrene	01-MAY-2021	01-MAY-2021	NS
Benz(a)anthracene	01-MAY-2021	01-MAY-2021	NS
Chrysene	01-MAY-2021	01-MAY-2021	NS
Benzo(b)fluoranthene	01-MAY-2021	01-MAY-2021	NS

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386585	BH103-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Benzo(k)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(a)pyrene	01-MAY-2021	01-MAY-2021	NS
Indeno(1,2,3-cd)pyrene	01-MAY-2021	01-MAY-2021	NS
Dibenz(a,h)anthracene	01-MAY-2021	01-MAY-2021	NS
Benzo(g,h,i)perylene	01-MAY-2021	01-MAY-2021	NS
1 and 2 Methlynaphthalene	01-MAY-2021	01-MAY-2021	SYS
Naphthalene-d8	01-MAY-2021	01-MAY-2021	NS
Acenaphthene-d10	01-MAY-2021	01-MAY-2021	NS
Chrysene-d12	01-MAY-2021	01-MAY-2021	NS
Moisture Content	28-APR-2021	28-APR-2021	VB

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386587	BH103-4	Soil	19-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386588	MW104-2	Soil	19-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

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AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386588	MW104-2	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386589	MW104-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386589	MW104-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386590	MW105-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	01-MAY-2021	01-MAY-2021	NS
Acenaphthylene	01-MAY-2021	01-MAY-2021	NS
Acenaphthene	01-MAY-2021	01-MAY-2021	NS

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386590	MW105-1	Soil	19-APR-2021	23-APR-2021

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Fluorene	01-MAY-2021	01-MAY-2021	NS
Phenanthrene	01-MAY-2021	01-MAY-2021	NS
Anthracene	01-MAY-2021	01-MAY-2021	NS
Fluoranthene	01-MAY-2021	01-MAY-2021	NS
Pyrene	01-MAY-2021	01-MAY-2021	NS
Benz(a)anthracene	01-MAY-2021	01-MAY-2021	NS
Chrysene	01-MAY-2021	01-MAY-2021	NS
Benzo(b)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(k)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(a)pyrene	01-MAY-2021	01-MAY-2021	NS
Indeno(1,2,3-cd)pyrene	01-MAY-2021	01-MAY-2021	NS
Dibenz(a,h)anthracene	01-MAY-2021	01-MAY-2021	NS
Benzo(g,h,i)perylene	01-MAY-2021	01-MAY-2021	NS
1 and 2 Methlynaphthalene	01-MAY-2021	01-MAY-2021	SYS
Naphthalene-d8	01-MAY-2021	01-MAY-2021	NS
Acenaphthene-d10	01-MAY-2021	01-MAY-2021	NS
Chrysene-d12	01-MAY-2021	01-MAY-2021	NS
Moisture Content	28-APR-2021	28-APR-2021	VB

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386591	MW105-5	Soil	19-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386593	BH107-3	Soil	20-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386594	BH108-1	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE

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AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386594	BH108-1	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	26-MAY-2021	26-MAY-2021	NS
Acenaphthylene	26-MAY-2021	26-MAY-2021	NS
Acenaphthene	26-MAY-2021	26-MAY-2021	NS
Fluorene	26-MAY-2021	26-MAY-2021	NS
Phenanthrene	26-MAY-2021	26-MAY-2021	NS
Anthracene	26-MAY-2021	26-MAY-2021	NS
Fluoranthene	26-MAY-2021	26-MAY-2021	NS
Pyrene	26-MAY-2021	26-MAY-2021	NS
Benz(a)anthracene	26-MAY-2021	26-MAY-2021	NS
Chrysene	26-MAY-2021	26-MAY-2021	NS
Benzo(b)fluoranthene	26-MAY-2021	26-MAY-2021	NS
Benzo(k)fluoranthene	26-MAY-2021	26-MAY-2021	NS
Benzo(a)pyrene	26-MAY-2021	26-MAY-2021	NS
Indeno(1,2,3-cd)pyrene	26-MAY-2021	26-MAY-2021	NS
Dibenz(a,h)anthracene	26-MAY-2021	26-MAY-2021	NS
Benzo(g,h,i)perylene	26-MAY-2021	26-MAY-2021	NS
1 and 2 Methlynaphthalene	26-MAY-2021	26-MAY-2021	SYS
Naphthalene-d8	26-MAY-2021	26-MAY-2021	NS
Acenaphthene-d10	26-MAY-2021	26-MAY-2021	NS

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386594	BH108-1	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Chrysene-d12	26-MAY-2021	26-MAY-2021	NS
Moisture Content	21-MAY-2021	21-MAY-2021	VB

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386595	BH108-3	Soil	21-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386596	BH108-13	Soil	21-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI

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Time Markers

AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386596	BH108-13	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386597	MW109-1	Soil	21-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	29-APR-2021	30-APR-2021	AI
Toluene	29-APR-2021	30-APR-2021	AI
Ethylbenzene	29-APR-2021	30-APR-2021	AI
Xylenes (Total)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1)	29-APR-2021	30-APR-2021	AI
C6 - C10 (F1 minus BTEX)	29-APR-2021	30-APR-2021	AI
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR
Reporting TO - NS	03-MAY-2021		AH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386598	BH110-1	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK

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AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386598	BH110-1	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	01-MAY-2021	01-MAY-2021	NS
Acenaphthylene	01-MAY-2021	01-MAY-2021	NS
Acenaphthene	01-MAY-2021	01-MAY-2021	NS
Fluorene	01-MAY-2021	01-MAY-2021	NS
Phenanthrene	01-MAY-2021	01-MAY-2021	NS
Anthracene	01-MAY-2021	01-MAY-2021	NS
Fluoranthene	01-MAY-2021	01-MAY-2021	NS
Pyrene	01-MAY-2021	01-MAY-2021	NS
Benz(a)anthracene	01-MAY-2021	01-MAY-2021	NS
Chrysene	01-MAY-2021	01-MAY-2021	NS
Benzo(b)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(k)fluoranthene	01-MAY-2021	01-MAY-2021	NS
Benzo(a)pyrene	01-MAY-2021	01-MAY-2021	NS
Indeno(1,2,3-cd)pyrene	01-MAY-2021	01-MAY-2021	NS
Dibenz(a,h)anthracene	01-MAY-2021	01-MAY-2021	NS
Benzo(g,h,i)perylene	01-MAY-2021	01-MAY-2021	NS
1 and 2 Methlynaphthalene	01-MAY-2021	01-MAY-2021	SYS

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AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386598	BH110-1	Soil	21-APR-2021	23-APR-2021

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene-d8	01-MAY-2021	01-MAY-2021	NS
Acenaphthene-d10	01-MAY-2021	01-MAY-2021	NS
Chrysene-d12	01-MAY-2021	01-MAY-2021	NS
Moisture Content	28-APR-2021	28-APR-2021	VB

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386599	MW111-1	Soil	22-APR-2021	23-APR-2021

O. Reg. 153(511) - Metals & Inorganics (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	03-MAY-2021	03-MAY-2021	SE
Arsenic	03-MAY-2021	03-MAY-2021	SE
Barium	03-MAY-2021	03-MAY-2021	SE
Beryllium	03-MAY-2021	03-MAY-2021	SE
Boron	03-MAY-2021	03-MAY-2021	SE
Boron (Hot Water Soluble)	03-MAY-2021	03-MAY-2021	ZK
Cadmium	03-MAY-2021	03-MAY-2021	SE
Chromium	03-MAY-2021	03-MAY-2021	SE
Cobalt	03-MAY-2021	03-MAY-2021	SE
Copper	03-MAY-2021	03-MAY-2021	SE
Lead	03-MAY-2021	03-MAY-2021	SE
Molybdenum	03-MAY-2021	03-MAY-2021	SE
Nickel	03-MAY-2021	03-MAY-2021	SE
Selenium	03-MAY-2021	03-MAY-2021	SE
Silver	03-MAY-2021	03-MAY-2021	SE
Thallium	03-MAY-2021	03-MAY-2021	SE
Uranium	03-MAY-2021	03-MAY-2021	SE
Vanadium	03-MAY-2021	03-MAY-2021	SE
Zinc	03-MAY-2021	03-MAY-2021	SE
Chromium, Hexavalent			
Cyanide, Free	03-MAY-2021	03-MAY-2021	BG
Mercury	03-MAY-2021	03-MAY-2021	SE
Electrical Conductivity (2:1)	03-MAY-2021	03-MAY-2021	MM
Sodium Adsorption Ratio (2:1) (Calc.)	03-MAY-2021	03-MAY-2021	XH
pH, 2:1 CaCl2 Extraction	03-MAY-2021	03-MAY-2021	MM

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Naphthalene	26-MAY-2021	26-MAY-2021	NS
Acenaphthylene	26-MAY-2021	26-MAY-2021	NS

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AGAT WORK ORDER: 21Z737993
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386599	MW111-1	Soil	22-APR-2021	23-APR-2021

O. Reg. 153(511) - PAHs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Acenaphthene	26-MAY-2021	26-MAY-2021	NS
Fluorene	26-MAY-2021	26-MAY-2021	NS
Phenanthrene	26-MAY-2021	26-MAY-2021	NS
Anthracene	26-MAY-2021	26-MAY-2021	NS
Fluoranthene	26-MAY-2021	26-MAY-2021	NS
Pyrene	26-MAY-2021	26-MAY-2021	NS
Benz(a)anthracene	26-MAY-2021	26-MAY-2021	NS
Chrysene	26-MAY-2021	26-MAY-2021	NS
Benzo(b)fluoranthene	26-MAY-2021	26-MAY-2021	NS
Benzo(k)fluoranthene	26-MAY-2021	26-MAY-2021	NS
Benzo(a)pyrene	26-MAY-2021	26-MAY-2021	NS
Indeno(1,2,3-cd)pyrene	26-MAY-2021	26-MAY-2021	NS
Dibenz(a,h)anthracene	26-MAY-2021	26-MAY-2021	NS
Benzo(g,h,i)perylene	26-MAY-2021	26-MAY-2021	NS
1 and 2 Methlynaphthalene	26-MAY-2021	26-MAY-2021	SYS
Naphthalene-d8	26-MAY-2021	26-MAY-2021	NS
Acenaphthene-d10	26-MAY-2021	26-MAY-2021	NS
Chrysene-d12	26-MAY-2021	26-MAY-2021	NS
Moisture Content	21-MAY-2021	21-MAY-2021	VB

