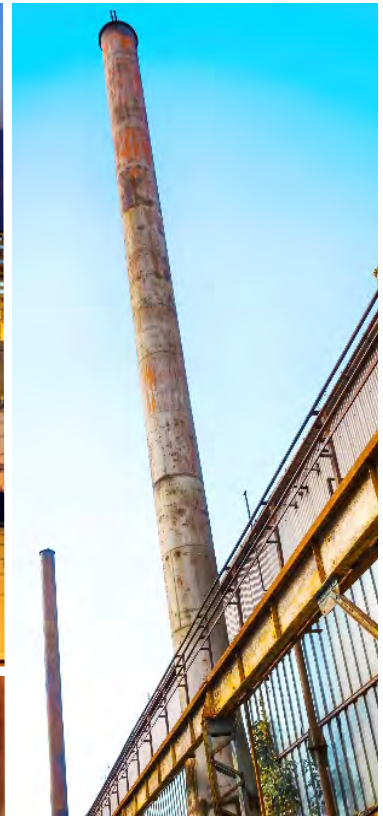




Phase One Environmental Site Assessment

17, 19 & 23 Robinson Avenue
Ottawa, Ontario

Robinson Village I Limited
Partnership





Executive Summary

GHD (Consultant) was retained by Robinson Village I Limited Partnership (RVLP or Client) represented by Mr. Daniel Boulanger, to complete a Phase One Environmental Site Assessment (Phase One ESA) in general accordance with the O. Reg. 153/04 Phase One ESA format for the purposes of site planning submissions to the City of Ottawa for the residential property located at 17 & 19 Robinson Avenue in Ottawa, Ontario (Site or Phase One Property). The client name and land owner for this development is [Robinson Village I Limited Partnership](#) represented by Mr. Daniel Boulanger.

The Phase One ESA is being conducted for environmental due diligence as part of the local municipal planning department requirement associated with redevelopment of the Site. The intended future use of the Site is residential and is currently used for residential purposes and therefore does not prompt a Record of Site Condition (RSC) filing for a change in land use.

According to the historical research, the earliest developed use of the Site is estimated to be 1889 based on ownership details from the land title search, and listings from the City directories. The Site was occupied for residential purposes to the current day.

Based on the historical research and known information of the general area of the Site, there was two on-Site potentially contaminating activities (PCAs); the storage of heating oil in ASTs, and the suspected historical placement of fill material during redevelopment of the adjacent railway site to the north with the present day parkland. These PCAs are considered to represent areas of potential environmental concern (APEC) for the Site.

Seventeen PCAs were identified on neighbouring properties in the Phase One Study Area as part of this assessment. None of the identified off-Site PCAs are considered to represent APECs for the subject Site.

Following the completion of the Phase One ESA for the subject Property, it is our opinion that a soil management plan is required for the Site as part of the redevelopment.



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1. Introduction

GHD (Consultant) was retained by TC United Group (TCU or Client), represented by Mr. Daniel Boulanger, to complete a Phase One Environmental Site Assessment (Phase One ESA) in general accordance with the O. Reg. 153/04 Phase One ESA format for the residential property located at 17, 19, and 23 Robinson Avenue in Ottawa, Ontario (Site or Phase One Property).

The Property is located at Civic Nos. 17, 19 and 23 Robinson Avenue in Ottawa, Ontario (Site or Property) and is approximately 1164 m² (0.12 hectares) in area. The Site has Latitude and Longitude coordinates of 45° 25' 5.76" N, 75° 40' 3.09" W and UTM coordinates of zone 18T, 447773 m E, 5029633 m N). The Site has a municipal zoning designation of R5N (2053) S312 "Residential Fifth Density Zone".

The Site is located at 17, 19 and 23 Robinson Avenue in Ottawa, Ontario. The Site is legally described as Lots 43 and 45 and Part of Lot 190 on Plan 190 and Part 2 on Registered Plan 4R7177 in the City of Ottawa in the Province of Ontario. The property identification numbers associated with the Site are 042070357 and 042070609 for a narrow strip forming the northwest limit (rear) of the Site. The location of the Site within the City of Ottawa is shown on Drawing T021226-E1-1 Site Location Plan, in the Figures Section following the text of this report. In all aspects of this report the Phase One property is referred to as the Site or Property.

The subject Property has been owned and/or operated as residential purposes since at least 1889 and was most recently observed to be used for residential purposes.

The area is serviced by municipal water and sewer services and is considered to be in a non-potable area. Electrical and natural gas services are available from private utility companies.

The Site is currently owned by [Robinson Village I Limited Partnership](#) represented by Mr. Daniel Boulanger. The Client is represented by Mr. Daniel Boulanger. [Robinson Village I Limited Partnership](#) has a corporate address of 800 Industrial Avenue, Unit 9, Ottawa, Ontario, K1G 4B8.

2. Scope of Investigation

The scope of the investigation was detailed in the proposal dated July 24, 2018 (Ref: 11177757Boulanger-1). The project was approved by Mr. Daniel Boulanger. The Phase One ESA is being conducted for environmental due diligence as part of the local municipal planning department requirement associated with redevelopment of the Site.

This Phase One ESA was conducted for the purposes of a submission of re-development planning for the City of Ottawa which requests that these submissions generally follow the guidelines set out in Ontario Regulation 153/04, as amended 2011 (O. Reg. 153/04), Records of Site Condition, Part XV.1 of the Environmental Protection Act.

The general objectives of this Phase One ESA were:

- To develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One study area.



- To determine the need for a Phase Two Environmental Site Assessment.
- To provide a basis for carrying out any Phase Two Environmental Site Assessment.
- This Phase One ESA included the following components:
 - Historical records review
 - Interviews
 - Site reconnaissance
- An evaluation of the information gathered from the records review, interviews and site reconnaissance.

3. Records Review

NOTE: Due to change in the name of the Ontario government agencies effective July 1, 2018 all references to Ministry of Environment or Ministry of Environment and Climate change are referring to the new name of Ministry of Environment, Conservation and Parks (MECP).

3.1 General

3.1.1 Phase One Study Area Determination

The Site is located within an urban area, which is predominantly residential use to the northeast, southeast, and southwest, with a municipal park (Robinson Field) adjacent to the northwest limit of the Property. The Site is located within the Sandy Hill Neighbourhood of the City of Ottawa, Ontario. The Site is immediately surrounded by a municipal park (Robinson Park) to the northwest, residential properties to the northeast and southwest, and a municipal street (Robinson Avenue) to the southeast. The historical records and use as well as present operations of properties located within 250 m of the subject land were considered from an environmental perspective for the purposes of this report. Based upon our review of the records and data collected during this mandate, properties located outside of the Phase One Study Area (250 m radius from property boundaries) were not considered to have the potential to have impacted the subject land.

3.1.2 First Developed Use Determination

A land title search indicated that the Site was owned by individuals from at least 1889 to between 1986 and 1988, and Corporations to present. 954194 Ontario Inc. was identified as an owner of the land in 2016 and the ownership changed to the current owner in 2018, [Robinson Village I Limited Partnership](#).

Aerial photographs indicate the Site was occupied by a residential dwelling in 1928.

Fire Insurance plans show the Site occupied by residential dwellings in 1902.

Based on the information reviewed at the time of this Phase One ESA, the first development on the Site is considered to have occurred in 1889 and was for residential use.



3.1.3 Fire Insurance Plans

Fire insurance plans (FIP) assist in the identification of historical land use and commonly indicate building layouts, detached structures, Site improvements, facility operations, names of tenants, the existence and location of boiler rooms, aboveground and underground storage tanks and adjoining property uses.

The 1902 FIP (Sheet 163) identifies the following:

- The Site occupied by three residential buildings identified as 17, 19, and 23 Robinson Avenue. Adjacent buildings to the west and east are also residential land use.
- Adjacent to the northwest of the Site is the Canadian Northern Ontario Railway, followed by a turn table, and the engine house:
 - The railway is a PCA (Item 46 - Rail Yards, Tracks and Spurs)
 - The engine house is a PCA (Item 27 - Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles)
- Approximately 100 m south of the Site is the Canadian Pacific Railway:
 - The railway is a PCA (Item 46 - Rail Yards, Tracks and Spurs)
- Approximately 130 m south of the Site is the Grand Trunk Railway:
 - The railway is a PCA (Item 46 - Rail Yards, Tracks and Spurs)
- Fifteen metres immediately south of the Site 46 Robinson Avenue is occupied by a Machine Shop:
 - The Machine Shop is a PCA (Item 34 – Metal fabrication)
- The location presently occupied by 29 Hurdman Road is occupied by the McCauliffe-Davis Lumber Co., with buildings identified as 103 Hurdman Bridge Road

The 1956 Fire Insurance Plan identifies the following:

- The Site occupied by three residential buildings identified as 17, 19, and 23 Robinson Avenue. Adjacent buildings to the west and east are also residential land use.
- Immediately opposite the Site 46 Robinson Avenue is occupied by an automotive garage:
 - The automotive garage is a PCA (Item 27 - Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles)
- Adjacent to the northwest of the Site is the Canadian Northern Ontario Railway, followed by a turn table, and the engine house:
 - The railway is a PCA (Item 46 - Rail Yards, Tracks and Spurs)
 - The engine house is a PCA (Item 27 - Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles)



- Currie Gas Works / Currie Tar Products is located at 170 Lees Avenue, with a tank identified as 'Tar' in the northwest corner of the Site:
 - A coal tar distillery is a PCA (Item 8 – chemical manufacturing, Processing, and Bulk Storage)
- Ottawa Gas Co. (Interprovincial Utilities Ltd.) is located at 175 Lees Avenue, 375 m to southwest:
 - A coal gasification plant is a PCA (Item 9 – Coal Gasification)
- Approximately 100 m south of the Site is the Canadian Pacific Railway:
 - The railway is a PCA (Item 46 - Rail Yards, Tracks and Spurs)
- Approximately 130 m south of the Site is the Canadian National (Formerly Grand Trunk) Railway:
 - The railway is a PCA (Item 46 - Rail Yards, Tracks and Spurs)
- The location presently occupied by 85 Robinson Road is occupied by a stockyard / slaughterhouse
- The location presently occupied by 29 Hurdman Road is occupied by the Harry Hayley & Sons Ltd Artificial Stone and Concrete Block Works, which includes a large (30 – 40 m diameter) cinder pile in the northeast corner, and a Gasoline service station in the northwest corner (on Lees Avenue – Hurdman Road intersection):
 - Fuel tanks are a PCA (Item 28 - Gasoline and Associated Products Storage in Fixed Tanks)

The aforementioned PCAs are summarized in Section 7.2.2 of this report. Given their locations and orientations with respect to the Site and previous analytical testing of soil and groundwater at the Site, only the adjacent railway to the north is considered to represent an areas of potential environmental concern (APECs) for the Site, and are summarized in Section 7.3 of this report.

3.1.4 Chain of Title

A request for an environmental chain of title search was submitted to Read Abstract Limited on behalf of GHD. The Chain of title indicated that the Phase One Property is legally described as Lot 43 and 45 and Part of Lot 47, and Part Lane, Plan 190, North Robinson, in the City of Ottawa. The results of the Title search and deviations in ownership of the Site are summarized in Table 4.1 below. A complete summary of the results of the search are included in Appendix B.