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386600	MW111-5	Soil	22-APR-2021	23-APR-2021

Moisture

Parameter	Date Prepared	Date Analyzed	Initials
% Moisture	28-APR-2021	28-APR-2021	DM

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene			
Toluene			
Ethylbenzene			
Xylenes (Total)			
C6 - C10 (F1)			
C6 - C10 (F1 minus BTEX)			
>C10 - C16 (F2)	29-APR-2021	29-APR-2021	WR
>C16 - C34 (F3)	29-APR-2021	29-APR-2021	WR
>C34 - C50 (F4)	29-APR-2021	29-APR-2021	WR
Gravimetric Heavy Hydrocarbons (F4G)	29-APR-2021	29-APR-2021	WR
o-terphenyl	29-APR-2021	29-APR-2021	WR

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AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2386600	MW111-5	Soil	22-APR-2021	23-APR-2021

O. Reg. 153(511) - PHCs F1 - F4 (Soil) (Toronto)

Parameter	Date Prepared	Date Analyzed	Initials
Reporting TO - NS	03-MAY-2021		AH

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
% Moisture	LAB-131-4024	CSSS 70.2	GRAVIMETRIC
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3541 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3541 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3541 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5009	CCME Tier 1 Method	BALANCE
Benzene	VOL-120-5015	Atlantic RBCA Guidelines for Laboratories Tier 1	(P&T)GC/MS
Toluene	VOL-120-5015	Atlantic RBCA Guidelines for Laboratories Tier 1	(P&T)GC/MS
Ethylbenzene	VOL-120-5015	Atlantic RBCA Guidelines for Laboratories Tier 1	(P&T)GC/MS
Xylenes (Total)	VOL-120-5015	Atlantic RBCA Guidelines for Laboratories Tier 1	(P&T)GC/MS
C6 - C10 (F1)	VOL-120-5015	CCME CWS Tier 1	GC/MS/FID
C6 - C10 (F1 minus BTEX)	VOL-120-5015	CCME CWS Tier 1	GC/MS/FID
>C10 - C16 (F2)	ORG-120-5102	Based on CCME CWS Tier 1	GC/FID
>C16 - C34 (F3)	ORG-120-5102	Based on CCME CWS Tier 1	GC/FID

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z737993

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
>C34 - C50 (F4)	ORG-120-5102	Based on CCME CWS Tier 1	GC/FID
Gravimetric Heavy Hydrocarbons (F4G)	ORG-120-5102	Based on CCME CWS Tier 1	GRAVIMETRIC
o-terphenyl	ORG-120-5102	CCME	GC/FID
Reporting TO - NS			N/A

AGAT Laboratories

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Chain of Custody Record

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

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Keith Brown
Address: 1-20 Gurdwara Road,
Ottawa, ON K2E 8B3
Phone: 613 745 6471 ext 230 Fax:
Reports to be sent to:
1. Email: kbrown@terrapex.com
2. Email:

Project Information:

Project: CO810.00
Site Location: 1186, 1188, 1194 and 1196 Wellington Street West, Ottawa, ON
Sampled By: EB
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐
Company: Terrapex Environmental Ltd.
Contact: Accounts Payable
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04 — Table 3 (Indicate One) — ☐ Ind/Com ☒ Res/Park ☐ Agriculture
Soil Texture (Check One): ☐ Coarse ☒ Fine
☐ Excess Soils R406 — Table ____ (Indicate One)
☐ Regulation 558
☐ CCME
☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Sample Matrix Legend

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

Laboratory Use Only

Work Order #: 21737993
Cooler Quantity: Ice
Arrival Temperatures: 6.3 5.9 6.0
(LT (free ice)) 2.4 2.7 2.6
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes:

Turnaround Time (TAT) Required:

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH101-1	Apr 19/21	7:30 AM PM	1	S		N				X							
BH101-3	Apr 19/21	8:00 AM PM	2	S		N			X								
BH101-13	Apr 19/21	8:00 AM PM	2	S		N			X								
BH102-1	Apr 19/21	8:45 AM PM	1	S		N	X										
BH102-4	Apr 19/21	9:00 AM PM	2	S		N			X								
BH103-1	Apr 19/21	11:00 AM PM	2	S		N	X			X							
BH103-4	Apr 19/21	11:30 AM PM	2	S		N			X								
MW104-2	Apr 19/21	12:30 AM PM	2	S		N			X								
MW104-1	Apr 19/21	12:15 AM PM	1	S		N	X										
MW105-1	Apr 19/21	14:00 AM PM	2	S		N	X			X							
MW105-5	Apr 19/21	14:30 AM PM	2	S		N			X								

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Eric Boonstra	Apr 23/21	16:00	[illegible]	21/4/23	16h00
(BtoPLUS)	21/4/23	16h00	SIMRAN	Apr 23/21	10:50 am

Page 1 of 2
N°:

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

Chain of Custody Record

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

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Keith Brown
Address: 1-20 Gurdwara Road,
Ottawa, ON K2E 8B3
Phone: 613 745 6471 ext 230 Fax:
Reports to be sent to:
1. Email: kbrown@terrapex.com
2. Email:

Project Information:

Project: CO810.00
Site Location: 1186, 1188, 1194 and 1196 Wellington Street West, Ottawa, ON
Sampled By: EB
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐
Company: Terrapex Environmental Ltd.
Contact: Accounts Payable
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table 3 (Indicate One)
☐ Ind/Com
☒ Res/Park
☐ Agriculture
Soil Texture (Check One)
☐ Coarse
☒ Fine

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

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

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

Report Guideline on Certificate of Analysis ☒ Yes ☐ No

Sample Matrix Legend

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

Laboratory Use Only

Work Order #:
Cooler Quantity:
Arrival Temperatures: 5.8 | 5.4 | 5.1
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	BTEX-F1	Potentially Hazardous or High Concentration (Y/N)
BH107-3	Apr 20/21	15:00 PM	1	S		N	X											
BH108-[illegible]1	Apr 21/21	8:00 PM	1	S		N	X											
BH108-3	Apr 21/21	8:30 PM	2	S		N			X									
BH108-[illegible]3	Apr 21/21	8:30 PM	2	S		N			X									
MW109-1	Apr 21/21	13:10 PM	2	S		N			X									
BH110-1	Apr 21/21	14:00 PM	2	S		N	X			X								
MW111-1	Apr 22/21	8:00 PM	1	S		N	X											
MW111-5	Apr 22/21	8:15 PM	2	S		N			X									
MW111-6	Apr 22/21	8:30 PM	1	S												X		
		AM PM																
		AM PM																

Samples Relinquished By (Print Name and Sign): Eric Boorsma	Date: Apr 23/21	Time: 16:00	Samples Received By (Print Name and Sign):	Date: 21/4/23	Time: 16:00	Page 2 of 2	
Samples Relinquished By (Print Name and Sign):	Date: 21/4/23	Time: 16:00	Samples Received By (Print Name and Sign):	Date: Apr 24/21	Time: 10:50		
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time:	N°:	

AGAT Laboratories

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http://www.agatlabs.com

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
(613) 745-6471

ATTENTION TO: Keith Brown

PROJECT: CO810.00

AGAT WORK ORDER: 21Z750733

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Jun 01, 2021

PAGES (INCLUDING COVER): 11

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)

DATE RECEIVED: 2021-05-21

DATE REPORTED: 2021-06-01

				SAMPLE DESCRIPTION:	MW111-16
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-05-20 14:50
Parameter	Unit	G / S	RDL		2501981
F1 (C6 - C10)	µg/g	65	5		<5
F1 (C6 to C10) minus BTEX	µg/g	65	5		<5
F2 (C10 to C16)	µg/g	150	10		<10
F3 (C16 to C34)	µg/g	1300	50		<50
F4 (C34 to C50)	µg/g	5600	50		<50
Gravimetric Heavy Hydrocarbons	µg/g	5600	50		NA
Moisture Content	%		0.1		15.6
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140			77
Terphenyl	%	60-140			97

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2501981 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

O. Reg. 153(511) - VOCs (Soil)

DATE RECEIVED: 2021-05-21

DATE REPORTED: 2021-06-01

		SAMPLE DESCRIPTION:		MW111-16
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-05-20 14:50
Parameter	Unit	G / S	RDL	2501981
Dichlorodifluoromethane	µg/g	25	0.05	<0.05
Vinyl Chloride	ug/g	0.022	0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05
Trichlorofluoromethane	ug/g	5.8	0.05	<0.05
Acetone	ug/g	28	0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05
Methylene Chloride	ug/g	0.96	0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.75	0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.4	0.05	<0.05
1,1-Dichloroethane	ug/g	11	0.02	<0.02
Methyl Ethyl Ketone	ug/g	44	0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	30	0.02	<0.02
Chloroform	ug/g	0.18	0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03
1,1,1-Trichloroethane	ug/g	3.4	0.05	<0.05
Carbon Tetrachloride	ug/g	0.12	0.05	<0.05
Benzene	ug/g	0.17	0.02	<0.02
1,2-Dichloropropane	ug/g	0.085	0.03	<0.03
Trichloroethylene	ug/g	0.52	0.03	<0.03
Bromodichloromethane	ug/g	13	0.05	<0.05
Methyl Isobutyl Ketone	ug/g	4.3	0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04
Toluene	ug/g	6	0.05	<0.05
Dibromochloromethane	ug/g	9.4	0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04
Tetrachloroethylene	ug/g	2.3	0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.05	0.04	<0.04
Chlorobenzene	ug/g	2.7	0.05	<0.05
Ethylbenzene	ug/g	15	0.05	<0.05

Certified By: N Popowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

O. Reg. 153(511) - VOCs (Soil)

DATE RECEIVED: 2021-05-21

DATE REPORTED: 2021-06-01

				SAMPLE DESCRIPTION:	MW111-16
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-05-20 14:50
Parameter	Unit	G / S	RDL		2501981
m & p-Xylene	ug/g		0.05		<0.05
Bromoform	ug/g	0.26	0.05		<0.05
Styrene	ug/g	2.2	0.05		<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05		<0.05
o-Xylene	ug/g		0.05		<0.05
1,3-Dichlorobenzene	ug/g	6	0.05		<0.05
1,4-Dichlorobenzene	ug/g	0.097	0.05		<0.05
1,2-Dichlorobenzene	ug/g	4.3	0.05		<0.05
Xylenes (Total)	ug/g	25	0.05		<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.083	0.04		<0.04
n-Hexane	µg/g	34	0.05		<0.05
Moisture Content	%		0.1		15.6
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140			92
4-Bromofluorobenzene	% Recovery	50-140			93

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2501981 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

Trace Organics Analysis

RPT Date: Jun 01, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F2 (C10 to C16)	2381640		< 10	< 10	NA	< 10	90%	60%	140%	85%	60%	140%	73%	60%	140%
F3 (C16 to C34)	2381640		< 10	< 10	NA	< 10	111%	60%	140%	84%	60%	140%	73%	60%	140%
F4 (C34 to C50)	2381640		< 50	< 50	NA	< 50	101%	60%	140%	100%	60%	140%	118%	60%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	2502030		<0.05	<0.05	NA	< 0.05	88%	50%	140%	99%	50%	140%	101%	50%	140%
Vinyl Chloride	2502030		<0.02	<0.02	NA	< 0.02	104%	50%	140%	99%	50%	140%	86%	50%	140%
Bromomethane	2502030		<0.05	<0.05	NA	< 0.05	81%	50%	140%	73%	50%	140%	76%	50%	140%
Trichlorofluoromethane	2502030		<0.05	<0.05	NA	< 0.05	78%	50%	140%	79%	50%	140%	75%	50%	140%
Acetone	2502030		<0.50	<0.50	NA	< 0.50	75%	50%	140%	88%	50%	140%	89%	50%	140%
1,1-Dichloroethylene	2502030		<0.05	<0.05	NA	< 0.05	87%	50%	140%	116%	60%	130%	76%	50%	140%
Methylene Chloride	2502030		<0.05	<0.05	NA	< 0.05	94%	50%	140%	112%	60%	130%	99%	50%	140%
Trans- 1,2-Dichloroethylene	2502030		<0.05	<0.05	NA	< 0.05	88%	50%	140%	106%	60%	130%	76%	50%	140%
Methyl tert-butyl Ether	2502030		<0.05	<0.05	NA	< 0.05	82%	50%	140%	87%	60%	130%	83%	50%	140%
1,1-Dichloroethane	2502030		<0.02	<0.02	NA	< 0.02	92%	50%	140%	112%	60%	130%	86%	50%	140%
Methyl Ethyl Ketone	2502030		<0.50	<0.50	NA	< 0.50	99%	50%	140%	88%	50%	140%	81%	50%	140%
Cis- 1,2-Dichloroethylene	2502030		<0.02	<0.02	NA	< 0.02	77%	50%	140%	96%	60%	130%	79%	50%	140%
Chloroform	2502030		<0.04	<0.04	NA	< 0.04	80%	50%	140%	103%	60%	130%	82%	50%	140%
1,2-Dichloroethane	2502030		<0.03	<0.03	NA	< 0.03	106%	50%	140%	101%	60%	130%	101%	50%	140%
1,1,1-Trichloroethane	2502030		<0.05	<0.05	NA	< 0.05	73%	50%	140%	94%	60%	130%	102%	50%	140%
Carbon Tetrachloride	2502030		<0.05	<0.05	NA	< 0.05	90%	50%	140%	95%	60%	130%	81%	50%	140%
Benzene	2502030		<0.02	<0.02	NA	< 0.02	113%	50%	140%	95%	60%	130%	110%	50%	140%
1,2-Dichloropropane	2502030		<0.03	<0.03	NA	< 0.03	105%	50%	140%	85%	60%	130%	108%	50%	140%
Trichloroethylene	2502030		<0.03	<0.03	NA	< 0.03	107%	50%	140%	94%	60%	130%	106%	50%	140%
Bromodichloromethane	2502030		<0.05	<0.05	NA	< 0.05	76%	50%	140%	93%	60%	130%	80%	50%	140%
Methyl Isobutyl Ketone	2502030		<0.50	<0.50	NA	< 0.50	94%	50%	140%	97%	50%	140%	87%	50%	140%
1,1,2-Trichloroethane	2502030		<0.04	<0.04	NA	< 0.04	100%	50%	140%	93%	60%	130%	117%	50%	140%
Toluene	2502030		<0.05	<0.05	NA	< 0.05	96%	50%	140%	103%	60%	130%	111%	50%	140%
Dibromochloromethane	2502030		<0.05	<0.05	NA	< 0.05	79%	50%	140%	81%	60%	130%	76%	50%	140%
Ethylene Dibromide	2502030		<0.04	<0.04	NA	< 0.04	95%	50%	140%	85%	60%	130%	109%	50%	140%
Tetrachloroethylene	2502030		<0.05	<0.05	NA	< 0.05	89%	50%	140%	101%	60%	130%	104%	50%	140%
1,1,1,2-Tetrachloroethane	2502030		<0.04	<0.04	NA	< 0.04	100%	50%	140%	109%	60%	130%	84%	50%	140%
Chlorobenzene	2502030		<0.05	<0.05	NA	< 0.05	91%	50%	140%	97%	60%	130%	113%	50%	140%
Ethylbenzene	2502030		<0.05	<0.05	NA	< 0.05	91%	50%	140%	95%	60%	130%	108%	50%	140%
m & p-Xylene	2502030		<0.05	<0.05	NA	< 0.05	93%	50%	140%	109%	60%	130%	114%	50%	140%
Bromoform	2502030		<0.05	<0.05	NA	< 0.05	78%	50%	140%	77%	60%	130%	70%	50%	140%
Styrene	2502030		<0.05	<0.05	NA	< 0.05	114%	50%	140%	94%	60%	130%	105%	50%	140%
1,1,2,2-Tetrachloroethane	2502030		<0.05	<0.05	NA	< 0.05	100%	50%	140%	102%	60%	130%	98%	50%	140%
o-Xylene	2502030		<0.05	<0.05	NA	< 0.05	94%	50%	140%	98%	60%	130%	97%	50%	140%

AGAT Laboratories

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

Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

Trace Organics Analysis (Continued)

RPT Date: Jun 01, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,3-Dichlorobenzene	2502030		<0.05	<0.05	NA	< 0.05	104%	50%	140%	109%	60%	130%	116%	50%	140%
1,4-Dichlorobenzene	2502030		<0.05	<0.05	NA	< 0.05	82%	50%	140%	90%	60%	130%	75%	50%	140%
1,2-Dichlorobenzene	2502030		<0.05	<0.05	NA	< 0.05	100%	50%	140%	101%	60%	130%	110%	50%	140%
n-Hexane	2502030		<0.05	<0.05	NA	< 0.05	94%	50%	140%	78%	60%	130%	107%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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

Time Markers

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2501981	MW111-16	Soil	20-MAY-2021	21-MAY-2021

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
F1 (C6 - C10)	28-MAY-2021	28-MAY-2021	SS
F1 (C6 to C10) minus BTEX	28-MAY-2021	28-MAY-2021	SYS
Toluene-d8	28-MAY-2021	28-MAY-2021	SS
F2 (C10 to C16)	28-MAY-2021	31-MAY-2021	SK
F3 (C16 to C34)	28-MAY-2021	31-MAY-2021	SK
F4 (C34 to C50)	28-MAY-2021	31-MAY-2021	SK
Gravimetric Heavy Hydrocarbons	28-MAY-2021	31-MAY-2021	SK
Moisture Content	27-MAY-2021	27-MAY-2021	VB
Terphenyl	28-MAY-2021	31-MAY-2021	SK

O. Reg. 153(511) - VOCs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Dichlorodifluoromethane	28-MAY-2021	28-MAY-2021	AG
Vinyl Chloride	28-MAY-2021	28-MAY-2021	AG
Bromomethane	28-MAY-2021	28-MAY-2021	AG
Trichlorofluoromethane	28-MAY-2021	28-MAY-2021	AG
Acetone	28-MAY-2021	28-MAY-2021	AG
1,1-Dichloroethylene	28-MAY-2021	28-MAY-2021	AG
Methylene Chloride	28-MAY-2021	28-MAY-2021	AG
Trans- 1,2-Dichloroethylene	28-MAY-2021	28-MAY-2021	AG
Methyl tert-butyl Ether	28-MAY-2021	28-MAY-2021	AG
1,1-Dichloroethane	28-MAY-2021	28-MAY-2021	AG
Methyl Ethyl Ketone	28-MAY-2021	28-MAY-2021	AG
Cis- 1,2-Dichloroethylene	28-MAY-2021	28-MAY-2021	AG
Chloroform	28-MAY-2021	28-MAY-2021	AG
1,2-Dichloroethane	28-MAY-2021	28-MAY-2021	AG
1,1,1-Trichloroethane	28-MAY-2021	28-MAY-2021	AG
Carbon Tetrachloride	28-MAY-2021	28-MAY-2021	AG
Benzene	28-MAY-2021	28-MAY-2021	AG
1,2-Dichloropropane	28-MAY-2021	28-MAY-2021	AG
Trichloroethylene	28-MAY-2021	28-MAY-2021	AG
Bromodichloromethane	28-MAY-2021	28-MAY-2021	AG
Methyl Isobutyl Ketone	28-MAY-2021	28-MAY-2021	AG
1,1,2-Trichloroethane	28-MAY-2021	28-MAY-2021	AG
Toluene	28-MAY-2021	28-MAY-2021	AG
Dibromochloromethane	28-MAY-2021	28-MAY-2021	AG
Ethylene Dibromide	28-MAY-2021	28-MAY-2021	AG
Tetrachloroethylene	28-MAY-2021	28-MAY-2021	AG
1,1,1,2-Tetrachloroethane	28-MAY-2021	28-MAY-2021	AG