Table 3.1 Summary of Chain of Title

Lot	Year	Property Ownership
Entire Site		
Plan 190	1899	T.W.McDermott and R.P.Robinson
Portions and Site Under Separate Ownership		
Lot 43	1903 to 1908	Mary McNiel
	1908 to 1910	William Joynt
	1910 to 1911	Robert Scarff



Table 3.1 Summary of Chain of Title

Lot	Year	Property Ownership
	1911 to 1941	George Mahon
	1941 to 1986	George and Mary Mahon
	1986 to 2003	Iberica Development Corp.
Lot 45	1903 to 1919	Onesime Nault
	1919 to 1938	Frederick Mahon
	1938 to 1985	George and Mary Mahon
	1985 to 1988	Enrique Iglesias
	1988 to 2003	Iberica Development Corp.
Lot 47	1900 to 1908	John Ogilvie
	1908 to 1924	Benjamin Bigford
	1924 to 1958	Ida Bigford
	1958 to 1980	Richard Goodwin
	1980 to 1986	James and Nancy Hogan
	1986 to 2003	Iberica Development Corp.
Part Lane to Lots 43, 45, 47	1989 to 2003	Iberica Development Corp.
Entire Site		
All	2003 to 2016	954194 Ontario Inc. and Iglesias Investments Ltd.
	2016 to 2018	954194 Ontario Inc.
	2018 to present	Robinson Village I Limited Partnership

The Phase One Property changed ownership between individuals from at least 1889 to between 1986 and 1988, and Corporations to present. The current registered owner of the Site is [Robinson Village I Limited Partnership](#). There was no evidence suggesting potentially contaminating activities or areas of potential environmental concern with the subject Site identified through the review of the title of Site ownership.

3.1.5 Environmental Reports

The following environmental reports were reviewed prior to conducting this Phase One ESA:

“Limited Phase II Environmental Site Assessment, 17-23 Robinson Avenue, Ottawa, Ontario” Reference No. T020465-E1, prepared by Inspec-Sol Inc., dated June 4, 2008 (2008 ESA).

- The Site contained three residential two-storey buildings located at the front of the lot (i.e. the Robinson Avenue side of the lot). Each building had an open backyard ringed with older growth trees. A private garage/shed building was located at the rear of the driveway to 23 Robinson Avenue.
- The purpose of the Limited Phase II ESA was to investigate, through an intrusive investigation, the potential presence of contaminated soil and groundwater on the Site related to fuel oil usage on the properties, which may have caused environmental impact with the Site, or the immediate vicinity of the Site. It was understood that the client's lending institution did not request a Phase I ESA and only requested a limited Phase II due to presence of a fuel oil AST for heating.



At the time of the Limited Phase II ESA, there was only one current Fuel Oil AST located at 23 Robinson Avenue.

- Three boreholes were placed on the Site in 2008, two of which were instrumented with groundwater monitoring wells. None of the analysed soil and groundwater samples had concentrations of petroleum hydrocarbons above the laboratory method detection limits; therefore the analytical results were in compliance with the MOE criteria for the Site.

“Phase Two Environmental Site Assessment, Residential Properties, 17, 19, and 23 Robinson Avenue, Ottawa, Ontario” Reference Number T021226-E1, prepared by Inspec-Sol Inc., dated November 14, 2013 (2013-ESA).

- A historical review was conducted identified the following:

PCAs

- On-Site | A heating oil aboveground storage tank (AST) was identified to the west of the 23 Robinson Avenue dwelling. Former ASTs were suspected to have been associated with the dwellings addressed 17 and 19 Robinson Avenue.
- On-Site | The potential placement of impacted fill material, used to grade the Site.
- Off-Site | Former railway line and rail storage facilities were located approximately 10 m north and 100 m northwest of the Site, respectively.
- Off-Site | A former automotive repair garage was located approximately 60 m south of the Site.
- Off-Site | A former retail fuel outlet was located approximately 95 m south-southeast of the Site.
- Off-Site | The former Lees Avenue coal gasification plant was located approximately 150 m southwest of the Site.

APECs

- Surficial soil contamination associated with a former railway line to the north of the Site, including the potential placement of fill material.
- Potential soil and groundwater contamination from the former railway and rail storage facilities to the north and northwest of the Site.
- Potential soil and groundwater contamination from the former Lees Avenue coal tar gasification plant to the west of the Site.
- Potential soil and groundwater contamination from the former automotive service garage located to the south of the Site.

CPCs

- Petroleum Hydrocarbons ranges F1-F4 (PHCs).
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Metals.



- Volatile Organic Compounds (VOCs).
- The generic O. Reg. 153/04 Table 3 (residential) criteria were considered the applicable Site comparison.
- The investigation involved the advancement of four new boreholes, all of which were completed with groundwater monitoring wells with screens set within the overburden glacial till, on October 8, 2013:
 - The investigation identified four subsurface soil types within the depth investigated, namely:
 - Topsoil;
 - Sandy Clay with Gravel (fill);
 - Sandy Silt; and,
 - Till (native).
 - The overburden groundwater on the Site flows to the northeast. Based on the recorded groundwater elevations in Table B above, and a lateral separation distance of approximately 39 m between BH7 (MW) and BH5 (MW), the horizontal hydraulic gradient is approximately 0.0205 m/m. The hydraulic gradient is expected to vary with seasonal and weather conditions. Based on differences in the geology observed on the Site, it appears that the overburden aquifer is unconfined.
- Soil and groundwater samples were submitted for analysis:
 - Eight soil samples, including two duplicate samples, were submitted for laboratory analysis of a combination of metals, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (PHCs), volatile organic compounds (VOC) and pH parameters. Analysis of the overburden soil revealed lead and benzo(a)pyrene exceedances of the O. Reg. 153/04 criteria in one of the analysed soil samples from the northeast portion of the Site. All other soil parameters were in compliance with the O. Reg. 153/04 criteria. Accordingly, the one sample is not considered representative of Site conditions. It is suspected that an area of contaminated fill is present on the northeast portion of the Site.
 - Seven groundwater samples, including a duplicate sample, were submitted for laboratory analysis of metals, PAHs, PHCs, VOCs and pH. All analysed groundwater sample results were in compliance with the O. Reg. 153/04 Table 3 criteria.
- The report concluded that:
 - "It is suspected that an area of contaminated fill is present on the northeast portion of the Site."
 - "A soil management program will be developed with the client in order to manage and dispose of the contaminated soil at the time of development."
 - "There are Table 3 exceedances in soil. The site may be considered for a Risk Assessment, however, it is recommended that the generic remediation approach be conducted during Site redevelopment to remove and dispose of any contaminated soil on the Site."



- “All of final analysed groundwater sample results were in compliance with the O. Reg. 153/04 Table 3 criteria.”

3.2 Environmental Source Information

The following environmental source information was reviewed as part of this assessment.

National Pollutant Release Inventory (Online), Environment Canada

The database titled National Pollutant Release Inventory (NPRI) provides the results and data with respect to releases of pollutants into the natural environment as a result of industrial processes. Data is collected and updated online annually. A search of the NPRI was conducted through a subcontracted Ecolog Environmental ERIS search. The Site is not listed in the NPRI for any of the recorded years (1993 - 2014). No properties within 250 m of the Site are listed in the NPRI. A copy of the Ecolog ERIS Database Summary is included in Appendix C.

National PCB Inventory

The National Inventory of PCB Storage Sites, January 1993 contains information on PCB Storage Sites in the Province of Ontario, which is collected under Ontario Regulation 362/90 by the district and regional offices of the MECP. The document is an inventory of known private and provincially-operated PCB storage sites as of January 1993. The document does not include Federal PCB storage sites, which are under Environment Canada jurisdiction. The Site was not listed in the Ontario Inventory of PCB Storage Sites report. No properties within 250 m of the Site were identified in the Ontario Inventory of PCB Storage Sites report. The PCB search was confirmed by the results of the subcontracted Ecolog Environmental ERIS search.

Environmental Approvals, Certificates, and Instruments

Requests were submitted to the Ministry of Environment and Conservation and Parks (MECP) under the Freedom of Information and Protection of Privacy Act relating to the Site. The requested information included environmental approvals, certificates and instruments maintained by the Ministry for the Site. The MECP responses dated August 22, 2018, to the inquiries indicated that no records were located responsive to the request. A copy of the MECP FOI response is included in Appendix D.

The subcontracted Ecolog Environmental ERIS search identified the following, which were suggestive of PCAs:

- 23 Hurdman Road obtained both a Certificate of Approval (Air) and an Environmental Compliance Approval (Air) in 2003. The approvals were issued to 'Kellys Auto Body (1984) Ltd':
 - An autobody shop is a PCA (Item 10 – Commercial Autobody Shops)

Inventory of Coal Gasification Plant Waste Sites in Ontario, April 1987

The report titled Inventory of Coal Gasification Plant Waste Sites in Ontario, April 1987 provides an inventory and preliminary assessment of the potential environmental impacts of 41 known manufactured gas plant waste sites in the Province of Ontario as of April 1987. Industrial facilities that utilized coal carbonization for manufacturing of gas, coke, ammonia, and other products were address in this study.



- The Site was not listed in the Inventory of Coal Gasification Plant Waste Sites.
- Lees Avenue Gas Works | 375 m to the southwest, 175 Lees Avenue is located between Lees Avenue and Highway 417, and between Lees Avenue ramps and Lees Avenue overpass. The Ottawa Gas Company operated the three Hectare Site under different names (Lees Avenue Gas Works Ottawa Gas Co, Ottawa Heat Light and Power Co, Interprovincial Utilities Ltd, Consumers Gas Co) between 1920s to 1957.

In 1981 - 1986, the Site was developed as underground bus transit way station and parking lot, a Consumers gas metering Station, a high rise apartment (169 Lees Ave) and vacant land.

Tars were originally observed in the pump house of the transit way station and in the Rideau River (approximately 150 m to SE) in the vicinity of the outfall. Tars have also been observed under the foundations of 169 Lees Avenue.

It was also reported that ash and cinder are likely deposited on the former dump site that is now Algonquin College (140 m south of the Site), and at 180 and 190 Lees Avenue (respectively 360 m and 320 m to southwest). Some tar and spent oxide wastes likely deposited south of Lees Avenue.

Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario, November 1988

The report titled Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario, November 1988 provides the results of an inventory and preliminary assessment of potential environmental impacts of 44 known industrial sites in Ontario which produced or used coal tar and related tars, as of November 1988. This report was prepared to continue the inventory and assessment process started by the Inventory of Coal Gasification Plant Waste Sites in Ontario, April 1987:

- The Site was not listed in the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars.
- Currie Products | Located 400 m to southwest, 170 Lees Avenue operated as a coal distillation plant between 1922 and 1949, but the Site was also used for tar storage until about 1970. The Site covered about 1.7 Ha, located between Lees Avenue and the Rideau River. The Site is presently occupied by a high-rise apartment with underground parking. Coal Tar has been identified in soil and groundwater under the apartment building, extending to the west. Tar was also found seeping into the lowest level of the garage. Coal Tar in the soil has contaminated the groundwater which is migrating to the east. Coal tar has also been found in a storm sewer line that discharges to the river at the west limit of the Site.

Ministry Environmental Incident Records

Requests were submitted to the Ministry of Environment and Conservation and Parks (MECP) under the Freedom of Information and Protection of Privacy Act relating to the Site. The requested information included environmental incidents, orders, offences, spills, discharges of contaminants, or inspections maintained by the Ministry for the Site or for properties that may directly influence the environmental condition of the Site. The MECP response dated August 22, 2018, to the inquiries indicated that no records were located responsive to the request.



A search for records of environmental incidents, orders, offences, spills, discharges of contaminants, or inspections maintained by the Ministry of the Environment for the Site or for properties that may directly influence the environmental condition of the Site was also conducted through the subcontracted Ecolog Environmental ERIS search. Five spills were reported for properties within 250 m of the Site, with details summarized below:

- A spill of approximately 10 L of motor oil from a vehicle into a catch basin was reported at 5 – 9 Hurdman Street in 1992. Environmental impact was not anticipated.
- A spill of an unknown volume of furnace oil was reported at 28 Robinson Avenue in 1988. The spill was from a leaking AST at the residence. Environmental impact to soil was deemed possible:
 - Fuel tanks are a PCA (Item 28 - Gasoline and Associated Products Storage in Fixed Tanks)
- A spill of 110 - 115 L of non-PCB transformer oil was reported at 23 Hurdman Avenue in 2004. Environmental impact was not anticipated.
- A spill of 136 L of diesel fuel leaking from fuel barrels was reported at 29 Hurdman Road in 2009. Environmental impact was not anticipated.
- A spill of unknown volume from a leaking underground fuel tank was reported at 29 Hurdman Avenue in 2011. Environmental impact was not anticipated:
 - Fuel tanks are a PCA (Item 28 - Gasoline and Associated Products Storage in Fixed Tanks)
 - The Site is described as a Roads Department Yard. A Roads Yard is a PCA (Item 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems)

Several of the aforementioned spills are associated with PCAs, however given their distances from the Site and cross or down-gradient orientations, and previous ESA-2008 and ESA-2013 environmental investigations at the Site, these spills are not considered to represent APECs for the Site.