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Time Markers

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2501981	MW111-16	Soil	20-MAY-2021	21-MAY-2021

O. Reg. 153(511) - VOCs (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Chlorobenzene	28-MAY-2021	28-MAY-2021	AG
Ethylbenzene	28-MAY-2021	28-MAY-2021	AG
m & p-Xylene	28-MAY-2021	28-MAY-2021	AG
Bromoform	28-MAY-2021	28-MAY-2021	AG
Styrene	28-MAY-2021	28-MAY-2021	AG
1,1,2,2-Tetrachloroethane	28-MAY-2021	28-MAY-2021	AG
o-Xylene	28-MAY-2021	28-MAY-2021	AG
1,3-Dichlorobenzene	28-MAY-2021	28-MAY-2021	AG
1,4-Dichlorobenzene	28-MAY-2021	28-MAY-2021	AG
1,2-Dichlorobenzene	28-MAY-2021	28-MAY-2021	AG
Xylenes (Total)	28-MAY-2021	28-MAY-2021	SYS
1,3-Dichloropropene (Cis + Trans)	28-MAY-2021	28-MAY-2021	SYS
n-Hexane	28-MAY-2021	28-MAY-2021	AG
Toluene-d8	28-MAY-2021	28-MAY-2021	AG
4-Bromofluorobenzene	28-MAY-2021	28-MAY-2021	AG
Moisture Content	27-MAY-2021	27-MAY-2021	VB

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
F1 (C6 - C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	ORG-91-5009	CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

AGAT Laboratories

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z750733

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:1186,1188,1184 and 1196 Wellington street West, Ottawa, ON

SAMPLED BY:EB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Toluene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

AGAT Laboratories

(Med Blue)

5835 Coopers Avenue
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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 21Z7507033

Cooler Quantity: One - ICP

Arrival Temperatures: 4.2 | 3.5 | 4.1

(TC rec'd 16) 4.0 | 4.3 | 4.1

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes:

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Keith Brown
Address: 1-20 Gurdwara Road,
Ottawa, ON K2E 8B3
Phone: 613 745 6471 ext 230 Fax:
Reports to be sent to:
1. Email: kbrown@terrapex.com
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table 3 (Indicate One)
☐ Ind/Com
☒ Res/Park
☐ Agriculture

Soil Texture (Check One)
☐ Coarse
☒ Fine

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

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

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

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

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: CO810.00
Site Location: 1186, 1188, 1194 and 1196 Wellington Street West, Ottawa, ON
Sampled By: EB
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Terrapex Environmental Ltd.
Contact: Accounts Payable
Address:
Email:

Sample Matrix Legend

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
MW111-16	May 20/21	14:50 AM/PM	2	S		N			X			X					
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
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		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign): Eric Boonstra	Date: May 21/21	Time: 16:00	Samples Received By (Print Name and Sign):	Date: 21/5/21	Time: 15h30
Samples Relinquished By (Print Name and Sign): UP-TOPHO	Date: 21/5/21	Time: 16:00	Samples Received By (Print Name and Sign): S/MRAD May 2	Date: 2/21	Time: 11:30 am
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time:

Page 1 of 1

N°:

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http://www.agatlabs.com

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
(613) 745-6471
ATTENTION TO: Keith Brown
PROJECT: CO810.00
AGAT WORK ORDER: 21Z752731
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist
WATER ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician
DATE REPORTED: Jun 03, 2021
PAGES (INCLUDING COVER): 28
VERSION*: 1

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

*Notes

Disclaimer:

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

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Certificate of Analysis

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - BTEX (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

		SAMPLE DESCRIPTION:		Trip Spike
		SAMPLE TYPE:		Water
		DATE SAMPLED:		
Parameter	Unit	G / S	RDL	2522675
Benzene	%			105
Toluene	%			95
Ethylbenzene	%			96
m & p-Xylene	%			109
o-Xylene	%			101
Xylenes (Total)	µg/L		0.20	210
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	50-140		93
4-Bromofluorobenzene	% Recovery	50-140		114

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

2522675 Results relate only to the items tested.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

				SAMPLE DESCRIPTION:	MW111
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2021-05-25 13:15
Parameter	Unit	G / S	RDL		2522627
F1 (C6 - C10)	µg/L	750	25		84
F1 (C6 to C10) minus BTEX	µg/L	750	25		84
F2 (C10 to C16)	µg/L	150	100		<100
F3 (C16 to C34)	µg/L	500	100		<100
F4 (C34 to C50)	µg/L	500	100		<100
Gravimetric Heavy Hydrocarbons	µg/L		500		NA
Sediment					No
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140			81.8
Terphenyl	%	60-140			82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2522627 The C6-C10 fraction is calculated using Toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6-C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

				SAMPLE DESCRIPTION:	MW109	MW105	MW106	MW114	MW104
				SAMPLE TYPE:	Water	Water	Water	Water	Water
				DATE SAMPLED:	2021-05-25 11:25	2021-05-25 13:50	2021-05-25 14:40	2021-05-25 15:30	2021-05-25 15:30
Parameter	Unit	G / S	RDL		2522626	2522628	2522629	2522630	2522667
Benzene	µg/L	430	0.20		<0.20	<0.20	<0.20	0.26	0.33
Toluene	µg/L	18000	0.20		<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	2300	0.10		<0.10	<0.10	<0.10	0.97	1.26
m & p-Xylene	µg/L		0.20		<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	µg/L		0.10		<0.10	<0.10	<0.10	<0.10	<0.10
Xylenes (Total)	µg/L	4200	0.20		<0.20	<0.20	<0.20	<0.20	<0.20
F1 (C6 - C10)	µg/L	750	25		<25	<25	<25	52	50
F1 (C6 to C10) minus BTEX	µg/L	750	25		<25	<25	<25	51	48
F2 (C10 to C16)	µg/L	150	100		<100	<100	<100	<100	<100
F3 (C16 to C34)	µg/L	500	100		<100	<100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100		<100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500		NA	NA	NA	NA	NA
Sediment					No	No	No	No	No
Surrogate	Unit	Acceptable Limits							
Toluene-d8	% Recovery	60-140			100	70.5	94.5	88.0	110
Terphenyl	% Recovery	60-140			83	91	82	81	77

Certified By:

AGAT Laboratories

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http://www.aga labs.com

Certificate of Analysis

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2522626-2522667 The C6-C10 fraction is calculated using Toluene response factor.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6-C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153/04, results are considered valid without determining the PAH contribution if not requested by the client.
NA = Not Applicable

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

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1/BTEX (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

		SAMPLE DESCRIPTION:		Trip Blank
		SAMPLE TYPE:		Water
		DATE SAMPLED:		
Parameter	Unit	G / S	RDL	2522676
Benzene	µg/L	430	0.20	<0.20
Toluene	µg/L	18000	0.20	<0.20
Ethylbenzene	µg/L	2300	0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20
o-Xylene	µg/L		0.10	<0.10
Xylenes (Total)	µg/L	4200	0.20	<0.20
F1 (C6-C10)	µg/L	750	25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	60-140		102

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2522676 The C6-C10 fraction is calculated using Toluene response factor.
Total C6-C10 results are corrected for BTEX contributions.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
Extraction and holding times were met for this sample.
NA = Not Applicable

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AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

				SAMPLE DESCRIPTION:	MW111
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2021-05-25 13:15
Parameter	Unit	G / S	RDL		2522627
Dichlorodifluoromethane	µg/L	4400	0.40		<0.40
Vinyl Chloride	µg/L	1.7	0.34		<0.34
Bromomethane	µg/L	56	0.40		<0.40
Trichlorofluoromethane	µg/L	2500	0.80		<0.80
Acetone	µg/L	130000	2.0		<2.0
1,1-Dichloroethylene	µg/L	17	0.60		<0.60
Methylene Chloride	µg/L	5500	0.60		<0.60
trans- 1,2-Dichloroethylene	µg/L	17	0.40		<0.40
Methyl tert-butyl ether	µg/L	1400	0.40		<0.40
1,1-Dichloroethane	µg/L	3100	0.60		<0.60
Methyl Ethyl Ketone	µg/L	1500000	2.0		<2.0
cis- 1,2-Dichloroethylene	µg/L	17	0.40		<0.40
Chloroform	µg/L	22	0.40		<0.40
1,2-Dichloroethane	µg/L	12	0.40		<0.40
1,1,1-Trichloroethane	µg/L	6700	0.60		<0.60
Carbon Tetrachloride	µg/L	8.4	0.40		<0.40
Benzene	µg/L	430	0.40		<0.40
1,2-Dichloropropane	µg/L	140	0.40		<0.40
Trichloroethylene	µg/L	17	0.40		<0.40
Bromodichloromethane	µg/L	85000	0.40		<0.40
Methyl Isobutyl Ketone	µg/L	580000	2.0		<2.0
1,1,2-Trichloroethane	µg/L	30	0.40		<0.40
Toluene	µg/L	18000	0.40		<0.40
Dibromochloromethane	µg/L	82000	0.20		<0.20
Ethylene Dibromide	µg/L	0.83	0.20		<0.20
Tetrachloroethylene	µg/L	17	0.40		<0.40
1,1,1,2-Tetrachloroethane	µg/L	28	0.20		<0.20
Chlorobenzene	µg/L	630	0.20		<0.20
Ethylbenzene	µg/L	2300	0.20		<0.20

Certified By: N Popowkolof

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Certificate of Analysis

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

				SAMPLE DESCRIPTION:	MW111
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2021-05-25 13:15
Parameter	Unit	G / S	RDL		2522627
m & p-Xylene	µg/L		0.40		<0.40
Bromoform	µg/L	770	0.20		<0.20
Styrene	µg/L	9100	0.20		<0.20
1,1,2,2-Tetrachloroethane	µg/L	15	0.20		<0.20
o-Xylene	µg/L		0.20		<0.20
1,3-Dichlorobenzene	µg/L	9600	0.20		<0.20
1,4-Dichlorobenzene	µg/L	67	0.20		<0.20
1,2-Dichlorobenzene	µg/L	9600	0.20		<0.20
1,3-Dichloropropene	µg/L	45	0.60		<0.60
Xylenes (Total)	µg/L	4200	0.40		<0.40
n-Hexane	µg/L	520	0.40		<0.40
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140			114
4-Bromofluorobenzene	% Recovery	50-140			84

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2522627 Dilution factor=2
The sample was diluted because it was foamy. The reporting detection limit has been corrected for the dilution factor used.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2021-05-26

DATE REPORTED: 2021-06-03

SAMPLE DESCRIPTION:				MW111		MW105		MW106	MW114	MW104
SAMPLE TYPE:				Water		Water		Water	Water	Water
DATE SAMPLED:				2021-05-25 13:15		2021-05-25 13:50		2021-05-25 14:40	2021-05-25 15:30	2021-05-25 15:30
Parameter	Unit	G / S	RDL	2522627	RDL	2522628	RDL	2522629	2522630	2522667
Dissolved Antimony	µg/L	20000	1.0	<1.0	1.0	<1.0	1.0	<1.0	<1.0	<1.0
Dissolved Arsenic	µg/L	1900	1.0	4.5	1.0	<1.0	1.0	3.9	1.6	5.5
Dissolved Barium	µg/L	29000	2.0	138	2.0	13.0	2.0	140	133	140
Dissolved Beryllium	µg/L	67	0.50	<0.50	0.50	<0.50	0.50	<0.50	<0.50	<0.50
Dissolved Boron	µg/L	45000	10.0	95.1	10.0	20.6	10.0	144	118	128
Dissolved Cadmium	µg/L	2.7	0.20	<0.20	0.20	<0.20	0.20	<0.20	<0.20	<0.20
Dissolved Chromium	µg/L	810	2.0	<2.0	2.0	<2.0	2.0	<2.0	<2.0	<2.0
Dissolved Cobalt	µg/L	66	0.50	0.54	0.50	<0.50	0.50	0.98	0.80	1.00
Dissolved Copper	µg/L	87	1.0	<1.0	1.0	2.7	1.0	1.2	2.4	<1.0
Dissolved Lead	µg/L	25	0.50	<0.50	0.50	<0.50	0.50	<0.50	<0.50	<0.50
Dissolved Molybdenum	µg/L	9200	0.50	3.68	0.50	2.07	0.50	11.2	4.87	3.64
Dissolved Nickel	µg/L	490	3.0	<3.0	3.0	<3.0	3.0	4.4	<3.0	3.7
Dissolved Selenium	µg/L	63	1.0	<1.0	1.0	<1.0	1.0	<1.0	<1.0	<1.0
Dissolved Silver	µg/L	1.5	0.20	<0.20	0.20	<0.20	0.20	<0.20	<0.20	<0.20
Dissolved Thallium	µg/L	510	0.30	<0.30	0.30	<0.30	0.30	<0.30	<0.30	<0.30
Dissolved Uranium	µg/L	420	0.50	1.10	0.50	<0.50	0.50	2.45	2.19	2.33
Dissolved Vanadium	µg/L	250	0.40	<0.40	0.40	<0.40	0.40	0.40	<0.40	0.52
Dissolved Zinc	µg/L	1100	5.0	<5.0	5.0	46.5	5.0	<5.0	8.9	6.6
Mercury	µg/L	2.8	0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02	<0.02
Chromium VI	µg/L	140	2.000	<2.000	2.000	<2.000	2.000	<2.000	<2.000	<2.000
Cyanide, Free	µg/L	66	2	<2	2	<2	2	<2	<2	<2
Dissolved Sodium	µg/L	2300000	500	706000	50	23800	1000	1630000	1620000	1620000
Chloride	µg/L	2300000	100	972000	100	17600	244	2930000	3230000	3230000
Electrical Conductivity	uS/cm	NA	2	4130	2	225	2	9760	10600	10600
pH	pH Units		NA	7.56	NA	7.43	NA	7.53	7.50	7.53

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2021-05-26

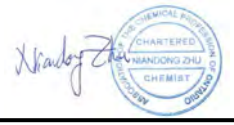
DATE REPORTED: 2021-06-03

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2522627-2522667 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:



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Exceedance Summary

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2522629	MW106	ON T3 NPGW MFT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	2300000	2930000
2522630	MW114	ON T3 NPGW MFT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	2300000	3230000
2522667	MW104	ON T3 NPGW MFT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	2300000	3230000

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Jun 03, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - BTEX (Water)															
Benzene	2520444		<0.20	<0.20	NA	< 0.20	82%	50%	140%	86%	60%	130%	94%	50%	140%
Toluene	2520444		<0.20	<0.20	NA	< 0.20	91%	50%	140%	115%	60%	130%	102%	50%	140%
Ethylbenzene	2520444		<0.10	<0.10	NA	< 0.10	95%	50%	140%	112%	60%	130%	110%	50%	140%
m & p-Xylene	2520444		<0.20	<0.20	NA	< 0.20	120%	50%	140%	117%	60%	130%	99%	50%	140%
o-Xylene	2520444		<0.10	<0.10	NA	< 0.10	92%	50%	140%	86%	60%	130%	95%	50%	140%
O. Reg. 153(511) - PHCs F1/BTEX (Water)															
Benzene	2525660		<0.20	<0.20	NA	< 0.20	119%	60%	140%	108%	60%	140%	114%	60%	140%
Toluene	2525660		<0.20	<0.20	NA	< 0.20	111%	60%	140%	103%	60%	140%	107%	60%	140%
Ethylbenzene	2525660		<0.10	<0.10	NA	< 0.10	100%	60%	140%	99%	60%	140%	109%	60%	140%
m & p-Xylene	2525660		<0.20	<0.20	NA	< 0.20	99%	60%	140%	92%	60%	140%	114%	60%	140%
o-Xylene	2525660		<0.10	<0.10	NA	< 0.10	88%	60%	140%	104%	60%	140%	111%	60%	140%
F1 (C6-C10)	2525660		<25	<25	NA	< 25	93%	60%	140%	107%	60%	140%	92%	60%	140%
O. Reg. 153(511) - PHCs F1 - F4 (Water)															
Benzene	2525660		<0.20	<0.20	NA	< 0.20	119%	60%	140%	108%	60%	140%	114%	60%	140%
Toluene	2525660		<0.20	<0.20	NA	< 0.20	111%	60%	140%	103%	60%	140%	107%	60%	140%
Ethylbenzene	2525660		<0.10	<0.10	NA	< 0.10	100%	60%	140%	99%	60%	140%	109%	60%	140%
m & p-Xylene	2525660		<0.20	<0.20	NA	< 0.20	99%	60%	140%	92%	60%	140%	114%	60%	140%
o-Xylene	2525660		<0.10	<0.10	NA	< 0.10	88%	60%	140%	104%	60%	140%	111%	60%	140%
F1 (C6 - C10)	2525660		<25	<25	NA	< 25	93%	60%	140%	107%	60%	140%	92%	60%	140%
F2 (C10 to C16)	2525654		< 100	< 100	NA	< 100	98%	60%	140%	88%	60%	140%	95%	60%	140%
F3 (C16 to C34)	2525654		< 100	< 100	NA	< 100	94%	60%	140%	89%	60%	140%	101%	60%	140%
F4 (C34 to C50)	2525654		< 100	< 100	NA	< 100	92%	60%	140%	80%	60%	140%	95%	60%	140%
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)															
F1 (C6 - C10)	2525660		<25	<25	NA	< 25	93%	60%	140%	107%	60%	140%	92%	60%	140%
O. Reg. 153(511) - VOCs (Water)															
Dichlorodifluoromethane	2520444		<0.20	<0.20	NA	< 0.20	105%	50%	140%	97%	50%	140%	106%	50%	140%
Vinyl Chloride	2520444		<0.17	<0.17	NA	< 0.17	97%	50%	140%	108%	50%	140%	98%	50%	140%
Bromomethane	2520444		<0.20	<0.20	NA	< 0.20	100%	50%	140%	99%	50%	140%	87%	50%	140%
Trichlorofluoromethane	2520444		<0.40	<0.40	NA	< 0.40	99%	50%	140%	103%	50%	140%	101%	50%	140%
Acetone	2520444		<1.0	<1.0	NA	< 1.0	92%	50%	140%	108%	50%	140%	87%	50%	140%
1,1-Dichloroethylene	2520444		<0.30	<0.30	NA	< 0.30	109%	50%	140%	109%	60%	130%	101%	50%	140%
Methylene Chloride	2520444		<0.30	<0.30	NA	< 0.30	111%	50%	140%	110%	60%	130%	90%	50%	140%
trans- 1,2-Dichloroethylene	2520444		<0.20	<0.20	NA	< 0.20	97%	50%	140%	82%	60%	130%	94%	50%	140%
Methyl tert-butyl ether	2520444		<0.20	<0.20	NA	< 0.20	99%	50%	140%	102%	60%	130%	91%	50%	140%
1,1-Dichloroethane	2520444		<0.30	<0.30	NA	< 0.30	94%	50%	140%	89%	60%	130%	89%	50%	140%
Methyl Ethyl Ketone	2520444		<1.0	<1.0	NA	< 1.0	99%	50%	140%	101%	50%	140%	98%	50%	140%
cis- 1,2-Dichloroethylene	2520444		<0.20	<0.20	NA	< 0.20	92%	50%	140%	102%	60%	130%	100%	50%	140%
Chloroform	2520444		<0.20	<0.20	NA	< 0.20	111%	50%	140%	102%	60%	130%	99%	50%	140%