Waste Management Records - Ontario Regulation 347 Waste Receivers and Generators

Requests were submitted to the Ministry of the Environment, Conservation and Parks (MECP) under the Freedom of Information and Protection of Privacy Act relating to the Site. The requested information included records of waste generators and receivers under O. Reg. 347 maintained by the MECP for the Site that may directly influence the environmental condition of the Site. The MECP response dated August 22, 2018, to the inquiries indicated that no records were located responsive to the request.

A search for records of waste generators and receivers under O. Reg. 347 maintained by the MECP was also conducted through the subcontracted Ecolog Environmental ERIS search.

- The Site is not listed in the Ontario Regulation 347 Waste Receivers and Generators.
- Eleven records of waste generator numbers were identified for 29 Hurdman Road (The City of Ottawa Roads Department yard) in the Ecolog ERIS search. For the years 1997 to 2017 the



facility was registered as generating 221 (light fuels), 251 (oil skimmings and sludges), 252 (waste oils and lubricants). In addition, after 2011 the facility was also registered as generating 145 (paint coatings residues):

- A Roads Yard is a PCA (Item 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems)

Environmental Reports Submitted to the MECP

Requests were submitted to the Ministry of Environment, Conservation and Parks (MECP) under the Freedom of Information and Protection of Privacy Act relating to the Site. The requested information included environmental reports for the Site submitted to the MECP. The MECP responses dated August 22, 2018, to the inquiries indicated that no records were located responsive to the request. The MECP FOI search was confirmed by the results of the subcontracted Ecolog Environmental ERIS search.

Technical Standards and Safety Authority (TSSA) Database

A request was submitted by GHD to the Technical Standards and Safety Authority (TSSA) to search their databases for any records of fuel storage tanks, spills, incidents or, infractions at the Site. An email response was received from the TSSA on July 30, 2018, indicating that there were no records in their database indicating the presence of storage tanks at the Site. A copy of the TSSA correspondence is included in Appendix D.

A search for records in the TSSA database within the Study Area was also conducted through the subcontracted Ecolog Environmental ERIS search.

- 13 Robinson Avenue was listed in the HINC database as having an unidentified source of CO. The report is not dated.
- 85 Robinson Avenue is listed in the RST database as operating as an Oil Change and Lubrication Service Station:
 - A service garage is a PCA (Item 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems)
- 29 Hurdman Road is listed in the INC database as having a leaking fuel UST discovered on the property in 2011. Environmental impact was identified:
 - Fuel tanks are a PCA (Item 28 - Gasoline and Associated Products Storage in Fixed Tanks)
 - A Roads Yard is a PCA (Item 52 - Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems)

MECP Notices, Instruments and Records of Site Condition

The Ministry of the Environment (MECP) Brownfields Environmental Site Registry (ESR) was consulted for historical certificates and instrument compliance records and records of site condition (RSCs). The Site was not listed in the Brownfields ESR. No properties within 250 m were listed in the Brownfields ESR.



A search for RSCs in the MECP database within the Study Area was also conducted through the subcontracted Ecolog Environmental ERIS search. The Site was not listed in the Brownfields ESR. No properties within 250 m were listed in the Brownfields ESR.

Areas of Natural Significance

The Ministry of Natural Resources and Forestry (MNRF) Geographical Information System (GIS) mapping software was consulted by GHD to investigate areas of natural significance in the Phase One Study Area. No areas of natural significance were identified within 250 m of the Site.

MOE Waste Disposal Site Inventory, June 1991

The MOE (now MECP) Waste Disposal Site Inventory June 1991 contains a list, prepared by the MOE, of all known active and closed waste disposal sites in the Province of Ontario as of October 31, 1990. This document is a "working document", subject to continual revisions and updating. The document contains an active site inventory, a closed site inventory, a closed municipal coal gasification plant site inventory, and an inventory of industrial sites producing and using coal tars and related tars in Ontario.

There were no active or closed waste disposal sites listed within a 500 m radius of the Site listed in the MECP Waste Disposal Site Inventory, June 1991.

City Directories

City directories list occupant(s) at a site address for a specific year, and infer land use with respect to occupant history. GHD consulted National Archives Canada located in Ottawa, Ontario, for any publicly available historical city directories for intermittent years between 1891 and 2011. The Civic addresses of the Site are 17, 19, 23 Robinson Avenue.

According to the information obtained from the reviewed city directories, Robinson Avenue was not included in the 1891 or 1900 city directories. The 1910 directory identified residential occupancy at 17 and 19 Robinson Avenue, while the 23 Robinson Avenue property was not listed until 1920. The directories identify 17, 19, and 23 Robinson Avenue as having residential occupants in 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, and 2010.

Surrounding land use in the Study Area identified the following non-residential land uses:

- 170 Lees Avenue | Hamilton Tar Products in 1930, Currie Tar Products in 1935, Currie Tar and Pitch Products Ltd in 1940, 1945, 1955, 1960, vacant in 1970, residential in 1980
- 175 Lees Avenue | Railway tracks in 1915, 1921, 1925, railway tracks and Ottawa Gas Co in 1930, 1935, 1940, Railway Tracks and Ottawa Light Heat and Power Co in 1945, 1950, railway tracks and Interprovincial Utilities Ltd Gas Plant in 1955, 1960
- 181 Lees Avenue | Hayley & Sons Garage in 1950, 1955, 1960, Hayley Industrial Equipment in 1970
- 200 Lees Avenue | Algonquin School of Technology in 1970, 1980, 1990, 2000
- 229 Lees Avenue | Ottawa Beef Co Ltd in 1955, 1960, 1970, 1980, 1990
- City weigh scales between Hurdman Road and the railway in 1920, suggesting commercial land use



- Hurdman Avenue | Canadian Northern Ontario Railway Station and Freight Sheds in 1910, 1921, CNR Yard and Rideau Supply Co Yards in 1925, CNR Yard and Hayley Building Materials and Rideau Supply Co Yards in 1930, CNR Yard and Ideal Corrugated Sheet Metal and Hayley Building Materials and Dominion Reinforcing Steel Co Ltd in 1935, CNR Yard and Ideal Corrugated Sheet Metal and White Granite Co Cement Block and Hayley Building Materials and Dominion Reinforcing Steel Co Ltd in 1940, CNR Yard and Ideal Roofing Co. Sheet Metal and Sphinx Manufacturing Co Oil Burners and Hayley Building Materials and Dominion Reinforcing Steel Co Ltd in 1945, 1950, CNR Yard and Manufacturers Product Ltd Roofing and Flintkote Construction Canada Ltd and Weldwood Plywood Ltd and Green AD Fire Brick Co and Ideal Roofing Co Sheet Metal and Hayley Building Materials and Sphinx Mfg. Co Oil Burners and Dominion Structural Steel in 1955, CNR Yard and Manufacturers Product Ltd Roofing and Flintkote Construction Canada Ltd and Weldwood Plywood Ltd and Green AD Fire Brick Co and Ideal Roofing Co Sheet Metal and Hayley Building Materials and Sphinx Mfg. Co Oil Burners and Dominion Structural Steel and Queensway Builders Ltd and Husmith Waterproofing and Paving Ltd and Loyd & Sons Doors Ltd in 1960, and Hayley Equipment Co in 1970, City of Ottawa Department of Operations Roadway Division in 1990
- 23 Hurdman Avenue | Kellys Auto-Body in 1980, 1990, 2000, 2010
- 18 Robinson Avenue | WA Hare Warehouse 1930, Hare Equipment Machine Shop in 1940, 1950, 1955, 1960, 1970, 1980
- 36 Robinson Avenue | Garys Custom Cycle in 2000, 2010
- 37 Robinson Avenue | Fournier Garage 1930, 1935, Fornier Van and Storage garage in 1940, 1945, 1950, 1955
- 39 Robinson Avenue | Fornier Van and Storage in 1940, 1945, 1950, 1955, Kinetech Logistics in 2010
- 44 Robinson Avenue | JRDL Custom Woodworking in 1990

The adjacent neighbouring properties were first listed for residential occupancy since at least 1896 and in subsequent directories were listed for residential, commercial or industrial purposes. The following operations, which are considered potentially contaminating activities (PCAs), were identified within 250 m in the City directories:

Table 3.2 Summary of Off-Site PCAs Identified in City Directory Research

Listing	Location	Years Listed	APEC (Y/N)
Hamilton Tar Products, Currie Tar Products, Currie Tar and Pitch Products Ltd	170 Lees Avenue	1930, 1940, 1950, 1960	N
Ottawa Gas Co, Ottawa Light Heat and Power Co, and Interprovincial Utilities Ltd Gas Plant	175 Lees Avenue	1930, 1935, 1940, 1945, 1950, 1955, 1960	N
Railway Tracks		1915, 1921, 1925, 1930, 1940, 1950, 1960, 1970	Y



Table 3.2 Summary of Off-Site PCAs Identified in City Directory Research

Listing	Location	Years Listed	APEC (Y/N)
Hayley & Sons Garage, Hayley Industrial Equipment	181 Lees Avenue	1950, 1955, 1960, 1970	N
Dominion Reinforcing Steel Co Ltd	Hurdman Avenue	1935, 1940, 1945, 1950, 1960,	N
CNR Yard	Hurdman Avenue	1910, 1921, 1925, 1930, 1935, 1940, 1945, 1950, 1960,	N
Kellys Auto-Body	23 Hurdman Avenue	1980, 1990, 2000, 2010	N
Hare Equipment Machine Shop	18 Robinson Avenue	1940, 1950, 1955, 1960, 1970, 1980	N
Garys Custom Cycle	36 Robinson Avenue	2000, 2010	N
Fournier Garage, Fournier Van and Storage Garage	37 Robinson Avenue	1930, 1935, 1940, 1945, 1950, 1955	N

The aforementioned listings are considered to be associated with Potentially Contaminating Activities (PCAs) and are summarized in Section 7.2.2 of this report. Only one of these historical operations (The adjacent rail line) are considered to represent areas of potential environmental concern (APECs) for the Site and are summarized in Section 7.3 of this report.

Mapping and Assessment of Former Industrial Sites, City of Ottawa

The report titled Mapping and Assessment of Former Industrial Sites, City of Ottawa, July 1988 provides the results of an inventory and preliminary assessment of 177 known former industrial sites in the City of Ottawa, as of July 1988.

The Site is not listed in the Mapping and Assessment of Former Industrial Sites, City of Ottawa, July 1988.

Within the Study Area there were two former industrial sites identified within 250 m of the Site.

- The Lees Avenue Landfill is shown located between Lees Avenue / Highway 417 and the Rideau River. The landfill is diagrammed as approaching within 160 m of the south limits of the Site, in the space presently occupied by 170 and 200 Lees Avenue.
 - Item 58: Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste is a PCA
- Ottawa Gas Co. (gasworks), located at 175 Lees Avenue, is shown to approach within 250 m to the southwest
 - Item 9: Coal Gasification is a PCA



Given its distance and orientation with respect to the Site, this former industrial site is not suspected to have impacted the subject property.