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
AGAT WORK ORDER: 21Z752731
PROJECT: CO810.00
ATTENTION TO: Keith Brown
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Jun 03, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,2-Dichloroethane	2520444		<0.20	<0.20	NA	< 0.20	115%	50%	140%	105%	60%	130%	110%	50%	140%
1,1,1-Trichloroethane	2520444		<0.30	<0.30	NA	< 0.30	99%	50%	140%	107%	60%	130%	104%	50%	140%
Carbon Tetrachloride	2520444		<0.20	<0.20	NA	< 0.20	97%	50%	140%	92%	60%	130%	106%	50%	140%
Benzene	2520444		<0.20	<0.20	NA	< 0.20	82%	50%	140%	86%	60%	130%	94%	50%	140%
1,2-Dichloropropane	2520444		<0.20	<0.20	NA	< 0.20	98%	50%	140%	111%	60%	130%	116%	50%	140%
Trichloroethylene	2520444		<0.20	<0.20	NA	< 0.20	91%	50%	140%	93%	60%	130%	93%	50%	140%
Bromodichloromethane	2520444		<0.20	<0.20	NA	< 0.20	103%	50%	140%	94%	60%	130%	89%	50%	140%
Methyl Isobutyl Ketone	2520444		<1.0	<1.0	NA	< 1.0	96%	50%	140%	98%	50%	140%	104%	50%	140%
1,1,2-Trichloroethane	2520444		<0.20	<0.20	NA	< 0.20	107%	50%	140%	98%	60%	130%	97%	50%	140%
Toluene	2520444		<0.20	<0.20	NA	< 0.20	91%	50%	140%	115%	60%	130%	102%	50%	140%
Dibromochloromethane	2520444		<0.10	<0.10	NA	< 0.10	97%	50%	140%	109%	60%	130%	83%	50%	140%
Ethylene Dibromide	2520444		<0.10	<0.10	NA	< 0.10	94%	50%	140%	84%	60%	130%	96%	50%	140%
Tetrachloroethylene	2520444		<0.20	<0.20	NA	< 0.20	106%	50%	140%	95%	60%	130%	113%	50%	140%
1,1,1,2-Tetrachloroethane	2520444		<0.10	<0.10	NA	< 0.10	118%	50%	140%	96%	60%	130%	97%	50%	140%
Chlorobenzene	2520444		<0.10	<0.10	NA	< 0.10	97%	50%	140%	97%	60%	130%	101%	50%	140%
Ethylbenzene	2520444		<0.10	<0.10	NA	< 0.10	95%	50%	140%	112%	60%	130%	110%	50%	140%
m & p-Xylene	2520444		<0.20	<0.20	NA	< 0.20	120%	50%	140%	117%	60%	130%	99%	50%	140%
Bromoform	2520444		<0.10	<0.10	NA	< 0.10	93%	50%	140%	88%	60%	130%	79%	50%	140%
Styrene	2520444		<0.10	<0.10	NA	< 0.10	89%	50%	140%	90%	60%	130%	99%	50%	140%
1,1,2,2-Tetrachloroethane	2520444		<0.10	<0.10	NA	< 0.10	102%	50%	140%	85%	60%	130%	81%	50%	140%
o-Xylene	2520444		<0.10	<0.10	NA	< 0.10	92%	50%	140%	86%	60%	130%	95%	50%	140%
1,3-Dichlorobenzene	2520444		<0.10	<0.10	NA	< 0.10	109%	50%	140%	85%	60%	130%	82%	50%	140%
1,4-Dichlorobenzene	2520444		<0.10	<0.10	NA	< 0.10	109%	50%	140%	100%	60%	130%	87%	50%	140%
1,2-Dichlorobenzene	2520444		<0.10	<0.10	NA	< 0.10	103%	50%	140%	110%	60%	130%	90%	50%	140%
n-Hexane	2520444		<0.20	<0.20	NA	< 0.20	88%	50%	140%	85%	60%	130%	87%	50%	140%

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

Certified By: N Popowkolof

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
AGAT WORK ORDER: 21Z752731
PROJECT: CO810.00
ATTENTION TO: Keith Brown
SAMPLING SITE:
SAMPLED BY:

Water Analysis

RPT Date: Jun 03, 2021

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Water)															
Dissolved Antimony	2525654		<1.0	<1.0	NA	< 1.0	100%	70%	130%	105%	80%	120%	100%	70%	130%
Dissolved Arsenic	2525654		6.0	5.5	8.7%	< 1.0	84%	70%	130%	105%	80%	120%	101%	70%	130%
Dissolved Barium	2525654		87.8	87.5	0.3%	< 2.0	99%	70%	130%	105%	80%	120%	100%	70%	130%
Dissolved Beryllium	2525654		<0.50	<0.50	NA	< 0.50	98%	70%	130%	107%	80%	120%	111%	70%	130%
Dissolved Boron	2525654		135	140	3.6%	< 10.0	99%	70%	130%	105%	80%	120%	112%	70%	130%
Dissolved Cadmium	2525654		<0.20	<0.20	NA	< 0.20	101%	70%	130%	103%	80%	120%	104%	70%	130%
Dissolved Chromium	2525654		<2.0	<2.0	NA	< 2.0	100%	70%	130%	102%	80%	120%	103%	70%	130%
Dissolved Cobalt	2525654		0.51	0.86	NA	< 0.50	95%	70%	130%	105%	80%	120%	100%	70%	130%
Dissolved Copper	2525654		3.4	4.1	NA	< 1.0	99%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Lead	2525654		<0.50	<0.50	NA	< 0.50	93%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Molybdenum	2525654		8.91	9.23	3.5%	< 0.50	101%	70%	130%	110%	80%	120%	101%	70%	130%
Dissolved Nickel	2525654		<3.0	<3.0	NA	< 3.0	96%	70%	130%	108%	80%	120%	103%	70%	130%
Dissolved Selenium	2525654		3.4	<1.0	NA	< 1.0	94%	70%	130%	105%	80%	120%	100%	70%	130%
Dissolved Silver	2525654		<0.20	<0.20	NA	< 0.20	99%	70%	130%	105%	80%	120%	102%	70%	130%
Dissolved Thallium	2525654		<0.30	<0.30	NA	< 0.30	94%	70%	130%	103%	80%	120%	104%	70%	130%
Dissolved Uranium	2525654		2.84	2.92	2.8%	< 0.50	96%	70%	130%	102%	80%	120%	104%	70%	130%
Dissolved Vanadium	2525654		0.49	0.50	NA	< 0.40	94%	70%	130%	101%	80%	120%	101%	70%	130%
Dissolved Zinc	2525654		<5.0	<5.0	NA	< 5.0	99%	70%	130%	102%	80%	120%	102%	70%	130%
Mercury	2523597		<0.02	<0.02	NA	< 0.02	99%	70%	130%	97%	80%	120%	83%	70%	130%
Chromium VI	2529824		<2.000	<2.000	NA	< 2	97%	70%	130%	107%	80%	120%	108%	70%	130%
Cyanide, Free	2507342		<2	<2	NA	< 2	107%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Sodium	2518204		31400	31700	1.0%	< 50	94%	70%	130%	94%	80%	120%	97%	70%	130%
Chloride	2518211		110000	110000	0.0%	< 100	96%	70%	130%	105%	80%	120%	105%	70%	130%
Electrical Conductivity	2525086		824	829	0.6%	< 2	100%	90%	110%						
pH	2525086		7.16	7.17	0.1%	NA	101%	98%	103%						

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

Certified By:

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522626	MW109	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	SS
Toluene	03-JUN-2021	03-JUN-2021	SS
Ethylbenzene	03-JUN-2021	03-JUN-2021	SS
m & p-Xylene	03-JUN-2021	03-JUN-2021	SS
o-Xylene	03-JUN-2021	03-JUN-2021	SS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
F1 (C6 - C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	SS
F2 (C10 to C16)	31-MAY-2021	02-JUN-2021	JKJ
F3 (C16 to C34)	31-MAY-2021	02-JUN-2021	JKJ
F4 (C34 to C50)	31-MAY-2021	02-JUN-2021	JKJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	31-MAY-2021	02-JUN-2021	JKJ
Sediment			

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522627	MW111	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	31-MAY-2021	31-MAY-2021	CC
Dissolved Arsenic	31-MAY-2021	31-MAY-2021	CC
Dissolved Barium	31-MAY-2021	31-MAY-2021	CC
Dissolved Beryllium	31-MAY-2021	31-MAY-2021	CC
Dissolved Boron	31-MAY-2021	31-MAY-2021	CC
Dissolved Cadmium	31-MAY-2021	31-MAY-2021	CC
Dissolved Chromium	31-MAY-2021	31-MAY-2021	CC
Dissolved Cobalt	31-MAY-2021	31-MAY-2021	CC
Dissolved Copper	31-MAY-2021	31-MAY-2021	CC
Dissolved Lead	31-MAY-2021	31-MAY-2021	CC
Dissolved Molybdenum	31-MAY-2021	31-MAY-2021	CC
Dissolved Nickel	31-MAY-2021	31-MAY-2021	CC
Dissolved Selenium	31-MAY-2021	31-MAY-2021	CC
Dissolved Silver	31-MAY-2021	31-MAY-2021	CC
Dissolved Thallium	31-MAY-2021	31-MAY-2021	CC
Dissolved Uranium	31-MAY-2021	31-MAY-2021	CC
Dissolved Vanadium	31-MAY-2021	31-MAY-2021	CC
Dissolved Zinc	31-MAY-2021	31-MAY-2021	CC
Mercury	31-MAY-2021	31-MAY-2021	DL

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Time Markers

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522627	MW111	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Chromium VI	01-JUN-2021	01-JUN-2021	NK
Cyanide, Free	02-JUN-2021	02-JUN-2021	BG
Dissolved Sodium	02-JUN-2021	02-JUN-2021	ZK
Chloride	28-MAY-2021	28-MAY-2021	LC
Electrical Conductivity	31-MAY-2021	31-MAY-2021	ND
pH	31-MAY-2021	31-MAY-2021	ND

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Toluene-d8	03-JUN-2021	03-JUN-2021	SS
F1 (C6 - C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
F2 (C10 to C16)	31-MAY-2021	02-JUN-2021	JKJ
F3 (C16 to C34)	31-MAY-2021	02-JUN-2021	JKJ
F4 (C34 to C50)	31-MAY-2021	02-JUN-2021	JKJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	31-MAY-2021	02-JUN-2021	JKJ
Sediment			

O. Reg. 153(511) - VOCs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dichlorodifluoromethane	03-JUN-2021	03-JUN-2021	NS
Vinyl Chloride	03-JUN-2021	03-JUN-2021	NS
Bromomethane	03-JUN-2021	03-JUN-2021	NS
Trichlorofluoromethane	03-JUN-2021	03-JUN-2021	NS
Acetone	03-JUN-2021	03-JUN-2021	NS
1,1-Dichloroethylene	03-JUN-2021	03-JUN-2021	NS
Methylene Chloride	03-JUN-2021	03-JUN-2021	NS
trans- 1,2-Dichloroethylene	03-JUN-2021	03-JUN-2021	NS
Methyl tert-butyl ether	03-JUN-2021	03-JUN-2021	NS
1,1-Dichloroethane	03-JUN-2021	03-JUN-2021	NS
Methyl Ethyl Ketone	03-JUN-2021	03-JUN-2021	NS
cis- 1,2-Dichloroethylene	03-JUN-2021	03-JUN-2021	NS
Chloroform	03-JUN-2021	03-JUN-2021	NS
1,2-Dichloroethane	03-JUN-2021	03-JUN-2021	NS
1,1,1-Trichloroethane	03-JUN-2021	03-JUN-2021	NS
Carbon Tetrachloride	03-JUN-2021	03-JUN-2021	NS
Benzene	03-JUN-2021	03-JUN-2021	NS
1,2-Dichloropropane	03-JUN-2021	03-JUN-2021	NS

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522627	MW111	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - VOCs (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Trichloroethylene	03-JUN-2021	03-JUN-2021	NS
Bromodichloromethane	03-JUN-2021	03-JUN-2021	NS
Methyl Isobutyl Ketone	03-JUN-2021	03-JUN-2021	NS
1,1,2-Trichloroethane	03-JUN-2021	03-JUN-2021	NS
Toluene	03-JUN-2021	03-JUN-2021	NS
Dibromochloromethane	03-JUN-2021	03-JUN-2021	NS
Ethylene Dibromide	03-JUN-2021	03-JUN-2021	NS
Tetrachloroethylene	03-JUN-2021	03-JUN-2021	NS
1,1,1,2-Tetrachloroethane	03-JUN-2021	03-JUN-2021	NS
Chlorobenzene	03-JUN-2021	03-JUN-2021	NS
Ethylbenzene	03-JUN-2021	03-JUN-2021	NS
m & p-Xylene	03-JUN-2021	03-JUN-2021	NS
Bromoform	03-JUN-2021	03-JUN-2021	NS
Styrene	03-JUN-2021	03-JUN-2021	NS
1,1,2,2-Tetrachloroethane	03-JUN-2021	03-JUN-2021	NS
o-Xylene	03-JUN-2021	03-JUN-2021	NS
1,3-Dichlorobenzene	03-JUN-2021	03-JUN-2021	NS
1,4-Dichlorobenzene	03-JUN-2021	03-JUN-2021	NS
1,2-Dichlorobenzene	03-JUN-2021	03-JUN-2021	NS
1,3-Dichloropropene	03-JUN-2021	03-JUN-2021	NS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	NS
n-Hexane	03-JUN-2021	03-JUN-2021	NS
Toluene-d8	03-JUN-2021	03-JUN-2021	NS
4-Bromofluorobenzene	03-JUN-2021	03-JUN-2021	NS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522628	MW105	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	31-MAY-2021	31-MAY-2021	CC
Dissolved Arsenic	31-MAY-2021	31-MAY-2021	CC
Dissolved Barium	31-MAY-2021	31-MAY-2021	CC
Dissolved Beryllium	31-MAY-2021	31-MAY-2021	CC
Dissolved Boron	31-MAY-2021	31-MAY-2021	CC
Dissolved Cadmium	31-MAY-2021	31-MAY-2021	CC
Dissolved Chromium	31-MAY-2021	31-MAY-2021	CC
Dissolved Cobalt	31-MAY-2021	31-MAY-2021	CC
Dissolved Copper	31-MAY-2021	31-MAY-2021	CC
Dissolved Lead	31-MAY-2021	31-MAY-2021	CC

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522628	MW105	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Molybdenum	31-MAY-2021	31-MAY-2021	CC
Dissolved Nickel	31-MAY-2021	31-MAY-2021	CC
Dissolved Selenium	31-MAY-2021	31-MAY-2021	CC
Dissolved Silver	31-MAY-2021	31-MAY-2021	CC
Dissolved Thallium	31-MAY-2021	31-MAY-2021	CC
Dissolved Uranium	31-MAY-2021	31-MAY-2021	CC
Dissolved Vanadium	31-MAY-2021	31-MAY-2021	CC
Dissolved Zinc	31-MAY-2021	31-MAY-2021	CC
Mercury	31-MAY-2021	31-MAY-2021	DL
Chromium VI	01-JUN-2021	01-JUN-2021	NK
Cyanide, Free	02-JUN-2021	02-JUN-2021	BG
Dissolved Sodium	02-JUN-2021	02-JUN-2021	ZK
Chloride	28-MAY-2021	28-MAY-2021	LC
Electrical Conductivity	31-MAY-2021	31-MAY-2021	ND
pH	31-MAY-2021	31-MAY-2021	ND

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	SS
Toluene	03-JUN-2021	03-JUN-2021	SS
Ethylbenzene	03-JUN-2021	03-JUN-2021	SS
m & p-Xylene	03-JUN-2021	03-JUN-2021	SS
o-Xylene	03-JUN-2021	03-JUN-2021	SS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
F1 (C6 - C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	SS
F2 (C10 to C16)	31-MAY-2021	02-JUN-2021	JKJ
F3 (C16 to C34)	31-MAY-2021	02-JUN-2021	JKJ
F4 (C34 to C50)	31-MAY-2021	02-JUN-2021	JKJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	31-MAY-2021	02-JUN-2021	JKJ
Sediment			

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522629	MW106	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	31-MAY-2021	31-MAY-2021	CC

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Time Markers

AGAT WORK ORDER: 21Z752731
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522629	MW106	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Arsenic	31-MAY-2021	31-MAY-2021	CC
Dissolved Barium	31-MAY-2021	31-MAY-2021	CC
Dissolved Beryllium	31-MAY-2021	31-MAY-2021	CC
Dissolved Boron	31-MAY-2021	31-MAY-2021	CC
Dissolved Cadmium	31-MAY-2021	31-MAY-2021	CC
Dissolved Chromium	31-MAY-2021	31-MAY-2021	CC
Dissolved Cobalt	31-MAY-2021	31-MAY-2021	CC
Dissolved Copper	31-MAY-2021	31-MAY-2021	CC
Dissolved Lead	31-MAY-2021	31-MAY-2021	CC
Dissolved Molybdenum	31-MAY-2021	31-MAY-2021	CC
Dissolved Nickel	31-MAY-2021	31-MAY-2021	CC
Dissolved Selenium	31-MAY-2021	31-MAY-2021	CC
Dissolved Silver	31-MAY-2021	31-MAY-2021	CC
Dissolved Thallium	31-MAY-2021	31-MAY-2021	CC
Dissolved Uranium	31-MAY-2021	31-MAY-2021	CC
Dissolved Vanadium	31-MAY-2021	31-MAY-2021	CC
Dissolved Zinc	31-MAY-2021	31-MAY-2021	CC
Mercury	31-MAY-2021	31-MAY-2021	DL
Chromium VI	01-JUN-2021	01-JUN-2021	NK
Cyanide, Free	02-JUN-2021	02-JUN-2021	BG
Dissolved Sodium	02-JUN-2021	02-JUN-2021	ZK
Chloride	28-MAY-2021	28-MAY-2021	LC
Electrical Conductivity	31-MAY-2021	31-MAY-2021	ND
pH	31-MAY-2021	31-MAY-2021	ND

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	SS
Toluene	03-JUN-2021	03-JUN-2021	SS
Ethylbenzene	03-JUN-2021	03-JUN-2021	SS
m & p-Xylene	03-JUN-2021	03-JUN-2021	SS
o-Xylene	03-JUN-2021	03-JUN-2021	SS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
F1 (C6 - C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	SS
F2 (C10 to C16)	31-MAY-2021	02-JUN-2021	JKJ
F3 (C16 to C34)	31-MAY-2021	02-JUN-2021	JKJ
F4 (C34 to C50)	31-MAY-2021	02-JUN-2021	JKJ

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522629	MW106	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Gravimetric Heavy Hydrocarbons			
Terphenyl	31-MAY-2021	02-JUN-2021	JKJ
Sediment			