3.3 Physical Setting Sources

3.3.1 Aerial Photographs

Aerial photographs are reviewed to generally document development of the Site and properties in the vicinity of the Site. They identify potential waste disposal areas, storage activities, land filling, and other potential adverse environmental concerns on Site and in the immediate vicinity of the Site. Aerial photographs of the Site and surrounding area were obtained for intermittent years between 1928 and 2017 at the National Air Photograph Library located in Ottawa, Ontario and from the City of Ottawa geoOttawa website. Comments for each photograph are presented in the following table. Copies of selected aerial photographs are presented in Appendix E.

Table 3.3 Aerial Photographs

Year	Site	Neighbouring Properties
1928	17, 19, and 23 Robinson Avenue is present. A third building is present towards the northeast corner of the lot (northwest of 23 Robinson Avenue).	The adjacent land to the northwest of the Site is a rail line, followed by undeveloped land. Robinson Avenue evident; east limit has evident commercial development at 85 Robinson Avenue, with remainder showing residential development. The adjacent land to the west and east is residential land use. Lees Avenue and Hurdman Avenue is evident, with commercial development at 23 Hurdman Avenue (west limit) and 29 Hurdman Avenue (east limit). South of Hurdman Avenue are is Lees Avenue, the CP and CN Rail Lines, followed by industrial land use (Ottawa Gas, Co, and Currie Gas Works) to the southwest. Fill placement is evident directly south of the Site
1958	The Site is unchanged from 1928 aerial photograph.	Increased residential development between Robinson Avenue and Lees Avenue. To the north residential development on Wiggins Private is evident north of the rail line. Increased industrial development to southwest of Site
1965	The Site is unchanged from 1958 aerial photograph.	Neighbouring properties to the southeast and southwest have been demolished. The Trans Canada Highway (HW417) to the south has been developed. South of HW417, Algonquin College is evident.
1976	The Site is unchanged from the 1965 aerial photograph.	Two streets to the southwest of the Site have been removed and developed for residential purposes. Neighbouring properties to the east have been redeveloped for residential purposes. Southwest portion of the Study Area shows removal of industrial land use, with a residential apartment building present at 170 Lees Avenue. A significant realignment of Lees Avenue evident.



Table 3.3 Aerial Photographs

Year	Site	Neighbouring Properties
1991	The Site is essentially unchanged from 1976.	Neighbouring properties to the southwest have been developed with their present day multi-level residential buildings.
1999	The Site is essentially unchanged from 1991.	Neighbouring properties are essentially unchanged from 1991.
2002	The Site is essentially unchanged from 1999. Tree cover prevents direct observation of the garage building northwest of 23 Robinson Avenue.	Neighbouring properties are essentially unchanged from 1999.
2005	The Site is essentially unchanged from 2002. Tree cover prevents direct observation of the garage building northwest of 23 Robinson Avenue.	Neighbouring properties are essentially unchanged from 2002.
2007	The Site is essentially unchanged from 2005. Tree cover prevents direct observation of the garage building northwest of 23 Robinson Avenue.	Neighbouring properties are essentially unchanged from 2005.
2008	The Site is essentially unchanged from 2007. Tree cover prevents direct observation of the garage building northwest of 23 Robinson Avenue.	Neighbouring properties are essentially unchanged from 2007.
2009	The garage building northwest of 23 Robinson Avenue has been removed, but the floor slab remains present.	Neighbouring properties are essentially unchanged from 2008.
2011	The Site has been cleared of vegetation with minimal grass cover. The floor slab of the garage building remains.	Neighbouring properties are essentially unchanged from 2009.
2014	The Site is essentially unchanged from 2011.	Neighbouring properties are essentially unchanged from 2011.
2017	The Site is essentially unchanged from 2014.	Neighbouring properties are essentially unchanged from 2017.

Aerial photographs indicated the subject Site had been utilized as a residential property since at least 1928.



The adjacent Site to the northwest (presently Robinson Field) is seen to operate as a rail yard in the 1928, 1958, and 1965 aerial photographs, but appears to be a park in the 1978 and subsequent aerial photographs:

- A rail yard is a PCA (Item 46 - Rail Yards, Tracks and Spurs), and is not considered to be an APEC

Southwest of the Site, the CN and CP Rail lines are present 90 m to the southwest:

- A rail line is a PCA (Item 46 - Rail Yards, Tracks and Spurs). However, due to the downgradient location, this PCA is not considered to be an APEC.

Southwest of the Site, the Lees Avenue Gasworks (originally 175 Lees Avenue) is evident in the 1928, 1958, and 1965 aerial photographs on the north side of Lees Avenue. All industrial development has been removed in the 1976 aerial photograph. The 1991 aerial photograph shows the west portion of the Site has been developed with an apartment (169 Lees Avenue). The east portion of the Site (191 Lees Avenue) is developed as a park and parking lot in 1991. A small building was present at 179 Lees Avenue in the 1991 and 1999 aerial photographs that is absent in the subsequent photographs:

- Coal gasification is a PCA (Item 9 – Coal Gasification). However, due to the downgradient location, this PCA is not considered to be an APEC.

South of the Site, the portion of the Lees Avenue Gasworks located south of Lees Avenue (currently 200 Lees Avenue) in the 1928 aerial photograph shows a single building and evident fill placement. The Site is vacant and overgrown in the 1958 aerial photograph. The 1965 and subsequent aerial photographs show that location as being developed with Algonquin College.

- Fill placement is a PCA (Item 30 - Importation of Fill Material of Unknown Quality). There are reports (Inventory of Coal Gasification Plant Waste Sites in Ontario 1987, discussed in Section 3.2 of this report) that suggest that ash and cinders, some tar, and some spent oxide wastes were deposited on the 200 Lees Avenue Site. However, due to the reported groundwater flow direction and separation distance is not considered to be an APEC.

Also southwest of the Site, the Currie Products distillation facility (originally 170 Lees Avenue) is evident in the 1928, 1958, and 1965 aerial photographs on the south side of Lees Avenue. All industrial development has been removed and a single apartment (170 Lees Avenue) is present in the 1976 aerial photograph. The 1991 aerial photograph shows three apartments are present on the south side of Lees Avenue (170, 180, and 190 Lees Avenue):

- A coal tar distillation plant is a PCA (Item 8 – Chemical Manufacturing, Processing, and Bulk Storage). However, due to the reported groundwater flow direction and separation distance is not considered to be an APEC.
- Fill placement is a PCA (Item 30 - Importation of Fill Material of Unknown Quality). There are reports (Inventory of Coal Gasification Plant Waste Sites in Ontario 1987, discussed in Section 3.2 of this report) that suggest that ash and cinders, some tar, and some spent oxide wastes were deposited on the 180 and 190 Lees Avenue Sites. However, due to the reported groundwater flow direction and separation distance is not considered to be an APEC.



Southeast of the Site, the 29 Hurdman Road facility is occupied by a number of commercial buildings in the 1928 aerial photograph. The 1958 and 1965 aerial photographs show increased development, as well as a large pile of material which is absent in the 1976 photograph. The 1991 aerial photographs show the property has been redeveloped, with different layout of commercial buildings and a dry storage cone:

- Fill placement is a PCA (Item 30 - Importation of Fill Material of Unknown Quality). However, due to the reported groundwater flow direction this location is not considered to be an APEC.

South of the Site, the 23 Hurdman Road location is shown as vacant land in the 1928 aerial photograph, then occupied by a commercial building in subsequent photos.

East of the Site the 1928 aerial photograph shows some residential buildings occupying what is presently 47 through 104 Robinson Avenue. The 1958, 1965, 1976, and 1991 aerial photographs show the site occupied by multiple connected commercial / industrial buildings and parking areas. The 199 and subsequent photographs show the facility has been replaced by multiple residential buildings.

It should be noted that the scale of the aerial photographs did not permit an accurate interpretation of detailed features of the Site or the adjacent properties.

3.3.2 Topography, Hydrology, Geology

A Topographic map was reviewed from the Ontario Ministry of Natural Resources and Forestry, and is provided in Figure 1. The mapping shows the Site is on relatively flat terrain, with general topography sloping towards the northeast, east, and south. The nearest surface water body indicated on the mapping is the Rideau River, located down-gradient 165 m to the northeast, 250 m to the east, and 330 m to the south of the Site.

According to the information obtained from the Geological Survey of Canada map 1506A titled 'Surficial Geology – Ottawa Ontario' the natural soil conditions of the Site appear to consist of (Glacial) Till Plains less than 5.0 m in relief. Elsewhere in the 250 m Study Area, Champlain Sea Sediments (blue-grey silt and clay marine deposits reworked by fluvial actions causing lenses bars and channels of sand deposits) located 115 m to south and 135 m to northeast. There is also a small area of Post Champlain Sea deposits of silty sand, silt, and sand and clay deposits of floodplains and area of low relief) is exposed approximately 150 m to northwest.

According to the information obtained from the Ontario Geologic Survey Map P.2716 titled 'Paleozoic Geology Ottawa Area', the bedrock in the Study Area is described as the Paleozoic (Upper Ordovician) Carlsbad Formation (interbedded dark grey shale, fossiliferous calcareous siltstone, and silty bioclastic limestones).

According to records from the water well information system and borehole databases, as presented in the results of the subcontracted Ecolog Environmental ERIS search, the overburden soil in the vicinity of the Site consist of a mixture of sand and clay type soils.



3.3.3 Fill Materials

The Site has surface cover of landscape/grass vegetation and paved asphalt parking surfaces. The Site is slightly higher than Robinson Avenue to the south and level with the surrounding neighbouring properties to the north, east and west.

Based on the aerial photographs, there is evidence to indicate that historical placement of fill material was done near the north limits of the Site. Previous investigations in this area have identified fill materials that present elevated concentrations of Lead and Benzo(a)pyrene confined to the northeast portion of the Site; this area was investigated by the 2013 ESA and found limited extent of the material.

In addition, the building footprints and the underground services would be expected to have required fill as part of their construction.

3.3.4 Water Bodies and Areas of Natural Significance

No natural surface water bodies were identified on the Site.

The nearest surface water body indicated on the mapping is the Rideau River, located 165 m to the northeast, 250 m to the east, and 330 m to the south of the Site.

There are no areas of natural significance within 250 m of the Site.

3.3.5 Well Records

A request was submitted to Ecolog ERIS to search for records of water wells registered with the MECP. Thirty-seven water wells were registered with the MECP for properties approximately within 250 m of the Site, respectively. All of the registered wells indicated are associated with monitoring and observation wells.

Given that the Site is located in an urban area within the City of Ottawa and that municipally treated water is available, it is not suspected that there are any active potable water wells remaining within the Phase One study area. A copy of the MECP well record search is present within the Ecolog ERIS database summary.

3.4 Site Operating Records

There were no Site operating records available for review following the specific request to the existing owner. Considering the length of time the Site has been occupied for residential use, it was not expected that such information exists.

4. Interviews

Mr. Daniel Boulanger, a representative of the current owner (RVLP) of the Site, was interviewed at the time of the Site visit. Mr. Boulanger stated that he had been familiar with the Site for less than one year. Mr. Boulanger stated that the Site had always been used for residential purposes since its development in the early 1900's. Mr. Boulanger stated that two of the buildings are heated by natural gas fueled furnaces, while the other building was heated by a fuel oil fired furnace; supplemental



baseboard heaters were also present throughout the building units. Other than the exterior fuel oil Aboveground Storage Tank associated with 23 Robinson, Mr. Boulanger was not aware of any storage tanks, current or former, or spills at the Site. Mr. Boulanger stated that the only chemicals stored at the Site were domestic grade cleaning chemicals.

5. Site Reconnaissance

5.1 General Requirements

GHD conducted a Site visit of the Property on October 11, 2018 between 9:00 am and 11:30 am. The visit was conducted by Mr. Luke Lopers, P. Eng., who has ten years' experience of conducting Phase One ESAs. Weather conditions were overcast with an approximate temperature of 9°C.

Site photographs were taken at the time of the Site visits and are presented in Appendix F.

5.2 Specific Observations at Phase One Property

5.2.1 On-Site Structures and Improvements

Above Ground Structures

Three residential buildings civically addressed as 17, 19 and 23 Robinson Avenue occupied the Site at the time of Site Visit. All three of the subject buildings were occupied, however, one of the residential units at 23 Robinson Avenue was vacant at the time of the Site assessment. It was reported that the buildings were constructed in the early 1900's. The buildings were two storey structures with concrete block or stone foundations and each contained a crawl space basement level. Mechanical areas, including furnaces and hot water tanks were located in the crawl space basements. The exterior of the Site buildings were finished with vinyl or metal siding, vinyl or metal framed windows, and wood doors. The roofs were sloped and covered with asphalt shingles.

Below Ground Structures

There were no below ground structures observed at the time of the Site visit, nor were any expected to be present on the Site.

5.2.2 Tanks

Above Ground Storage Tanks (ASTs)

The presence of one current exterior AST was observed by GHD at the time of the Site visit; this AST was located to the northwest of the residential building at 23 Robinson Avenue. The AST was used to store furnace oil and was suspected to be actively supplying fuel to the furnace in the crawl space basement, however, confirmation of the connection could not be confirmed as access was limited in this area of the basement. The AST was approximately 905 L in size and was constructed of fibreglass reinforced plastic. A fuel odour was observed in the basement crawl space, in the room adjacent to the AST. The floors in this room appeared to consist of older concrete, which had minor cracks and also appeared to be partially wet (suspected to be associated with water infiltration). The



presence of this AST is considered a potentially contaminating activity (PCA) and Area of Potential Environmental Concern (APEC) for the Site.

Based on the period of first development (early 1900's) of the Site, it is suspected that there may have been other historical ASTs or other fuel material (coal, wood, etc.) present at the Site, however, no records were available regarding their presence or location at the subject property.

Underground Ground Storage Tanks (USTs)

The current presence of USTs were not observed at the Site and none were reported to exist by the Client representative at the time of the Site visit.

5.2.3 Water Sources

Municipal water and sewer services are supplied by underground service trenches on the south portion of the Site leading to Robinson Avenue. No present day or historical water supply wells were observed or reported to exist on-Site during the Site visit.

5.2.4 Utility Corridors

Natural gas is supplied to the 17 and 19 Robinson Avenue buildings from underground service trenches leading from Robinson Avenue to the south of the Site. Communications and electrical services connections are from hydro poles south of the Site.

5.2.5 Building Features

Exit and Entry Points

The Site buildings were observed to have between two and four exterior entry/exit points for each residence, including a main entrance and a back door exiting into the backyard.

5.2.6 Heating Systems

The Site buildings civically addressed as 17 and 19 Robinson Avenue were equipped with natural gas fired furnaces at the time of the Site visit. It was suspected that the furnace located in the building civically addressed as 23 Robinson was equipped with a fuel oil fired furnace. No other heating systems were observed at the Site. No former heating systems were reported by the Site representatives.

Cooling Systems

Individual window-mounted air conditioning units were present in multiple residences at the time of the Site visit. It was not suspected that any other cooling systems existed for the buildings.

5.2.7 Drains, Pits, and Sumps

No pits, drains or sumps were observed in any of the crawl space basements in any of the Site buildings at the time of the Site visit.



5.2.8 Unidentified Substances

There were no visually obvious unidentified substances observed during the Site inspection.

5.2.9 Interior Stains or Spills

Olfactory observations of fuel oil odours were observed in the room adjacent to the exterior AST at 23 Robinson Avenue. It is suspected that historical spills or releases have contributed to the observed odour. The floors in this room appeared to consist of older concrete, which had minor cracks and also appeared to be partially wet (suspected to be associated with water infiltration). There was no visual evidence of staining or spills observed during the interior assessment portion of the Site visit.

5.2.10 Site Features

Wells

One monitoring well was observed during the Site visit in the northwest portion of the Site. This well is assumed to be associated with a limited Phase II ESA completed at the Site in 2013. The landscaped areas of the Site were overgrown with vegetation and additional monitoring wells were not observed.

Sewage Works

Sewage is discharged to the City of Ottawa sanitary sewer system through underground piping. Location of piping could not be determined at time of this investigation. There was no evidence of current or former septic systems on the Property at the time of inspection.

Ground Surface

The ground surface in the undeveloped areas of the Site consisted of grass, vegetation, and trees in the front and back yards; the backyards were overgrown with vegetation, which limited the inspection of the ground surface in these areas. Asphaltic parking areas were present on the south portions of the Site, with access to the south from Robinson Avenue.

Railway Lines

There were no railway lines on the subject Site or within a 250 m radius of the Phase One Property at the time of the Site visit.

5.3 Environmental Site Observations

5.3.1 Staining

No staining of the surface soil or vegetated areas was observed at the time of the Site visit.

5.3.2 Stressed Vegetation

No distressed vegetation, abnormal odours or visual evidence of contamination, suggesting the presence of chemical or petroleum spills or releases, were noted at the time of the Site visit.



5.3.3 Areas of Fill or Grading

The Site is relatively flat and generally at grade with the neighbouring properties to the south, east and west. The Site was elevated slightly with respect to the parkland to the north of the Site. No fill materials or grading was noted during the Site inspection.

5.4 Potentially Contaminating Activities

Potentially Contaminating Activities (PCAs) are listed in Ontario Regulation 153/04 Schedule D Table 2.

There was one PCA observed at the Site at the time of inspection. The presence of an on-Site AST, with olfactory observations of fuel odours in the basement of the adjacent building, is considered a PCA and Area of Potential Environmental Concern (APEC) for the Site.

5.4.1 Unidentified Substances

Unidentified substances were not observed at the Site during the Site visit.

5.4.2 Enhanced Investigation Property

According to Ontario Regulation 153/04 Schedule D 32(1)b, the Site is not classified as an 'Enhanced Property' for the purposes of this Phase One Study.

5.4.3 Phase One Study Area (properties within 250 m)

At the time of the Site visit, the properties adjacent to the Site were visually examined for evidence of potentially contaminating activities (PCAs) and areas of potential environmental concern (APECs) that may adversely impact the Site. The Site visit was conducted from public rights-of-way without physically accessing adjoining properties. For the purpose of this study, Robinson Avenue is considered to be the east-west axis. At the time of Site Visit the area within 250 m of the Site is occupied by the following facilities or features:

- North | Parkland, followed by residential apartments at Civic Nos. 310 and 440 Wiggins Private.
- East | Residential dwellings at Civic Nos. 25, 27, 29, 31, 35, 39, 41, 45, 47, 51, 53, 55, and 57 Robinson Avenue, followed by the Rideau River.
- South | Robinson Avenue followed by residential dwellings at Civic Nos. 16 and 20 Robinson Avenue, followed by a commercial property (Nationwide Restaurant Equipment) at Civic No. 23 Hurdman Road, followed by a municipal works yard at Civic No. 29 Hurdman Road.
- West | Residential dwellings at Civic Nos. 13, 11 and 7 Robinson Avenue, followed by residential dwellings at Civic Nos. 5, 7, 9, and 11 Hurdman Road, followed by Hurdman Road, followed by the Highway 417 right-of-way and adjacent land.

The Site and surrounding properties are located in a predominantly residential and commercial sector of the City of Ottawa, with some industrial (Municipal Works Yard) and institutional (University of Ottawa) uses.



The land use and PCAs identified in the Phase One Study area are presented in Figure 3: Surrounding Land Use. The off-Site PCAs are summarized in Section 7.2.2 of this report.

6. Review and Evaluation of Information

6.1 Current and Past Uses (Site)

Current and past land uses of the Site are summarized in Table 6.1.

Table 6.1 Summary of Current and Past Use

Year	Name of Owner	Description of Property Use (Property Use)	Other Observations from Aerial Photos, Fire Insurance Plans (etc.)
1889 to 1986 (1989 for some portions)	Individuals	Residential Use	Site developed for residential purposes (Title search, city directories)
1986 (1989) to 2003	Iberica Development Corp.	Residential Use	
2003 to 2016	954194 Ontario Inc. and Iglesias Investments Ltd.	Residential Use	
2016 to 2018	954194 Ontario Inc.	Residential Use	
2018 to present	Robinson Village I Limited partnership	Residential Use	

6.2 Potentially Contaminating Activities

6.2.1 Summary of On-Site Potentially Contaminating Activities

Two Potentially Contaminating Activities (PCA) were suspected to have occurred historically at the Site and was identified during the Phase One ESA.

- On-Site above ground fuel storage tanks (ASTs) storing furnace oil were documented in the 2008 Limited Phase II Environmental Site Assessment in each building, and observed in the 23 Robinson building during the October 2018 Site visit. A fuel tank is considered a PCA under O. Reg. 153/04.
- The layer of sandy clay with gravel fill material identified in the 2013 Phase Two Environmental Site Assessment of the Site is a considered PCA under O. Reg. 153/04.



A summary of the identified PCAs and location on the Site is presented in Table 6.2 below. The location of the PCA is shown on Figure 2: Site Plan and Figure 3: Surrounding Land Use.

Table 6.2 Summary of On-Site Potentially Contaminating Activities (PCAs)

Plan Reference Number	Potentially Contaminating Activity	Location
1	Item 28: Gasoline and Associated Products Storage in Fixed Tanks.	North of and below 17, 19, and 23 Robinson buildings
2	Item 30: Importation of Fill material of unknown quality.	Northeast portion of the site

6.2.2 Summary of Off-site Potentially Contaminating Activities (Phase One Study Area)

Seventeen potentially contaminating activities (PCAs) were identified at neighbouring properties within the Phase One Study Area as part of this assessment. A summary of the off-Site PCA's identified in the Phase One Study Area and their location with respect to the Site are presented in Table 6.3 below. The locations of these PCAs are shown on Figure 3: Surrounding Land Use Plan.

Table 6.3 Summary of Off-Site Potentially Contaminating Activities (PCAs)

Plan Reference Number	Potentially Contaminating Activity	Location
3	Item 46: Rail Yards, Tracks, and Spurs Item 27 - Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles	Adjacent to North Limit of Site Engine house 80m to north
4	Item 46: Rail Yards, Tracks, and Spurs	90 m to southwest and south of the Site
5	Item 46: Rail Yards, Tracks, and Spurs	120 m to southwest and south of the Site
6	Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems.	85 Robinson Avenue
7	Item 28: Gasoline and Associated Products Storage in Fixed Tanks. Item 48: Salt Manufacturing, Processing and Bulk Storage Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems.	29 Hurdman Road
8	Item 9: Coal Gasification Item 30: Importation of Fill Material of Unknown Quality Item 58: Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste	175 Lees Avenue 375 m to southwest



Table 6.3 Summary of Off-Site Potentially Contaminating Activities (PCAs)

Plan Reference Number	Potentially Contaminating Activity	Location
9	Item 58: Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste	200 Lees Avenue
10	Item 8: Chemical Manufacturing, Processing and Bulk Storage Item 30: Importation of Fill Material of Unknown Quality Item 58: Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste	170 Lees Avenue
11	Item 34: Metal Fabrication	South side of Hurdman Road 60m to south and southwest
12	Item 10: Commercial Autobody Shops	23 Hurdman Road
13	Item 34: Metal Fabrication Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems.	46 Robinson Avenue
14	Item 28: Gasoline and Associated Products Storage in Fixed Tanks. Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems.	West limit of 29 Hurdman Road
15	Item 10: Commercial Autobody Shops	195 Lees Avenue
16	Item 28: Gasoline and Associated Products Storage in Fixed Tanks.	28 Robinson Avenue
17	Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems.	181 Robinson Avenue
18	Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems.	36 Robinson Avenue
19	Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems	27 Robinson Avenue

6.3 Areas of Potential Environmental Concern

Based on the previous investigations, the historical research and known information of the general area of the Site, there are two On-Site PCA and no Off-Site PCA's that are considered to contribute to on-Site Areas of Potential Environmental Concern(APEC) for the Site.