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522630	MW114	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	31-MAY-2021	31-MAY-2021	CC
Dissolved Arsenic	31-MAY-2021	31-MAY-2021	CC
Dissolved Barium	31-MAY-2021	31-MAY-2021	CC
Dissolved Beryllium	31-MAY-2021	31-MAY-2021	CC
Dissolved Boron	31-MAY-2021	31-MAY-2021	CC
Dissolved Cadmium	31-MAY-2021	31-MAY-2021	CC
Dissolved Chromium	31-MAY-2021	31-MAY-2021	CC
Dissolved Cobalt	31-MAY-2021	31-MAY-2021	CC
Dissolved Copper	31-MAY-2021	31-MAY-2021	CC
Dissolved Lead	31-MAY-2021	31-MAY-2021	CC
Dissolved Molybdenum	31-MAY-2021	31-MAY-2021	CC
Dissolved Nickel	31-MAY-2021	31-MAY-2021	CC
Dissolved Selenium	31-MAY-2021	31-MAY-2021	CC
Dissolved Silver	31-MAY-2021	31-MAY-2021	CC
Dissolved Thallium	31-MAY-2021	31-MAY-2021	CC
Dissolved Uranium	31-MAY-2021	31-MAY-2021	CC
Dissolved Vanadium	31-MAY-2021	31-MAY-2021	CC
Dissolved Zinc	31-MAY-2021	31-MAY-2021	CC
Mercury	31-MAY-2021	31-MAY-2021	DL
Chromium VI	01-JUN-2021	01-JUN-2021	NK
Cyanide, Free	02-JUN-2021	02-JUN-2021	BG
Dissolved Sodium	02-JUN-2021	02-JUN-2021	ZK
Chloride	28-MAY-2021	28-MAY-2021	LC
Electrical Conductivity	31-MAY-2021	31-MAY-2021	ND
pH	31-MAY-2021	31-MAY-2021	ND

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	SS
Toluene	03-JUN-2021	03-JUN-2021	SS
Ethylbenzene	03-JUN-2021	03-JUN-2021	SS

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AGAT WORK ORDER: 21Z752731
PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522630	MW114	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
m & p-Xylene	03-JUN-2021	03-JUN-2021	SS
o-Xylene	03-JUN-2021	03-JUN-2021	SS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
F1 (C6 - C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	SS
F2 (C10 to C16)	31-MAY-2021	02-JUN-2021	JKJ
F3 (C16 to C34)	31-MAY-2021	02-JUN-2021	JKJ
F4 (C34 to C50)	31-MAY-2021	02-JUN-2021	JKJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	31-MAY-2021	02-JUN-2021	JKJ
Sediment			

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522667	MW104	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Dissolved Antimony	31-MAY-2021	31-MAY-2021	CC
Dissolved Arsenic	31-MAY-2021	31-MAY-2021	CC
Dissolved Barium	31-MAY-2021	31-MAY-2021	CC
Dissolved Beryllium	31-MAY-2021	31-MAY-2021	CC
Dissolved Boron	31-MAY-2021	31-MAY-2021	CC
Dissolved Cadmium	31-MAY-2021	31-MAY-2021	CC
Dissolved Chromium	31-MAY-2021	31-MAY-2021	CC
Dissolved Cobalt	31-MAY-2021	31-MAY-2021	CC
Dissolved Copper	31-MAY-2021	31-MAY-2021	CC
Dissolved Lead	31-MAY-2021	31-MAY-2021	CC
Dissolved Molybdenum	31-MAY-2021	31-MAY-2021	CC
Dissolved Nickel	31-MAY-2021	31-MAY-2021	CC
Dissolved Selenium	31-MAY-2021	31-MAY-2021	CC
Dissolved Silver	31-MAY-2021	31-MAY-2021	CC
Dissolved Thallium	31-MAY-2021	31-MAY-2021	CC
Dissolved Uranium	31-MAY-2021	31-MAY-2021	CC
Dissolved Vanadium	31-MAY-2021	31-MAY-2021	CC
Dissolved Zinc	31-MAY-2021	31-MAY-2021	CC
Mercury	31-MAY-2021	31-MAY-2021	DL
Chromium VI	01-JUN-2021	01-JUN-2021	NK
Cyanide, Free	02-JUN-2021	02-JUN-2021	BG
Dissolved Sodium	02-JUN-2021	02-JUN-2021	ZK

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522667	MW104	Water	25-MAY-2021	26-MAY-2021

O. Reg. 153(511) - Metals & Inorganics (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Chloride	28-MAY-2021	28-MAY-2021	LC
Electrical Conductivity	31-MAY-2021	31-MAY-2021	ND
pH	31-MAY-2021	31-MAY-2021	ND

O. Reg. 153(511) - PHCs F1 - F4 (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	SS
Toluene	03-JUN-2021	03-JUN-2021	SS
Ethylbenzene	03-JUN-2021	03-JUN-2021	SS
m & p-Xylene	03-JUN-2021	03-JUN-2021	SS
o-Xylene	03-JUN-2021	03-JUN-2021	SS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
F1 (C6 - C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	SS
F2 (C10 to C16)	31-MAY-2021	02-JUN-2021	JKJ
F3 (C16 to C34)	31-MAY-2021	02-JUN-2021	JKJ
F4 (C34 to C50)	31-MAY-2021	02-JUN-2021	JKJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	31-MAY-2021	02-JUN-2021	JKJ
Sediment			

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522675	Trip Spike	Water		26-MAY-2021

O. Reg. 153(511) - BTEX (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	NS
Toluene	03-JUN-2021	03-JUN-2021	NS
Ethylbenzene	03-JUN-2021	03-JUN-2021	NS
m & p-Xylene	03-JUN-2021	03-JUN-2021	NS
o-Xylene	03-JUN-2021	03-JUN-2021	NS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	NS
4-Bromofluorobenzene	03-JUN-2021	03-JUN-2021	NS

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522676	Trip Blank	Water		26-MAY-2021

O. Reg. 153(511) - PHCs F1/BTEX (Water)

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AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Keith Brown

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
2522676	Trip Blank	Water		26-MAY-2021

O. Reg. 153(511) - PHCs F1/BTEX (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-JUN-2021	03-JUN-2021	SS
Toluene	03-JUN-2021	03-JUN-2021	SS
Ethylbenzene	03-JUN-2021	03-JUN-2021	SS
m & p-Xylene	03-JUN-2021	03-JUN-2021	SS
o-Xylene	03-JUN-2021	03-JUN-2021	SS
Xylenes (Total)	03-JUN-2021	03-JUN-2021	SYS
F1 (C6-C10)	03-JUN-2021	03-JUN-2021	SS
F1 (C6 to C10) minus BTEX	03-JUN-2021	03-JUN-2021	SYS
Toluene-d8	03-JUN-2021	03-JUN-2021	SS

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Benzene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F1 (C6 - C10)	VOL-91- 5010	modified from MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC E3421	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC E3421	GC / FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC E3421	GC / FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC E3421	GC / FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC E3421	BALANCE
Terphenyl	VOL-91-5009	modified from MOE PHC E3421	GC/FID
Sediment			
Benzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Toluene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F1 (C6 - C10)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
Toluene-d8	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Benzene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

ATTENTION TO: Keith Brown

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
F1 (C6-C10)	VOL-91-5010	modified from MOE E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE E3421	(P&T)GC/FID
Toluene-d8	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

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

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 21Z752731

PROJECT: CO810.00

ATTENTION TO: Keith Brown

SAMPLING SITE:

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Dissolved Antimony	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Beryllium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cobalt	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Copper	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Molybdenum	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Selenium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Silver	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Thallium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Uranium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Vanadium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Chromium VI	INOR-93-6034	modified from SM 3500-CR B	LACHAT FIA
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Dissolved Sodium	MET-93-6105	modified from EPA 6010D	ICP/OES
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE

AGAT Laboratories (LTG(ice) – 7.4 | 8.4 | 8 6 ILG BIK

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

Laboratory Use Only

Work Order #: 21Z752731

Cooler Quantity: One - ice

Arrival Temperatures: 2.5 | 2.5 | 2.7

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes:

Chain of Custody Record

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

Report Information:

Company: Terrapex Environmental Ltd.
Contact: Keith Brown
Address: 1-20 Gurdwara Rd
Ottawa ON K2E 8B3
Phone: 613-745-6471 Fax:
Reports to be sent to:
1. Email: k.brown@terrapex.com
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04 — Table 3 (Indicate One): ☐Ind/Com ☒Res/Park ☐Agriculture
Soil Texture (Check One): ☐Coarse ☒Fine

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

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

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

Report Guideline on Certificate of Analysis ☒ Yes ☐ No

Turnaround Time (TAT) Required:

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

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: CO810.00
Site Location: 1186, 1188, 1194, 1196 Wellington St W, Ottawa, ON
Sampled By: EB
AGAT ID #: PO:

Please note: If quotation number is not provided, client will be billed full price for analysis.

Sample Matrix Legend

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

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Terrapex Environmental Ltd
Contact: Accounts payable
Address:
Email:

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	Total PCBs ☐ Aroclor	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	BTEX	BTEX-F1						Potentially Hazardous or High Concentration (Y/N)
MW109	May 25/21	11:25 AM	5	GW		N			X															
MW111		13:15 PM	~~8~~ 14	GW		Y	X		X			X												
~~[illegible]~~ MW105		13:50 PM	11	GW		Y	X		X															
~~[illegible]~~ MW106		14:40 PM	11	GW		Y	X		X															
MW114		15:30 PM	11	GW		Y	X		X															
MW104		15:30 PM	11	GW		Y	X		X															
Trip spike		— AM/PM	3	—		N											X							
Trip Blank		— AM/PM	3	—		N												X						
		AM/PM																						
		AM/PM																						
		AM/PM																						

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Eric Bamstra [signature]	~~[illegible]~~		Robert Delett [signature]	21-05-26	13h50
Samples Relinquished By (Print Name and Sign):	May 26/21	6:30	SIMRAN [signature]	May 28/21	9:50 am
Samples Relinquished By (Print Name and Sign): UPS to [illegible]	21-5-26	16:00	Samples Received By (Print Name and Sign):		

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Nº: T 119213

Document ID: DIV-78-1511.020

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Date Issued: December 9, 2020