The two On-Site PCA's that are considered APEC's are: the furnace oil use in the on-Site buildings; and the identified historical placement of fill material in the northeast corner of the Site.

These areas of potential environmental concern (APEC) on the Site are in the area near/under the existing building at 23 Robinson building, and the northeast corner of the Site.

6.4 Phase One Conceptual Site Model

Three plans are provided in this report to depict the conceptual Site model. Figure 1: Site Location Map shows the location of the Site within the City of Ottawa. Figure 2: Site Plan, shows the current configuration of the Site. Figure 3: Surrounding Land Use shows the uses of the neighbouring properties in the Phase One Study Area. The Site is immediately surrounded by residential and parkland properties.

The Site, occupied by three buildings referred to as Civic No. 17, 19, and 23 Robinson Avenue in Ottawa, Ontario, is approximately 1164 m² (0.12 hectares) in area (Site or Property). The Site has been used for residential purposes since the first developed use of the Property in approximately 1889.

No water bodies, areas of natural significance or drinking water wells are present at the Site. The nearest surface water body indicated on the mapping is the Rideau River, located 165 m to the northeast, 250 m to the east, and 330 m to the south of the Site; the location of these water bodies are indicated in the Conceptual Site Model. The Site is relatively flat and generally at grade with the neighbouring properties to the south, east and west. The Site was elevated slightly with respect to the parkland to the north of the Site. Past investigations at the Site have identified the soil conditions at the site as Topsoil, over Sandy Clay with Gravel (fill), over Sandy Silt, over Till (native) with bedrock not encountered above 5.2 meters below grade (mbg), and the overburden water table located 3.0 – 4.0 mbg.

The historical records, historical use and current use of adjacent properties located within 250 m of the Site were considered from an environmental perspective for the purposes of this report. There were no other Properties located outside of the Phase One Study Area (250 m radius) that were considered to have had the potential to have impacted the subject land.

Based on the historical research and known information of the general area of the Site, there were two on-Site potentially contaminating activities (PCA) and 17 off-Site PCAs. Based on analytical testing conducted during previous environmental investigations on the Site, the two on-Site PCA's (i.e. the use of ASTs that provided heating oil to the buildings, and the identified imported fill placement at the northeast portion of the Site are considered to have contributed to APECs on the Site).

The Phase One Study area is serviced by municipal water and sewer services and is in a non-potable area within the City of Ottawa. Electrical and natural gas services are available from private utility companies. Given the location of underground services on the Site and the locations of the PCAs at the Site and neighbouring properties, the presence of underground services are not considered to have the potential to have contributed to contaminant distribution on the subject land.



7. Conclusions

7.1 Whether Phase Two Environmental Site Assessment Required Before Record of Site Condition Submitted

This Phase One ESA is being prepared for submission to the City of Ottawa as part of the Site Plan Approval process.

A Record of Site Condition is not required nor intended at this time.

It should be noted that the previous land use of the Site is residential and that the proposed future use of the Site will also be residential land use. Any redevelopment of the Site under this proposed land use will not involve changing land use to a less stringent use and does not prompt a Record of Site Condition under Ontario Regulation 153/04.

Previous investigations (ESA-2008 and ESA-2013) have identified impacts are present in the fill material present in the northeast corner of the Site (APEC 2). There are O. Reg, 153/03 Table 3 exceedances in one soil sample (Lead and Benzo(a)pyrene in BH5/SS1 (0.0 - 0.6 mbg)). The conclusion was that "a soil management program will be developed with the client in order to manage and dispose of the contaminated soil at the time of development" and "All of final analysed groundwater sample results were in compliance with the O. Reg. 153/04 Table 3 criteria".

Based on these results further Phase Two ESA's are not required for this Site. The development of the Site will include a Soil Management Plan as part of the construction process and construction activities to address local areas of contaminated soils.

7.2 Record of Site Condition Based on Phase One Environmental Site Assessment Alone

This Phase One ESA is being prepared for submission to the City of Ottawa as part of the Site Plan Approval process.

A Record of Site Condition is not required nor intended at this time.

It should be noted that the previous land use of the Site is residential and that the proposed future use of the Site will include residential land use. Any redevelopment of the Site under this proposed land use will not involve changing land use to a less stringent use and will not require a Record of Site Condition under Ontario Regulation 153/04.

7.3 Closing Comments

The findings and conclusions of the Phase One Environmental Site Assessment are founded on the accuracy and reliability of the information obtained from all parties, unless contradicted by visual Site observations or other new written documentation that may be discovered through the development process.

The conclusions are presented based upon the readily available public information within the time frame of this mandate by trained professionals, following a prescribed and recognised assessment procedure.



This report is not intended to address, or provide comment on the presence, or absence of organic growth organisms commonly referred to as mould, through statements, inferences, or omissions.

The report is prepared for the use of the Client and his named representatives in making an informed financial and business decision regarding environmental liabilities that may be associated with the Site. The use of this report for any other purpose is at the Client's own risk.

The Client must understand that changing circumstances in the physical or regulatory environment, the administration and use of the Site, as well as changes in any substances stored, used, or disposed of at the Site, could significantly alter the conclusions and information contained in this report. Therefore, it is important that the Client periodically re-evaluates the Site and reviews developments or operations, which may potentially impact the Site.

8. References

2006. Canadian Standards Authority Z768-01 (R2006) - Phase I Environmental Site Assessment

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Regulation 153/04, Records of Site Condition, Part XV.I of the Act.

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Volume 1, April 1987. Queen's Printer for Ontario

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Volume 11, April 1987. Queen's Printer for Ontario

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July 1988

City of Ottawa, geoOttawa website: <http://maps.ottawa.ca/geoottawa/>

November 22, 2013, "ROBINSON PARK DEVELOPMENT Phase Two Environmental Site
Assessment - Residential Properties 17, 19 and 23 Robinson Avenue, Ottawa, Ontario";
Inspec-Sol Report T021226-E1

June 4, 2008; "PHASE II ENVIRONMENTAL SITE ASSESSMENT, 17 – 23 ROBINSON AVENUE,
OTTAWA, ONTARIO" Inspec-Sol Report T020465-E1



All of Which is Respectfully Submitted,

GHD

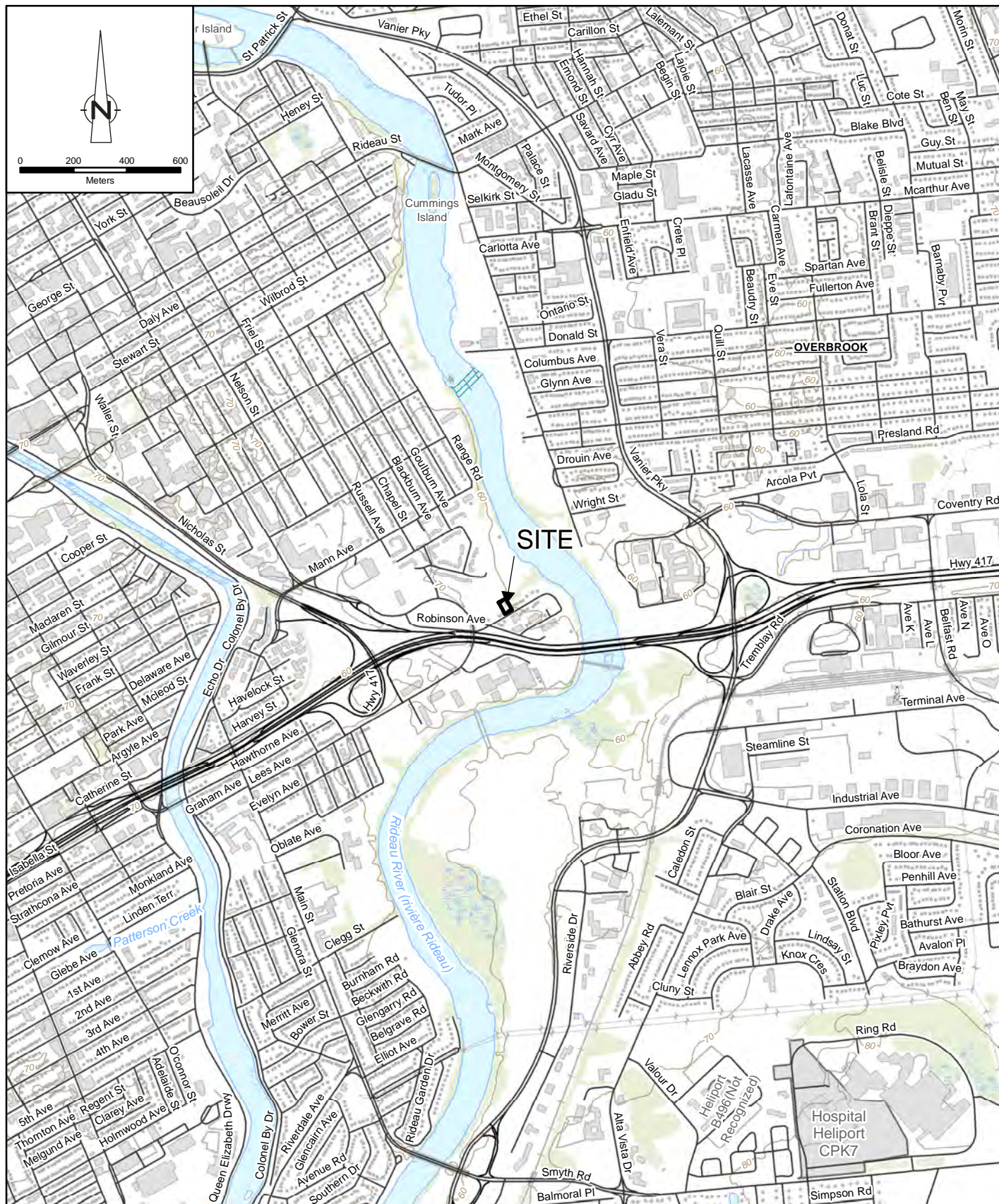
A handwritten signature in black ink that reads "S Wallis". The signature is written in a cursive, slightly stylized font.

Scott Wallis

A handwritten signature in blue ink that reads "J B Bennett". The signature is written in a cursive, stylized font.

Joseph B. Bennett, P. Eng.,





Source: MNRF NRVIS, 2018. Produced by GHD under licence from Ontario Ministry of Natural Resources and Forestry, © Queen's Printer 2018.
Coordinate System: NAD 1983 UTM Zone 18N



ROBINSON VILLAGE I LIMITED PARTNERSHIP
17, 19, & 23 ROBINSON AVENUE, OTTAWA, ONTARIO
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

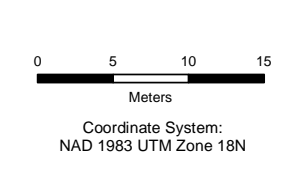
11180676-E1
Jul 28, 2018

SITE LOCATION

FIGURE 1



Source: Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation, date unknown



ROBINSON VILLAGE I LIMITED PARTNERSHIP
17, 19, & 23 ROBINSON AVENUE, OTTAWA, ONTARIO
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

SITE PLAN

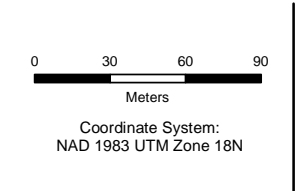
11180676-E1
Jul 28, 2018

FIGURE 2



Legend
[Dashed Line] Approx. Property Boundary

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ROBINSON VILLAGE I LIMITED PARTNERSHIP
17, 19, & 23 ROBINSON AVENUE, OTTAWA, ONTARIO
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

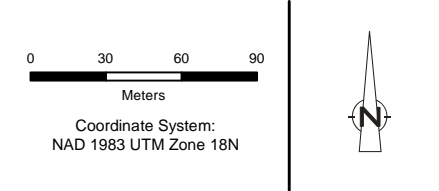
STUDY AREA

11180676-E1
Jul 28, 2018

FIGURE 3



Source: Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation, date unknown



ROBINSON VILLAGE I LIMITED PARTNERSHIP
17, 19, & 23 ROBINSON AVENUE, OTTAWA, ONTARIO
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

11180676-E1
Oct 24, 2018

POTENTIALLY CONTAMINATING ACTIVITIES

FIGURE 4

Appendices

Appendix A Previous Reports

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
17 – 23 ROBINSON AVENUE
OTTAWA, ONTARIO**

Date: **June 4, 2008**

Reference No: **T020465-E1**



INSPEC-SOL INC. 179 Colonnade Rd., Suite 400, Nepean, Ontario K2E 7J4 • Tel.: (613) 727-0895 • Fax: (613) 727-0581

Reference No. T020465-E1

Ottawa, June 4, 2008

Ottawa Carpentry
5669 Power Road
Gloucester, ON
K1G 3N4

Attn: Ms. Sonja Rego

Re: Limited Phase II Environmental Site Assessment
17 – 23 Robinson Avenue
Ottawa, Ontario

Dear Ms. Rego:

Further to your request, we have carried out a limited Phase II Environmental Site Assessment (Phase II ESA) at the above-mentioned Site and are pleased to present our findings in the accompanying report.

This report is intended to identify, through intrusive investigation techniques, the presence of contaminated soil and groundwater on the Site, which may have or is causing environmental impact.

Based on our investigation, the site does not show evidence of chemical contamination in excess of general background levels.

We trust that this report is to your satisfaction. Please do not hesitate to contact us, should any questions arise.

Yours very truly,

INSPEC-SOL INC.

A handwritten signature in black ink, appearing to read "JB Bennett".

Joseph B. Bennett, P.Eng
Vice-President

JBB/gm

Dist: Ms. Sonja Rego - Mail (3)

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1.0	INTRODUCTION	1
2.0	WORK ACTIVITIES.....	1
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3.0	SITE CLASSIFICATION.....	2
4.0	COMPARISON TO CRITERIA	3
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TABLE 2: SUMMARY OF GROUNDWATER RESULTS

DRAWINGS

SITE LOCATION MAP Dwg. No. T020465-E1-1

BOREHOLE LOCATION PLAN Dwg. No. T020465-E1-2

ENCLOSURES

BOREHOLE LOGS Enclosures 1 to 3

APPENDICES

APPENDIX I: CHEMICAL RAW DATA RESULTS – SOIL AND GROUNDWATER

1.0 INTRODUCTION

Inspec-Sol Inc. (**Inspec-Sol**) was retained by Ms. Sonja Rego of Ottawa Carpentry (Client), to conduct a limited Phase II Environmental Site Assessment (Phase II ESA) of the lands occupied by 17, 19, and 23 Robinson Avenue located in Ottawa, Ontario (Site or Property). A Site Location Map is included Drawing T020465-E1-1 in this report.

The property consists of three (3) residential two storey buildings located at the front of the lot (i.e. the Robinson Avenue side of the lot). Each building has an open backyard ringed with older growth trees. There is a garage/shed building at the rear of the driveway to 23 Robinson Avenue.

The purpose of the Phase II ESA was to identify through an intrusive investigation, the presence of contaminated soil and groundwater on the Site related to Fuel Oil Usage on the properties, which may have or is causing environmental impact with the Site, or the immediate vicinity of the Site. We understand the clients lending institution, did not request a Phase I and only requested a limited Phase II due to presence of fuel oil for heating. In reviewing the 3 addresses, there was only one current Fuel Oil AST located at 23 Robinson.

To the north of the properties is Robinson Park, which is an open grass sports field area. The surrounding properties to the east, west and south are all residential developments. The Rideau River bends around the neighbourhood, and is located approximately 200 m to the west and approximately 350 m to the south.

2.0 WORK ACTIVITIES

2.1 *Mandate*

As indicated in an **Inspec-Sol** written proposal dated May 5, 2008, the investigation was to include:

- obtaining of service locates;
- advance three (3) boreholes and collect soil samples
- install two (2) monitoring wells and collect water samples; and
- analysis limited to metals, F1 to F4 petroleums for this limited Phase II ESA

2.2 *Activities*

Borehole advancement was conducted on May 12, 2008 by Downing Drilling of Grenville-sur-la-Rouge, Quebec by means of a truck mounted drill rig. Borehole BH-1 was drilled within the driveway of 23 Robinson, as close to the existing above ground fuel storage tank (AST) as the overhead tree canopy would allow. Borehole 3 was located near what appears to have been a former AST site on the driveway of 17 Robinson Avenue, while borehole BH-2 was drilled in the driveway of 19 Robinson Avenue in a similar location to the other units where a former AST may have been located.

Three (3) soil samples were submitted to Maxxam Analytic Laboratories in Ottawa, Ontario under chain of custody number 514782 on May 13, 2008 for analysis of F1-F4 petroleum. Results were received from the laboratory under report A848059 on May 15, 2008.

Groundwater was sampled from the monitoring wells installed in each borehole by means of a Watera footvalve. The groundwater samples were submitted to Maxxam Analytic Laboratories in Ottawa, Ontario under chain of custody number 82595 on May 13, 2008 for analysis of F1-F4 petroleum. Results were received from the laboratory under report A848551 on May 16, 2008.

3.0 SITE CLASSIFICATION

In Ontario, the Brownfield's Statute Law Amendment Act (2001) laid out legislative and regulatory amendments to a number of Acts to encourage revitalization of contaminated and/or underutilized lands as well as ensure the environment is protected. The current industry standard is to follow the Ontario Regulation 153/04, which is fully in force as of October 1, 2005 in assessing of possible contaminated lands. The Regulation 153/04 outlines the soil and groundwater chemistry for various site setting conditions.

There are two approaches quoted in Part XV.I of the Environmental Protection Act and the Ontario Regulation 153/04. The two approaches consist of:

- 1) Using site condition standards comprised of background standards and effects-based standards (i.e. full depth generic and stratified).
- 2) Preparation of a Site Specific Risk Assessment.

For the purposes of this Phase II ESA we are using Option 1 – background standards and effects based standards.

When applying background standards and effects-based standards to a property, the results of the analytical testing are compared to a criterion that best describes the site setting and are known as Tables 1 to Table 5.

For the purposes of this site, the following are used in our assessment:

- The proposed land use for the property is residential;
- The Site is assumed to be in a Non-Potable Groundwater use site setting;
- The site is not considered a sensitive site and is being compared to Table 3 criteria and
- The physical testing of soil for grain size for samples from the Site were not determined as part of this initial Phase II ESA at this time, and as a consequence the more stringent criterion for coarse-grained soils has been applied.

For reference Table 1 and Table 3 are described as follows:

- Table 1 (background) considered representative of non-contaminated conditions in the province, and is also the target for land in a Sensitive Site Condition. Soil and Groundwater samples that comply with Table 1 criteria are considered to be ‘Not Contaminated’.
- Table 3 is for a non-potable groundwater condition, and considers that if the soils and groundwater are below the listed criteria, they will not present a risk to the environment or humans on a property under various land use activities serviced by municipal water.

4.0 COMPARISON TO CRITERIA

The submitted samples were compared to the MOE ‘*Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (March 2004)*’ (the Standards), to determine compliance for the soil and groundwater in its insitu condition on the Site.

Based on the historic use of furnace oil heating as well as environmental contamination being found in the adjacent site to the west, soil and groundwater samples were tested for F1-F4 petroleum parameters.

This property, defined for residential use in a non-potable water area, must have concentrations equal to or lower than those defined in Table 3 (Full depth Generic Site Condition Standards in a Non-Potable Groundwater Condition), or be assessed as ‘non-compliant’.

The samples were also compared to the most stringent criteria, O.Reg 153/04 Table 1 for reference only.

4.1 Soil Samples

The results from the chemical testing of the soil samples can be found in Table 1 found at the end of this report, while the raw data is included in Appendix 1 of this report.

Table 1 Comparison:

The analysis of the submitted soils did not show any contamination in excess of typical background criteria, which is O. Reg. 153/04 Table 1 (residential / institutional / park land use) criteria.

Table 3 Comparison:

The analysis of the submitted soils did not show any contamination in excess of O. Reg. 153/04 Table 3 (residential / institutional / park land use) criteria.

4.2 Groundwater Samples

The results from the chemical testing of the two water samples can be found in Table 2 found at the end of this report and in the raw data found in the Appendix I of this report.

Table 1 Comparison:

The analysis of the submitted groundwater did not show any contamination in excess of typical background criteria, which is O. Reg. 153/04 Table 1 (residential / institutional / park land use) criteria.

Table 3 Comparison:

The analysis of the submitted soils did not show any contamination in excess of O. Reg. 153/04 Table 3 (residential / institutional / park land use) criteria.

5.0 CONCLUSIONS

- 1) Based upon the site setting, the property is considered to be ‘non-sensitive’.
- 2) The soil samples recovered from the subject site show chemical results that are below the “Non-Potable Residential” values presented in Table 3 of Ontario Regulation 153/04 and are considered to be safe to remain on-site. The soil sample analyses also show no evidence of contamination above the “Typical Background” values presented in Table 1 of Ontario Regulation 153/04.
- 3) The groundwater samples recovered from the subject site in the monitoring wells (MW-1 and MW-2) have no exceedances of Table 1 or Table 3 criteria.

6.0 LIMITATION OF THE INVESTIGATION

The findings and conclusions of the Phase II ESA are founded on the accuracy and reliability of the information obtained from all parties, unless contradicted by visual Site observations or written documentation.

The conclusions are presented based upon the readily available public information within the timeframe of this mandate by trained professionals, following a prescribed and recognised assessment procedure.

This report is not intended to address, or provide comment on the presence, or absence of organic bacterial growth organisms commonly referred to as mould, through statements, inferences or omissions.

The report is prepared for the use of the Client and his named representatives in making an informed financial and business decision regarding environmental liabilities that may be associated with the site. The use of this report for any other purpose is at the client’s own risk.

The Client must understand that changing circumstances in the physical or regulatory environment, the administration and use of the Site, as well as changes in any substances stored, used, or disposed of at the Site, could significantly alter the conclusions and information contained in this report. Therefore, it is important that the Client periodically re-evaluates the Site and reviews developments or operations, which may potentially impact the Site.

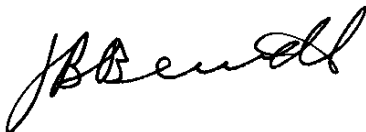
We trust that this report meets your present requirements. Please do not hesitate to contact us if any questions arise.

Yours very truly,

INSPEC-SOL INC.



Andrew Solomon, E.I.T.
Project Engineer



Joseph B. Bennett, P.Eng.
Vice-President

AS/gm

Dist: Ms. Sonja Rego – Mail (3)

T A B L E S

SUMMARY OF SOIL RESULTS
SUMMARY OF GROUNDWATER RESULTS

TABLE 1 - Summary of Soil Sample Analytical Results

Reg153/04 Parameter	Units	TABLE1 background other	TABLE3 non-potable residential / institution / park
FUELS & BTEX			
F1 (C6-C10)	ug/L	nv	(260) 30
F2 (C10-C16)	ug/L	nv	(900) 150
F3 (C16-C34)	ug/L	nv	(800) 400
F4 (C34+)	ug/L	nv	(5600) 2800

Sample ID:	BH-1 SS-3 (1.5-2.1m)	BH-2 SS-5 (2.4-3.0m)	BH-3 SS-5 (2.4-3.0m)
Date:	5/12/2008	5/12/2008	5/12/2008
LAB ID:	Y59350	Y59351	Y59352
	ND	ND	ND
	ND	ND	ND
	ND	ND	ND
	ND	ND	ND

DETECTION OF CONTAMINANT

TABLE 1 EXCEEDANCE

POSSIBLE TABLE 1 EXCEED.

TABLE 2 EXCEEDANCE

TABLE 3 EXCEEDANCE

ND - not detected

TABLE 2 - Summary of Groundwater Sample Analytical Results

Reg153/04 Parameter	Units	TABLE1 background other	TABLE3 non-potable residential / institution / park
FUELS & BTEX			
F1 (C6-C10)	ug/L	nv	nv
F2 (C10-C16)	ug/L	nv	nv
F3 (C16-C34)	ug/L	nv	nv
F4 (C34+)	ug/L	nv	nv

Sample ID:	MW-1	MW-3
Date:	5/13/2008	5/13/2008
LAB ID:	Y61379	Y61380
	ND	ND
	ND	ND
	ND	ND
	ND	ND

DETECTION OF CONTAMINANT

TABLE 1 EXCEEDANCE

POSSIBLE TABLE 1 EXCEED.

TABLE 2 EXCEEDANCE

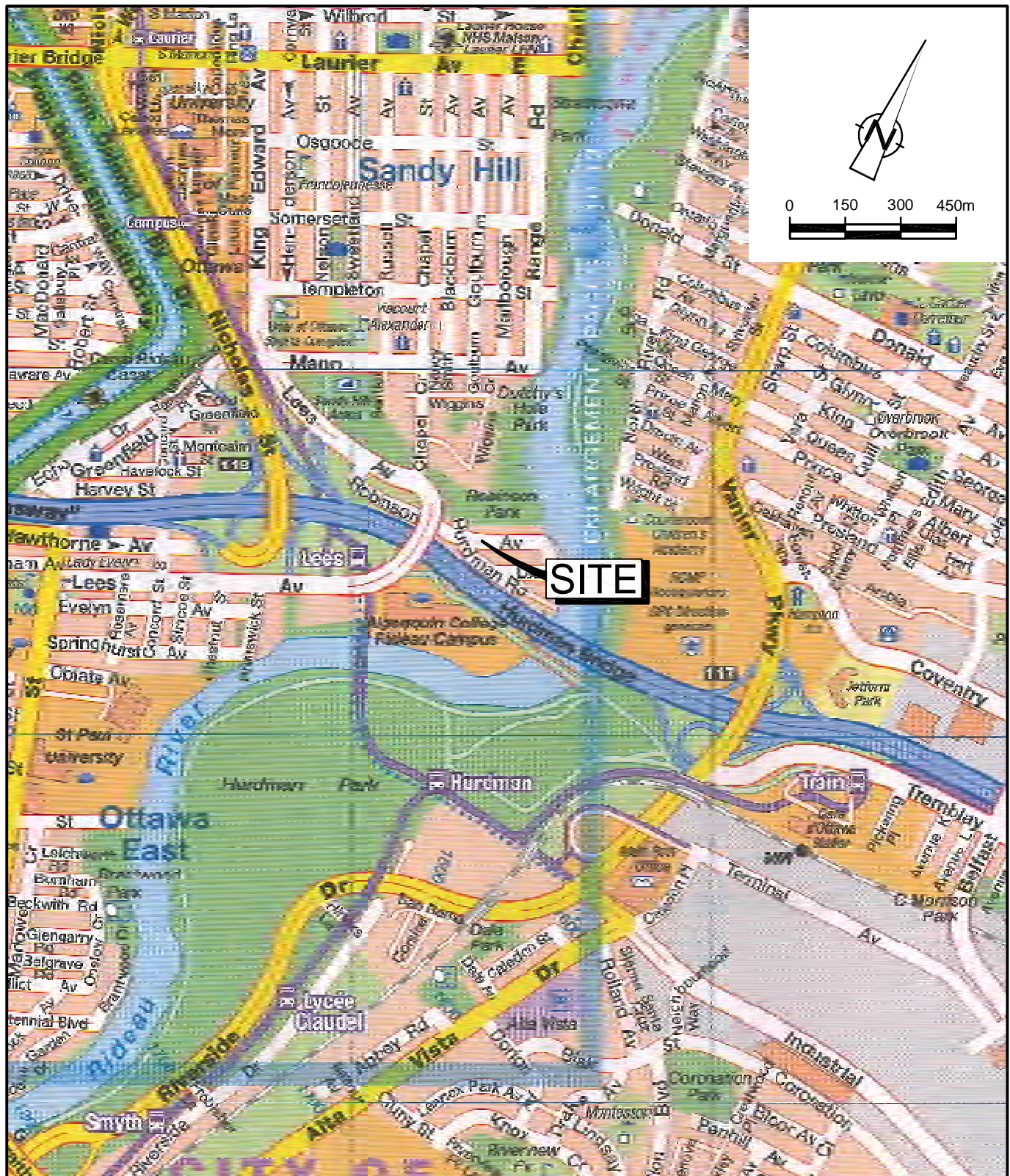
TABLE 3 EXCEEDANCE

ND - not detected

nv - no value

D R A W I N G S

SITE LOCATION MAP
BOREHOLE LOCATION PLAN



SOURCE: MAPART - OTTAWA, ONTARIO

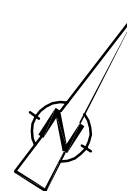
SITE LOCATION MAP

GEOTECHNICAL INVESTIGATION
OTTAWA CARPENTRY

17,19,23, ROBINSON AVE, OTTAWA, ONTARIO

Dwg. No. T020465-E1-1





NOT TO SCALE

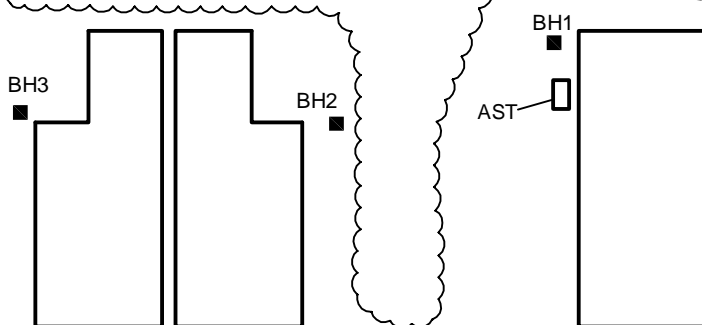
LEGEND

■ BH BOREHOLE LOCATION

--- PROPERTY BOUNDARY

~~~~~ WOODED AREA

BACKYARD AREA



ROBINSON AVE

BORE HOLE LOCATON PLAN  
GEOTECHNICAL INVESTIGATION  
OTTAWA CARPENTRY  
17,19,23, ROBINSON AVE, OTTAWA, ONTARIO  
*Dwg. No. T020465-E1-2*



# **ENCLOSURES**

## **BOREHOLE LOGS**



BOREHOLE No.: BH1

ELEVATION: 100.86 m

## BOREHOLE LOG

Page: 1 of 1

CLIENT: Ottawa Carpentry

PROJECT: Geotechnical Investigation

LOCATION: 17,19,23 Robinson Av., Ottawa, Ontario

DESCRIBED BY: Andrew Solomon






CHECKED BY: J.Bennett

DATE (START): May 12, 2008

DATE (FINISH): May 12, 2008

## LEGEND

- ☒ SS Split Spoon
- ☒ ST Shelby Tube
- ☒ RC Rock Core
- Water Level
- Water content (%)
- Atterberg limits (%)
- Penetration Index based on Split Spoon sample
- Penetration Index based on Dynamic Cone sample
- Shear Strength based on Field Vane
- Shear Strength based on Lab Vane
- Sensitivity Value of Soil
- Shear Strength based on Pocket Penetrometer

| SCALE     |               | STRATIGRAPHY                                                                        |                                                                                                    | MONITOR WELL |           | SAMPLE DATA     |          |                            |                         | SCALE FOR TEST RESULTS |  |  |  |  |  |  |  |  |  |
|-----------|---------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------|-----------|-----------------|----------|----------------------------|-------------------------|------------------------|--|--|--|--|--|--|--|--|--|
| Depth BGS | Elevation (m) | Stratigraphy                                                                        | DESCRIPTION OF SOIL AND BEDROCK                                                                    |              | State     | Type and Number | Recovery | Organic Vapour ppm or %LEL | Penetration Index / RQD |                        |  |  |  |  |  |  |  |  |  |
| meters    | 100.86        |                                                                                     | GROUND SURFACE                                                                                     |              |           |                 | %        | ppm                        | N                       |                        |  |  |  |  |  |  |  |  |  |
|           | 100.82        |    | ASPHALT                                                                                            | 0.05         |           |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |
|           | 100.64        |    | FILL- crushed granular base                                                                        | 0.05         |           |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |
| 0.5       |               |    | SILTY SAND- peat, roots, brown, compact                                                            | 0.33         |           | SS1             | 46       |                            | 15                      |                        |  |  |  |  |  |  |  |  |  |
| 1.0       |               |    | TILL SILTY SAND- loose, brown, moist to very moist, becoming wet at 1.52m, shale fragment at 2.13m |              |           | SS2             | 67       |                            | 6                       |                        |  |  |  |  |  |  |  |  |  |
| 1.5       |               |                                                                                     |                                                                                                    |              | RISER     |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |
| 2.0       |               |                                                                                     |                                                                                                    |              |           | SS3             | 63       |                            | 27                      |                        |  |  |  |  |  |  |  |  |  |
| 2.5       |               |                                                                                     |                                                                                                    |              |           |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |
| 2.74      |               |                                                                                     |                                                                                                    |              | BENTONITE | SS4             | 54       |                            | 11                      |                        |  |  |  |  |  |  |  |  |  |
| 3.0       | 98.07         |  | TILL SILTY SAND-becoming grey, wet                                                                 | 2.74         |           |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |
| 3.5       |               |                                                                                     |                                                                                                    | 3.05         |           | SS5             | 50       |                            | 15                      |                        |  |  |  |  |  |  |  |  |  |
| 4.0       |               |                                                                                     |                                                                                                    |              | SAND      |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |
| 4.5       |               |                                                                                     |                                                                                                    |              | SCREEN    | SS6             | 0        |                            | 22                      |                        |  |  |  |  |  |  |  |  |  |
| 4.57      | 96.29         |                                                                                     | End of Borehole                                                                                    | 4.57         |           |                 |          |                            |                         |                        |  |  |  |  |  |  |  |  |  |

NOTES:



BOREHOLE No.: BH2ELEVATION: 100.74 m**BOREHOLE LOG**Page: 1 of 1CLIENT: Ottawa CarpentryPROJECT: Geotechnical InvestigationLOCATION: 17,19,23 Robinson Av., Ottawa, OntarioDESCRIBED BY: Andrew SolomonCHECKED BY: J.BennettDATE (START): May 12, 2008DATE (FINISH): May 12, 2008**LEGEND**

- ☒ SS Split Spoon  
☒ ST Shelby Tube  
☒ RC Rock Core  
 Water Level  
 Water content (%)  
 Atterberg limits (%)  
 Penetration Index based on Split Spoon sample  
 Penetration Index based on Dynamic Cone sample  
 Shear Strength based on Field Vane  
 Shear Strength based on Lab Vane  
 Sensitivity Value of Soil  
 Shear Strength based on Pocket Penetrometer

| SCALE     |               | STRATIGRAPHY |                                                                                                                          |       | SAMPLE DATA     |          |                            |                         |
|-----------|---------------|--------------|--------------------------------------------------------------------------------------------------------------------------|-------|-----------------|----------|----------------------------|-------------------------|
| Depth BGS | Elevation (m) | Stratigraphy | DESCRIPTION OF SOIL AND BEDROCK                                                                                          | State | Type and Number | Recovery | Organic Vapour ppm or %LEL | Penetration Index / RQD |
| meters    | 100.74        |              | GROUND SURFACE                                                                                                           |       |                 | %        | ppm                        | N                       |
|           | 100.70        |              | ASPHALT                                                                                                                  |       |                 |          |                            |                         |
|           | 100.65        |              | FILL- crushed granular                                                                                                   |       |                 |          |                            |                         |
|           |               |              | FILL- sandy peat with gravel, compact, brown                                                                             |       |                 |          |                            |                         |
| 0.5       | 100.23        |              | TILL SILTY SAND WITH GRAVEL- compact, brown, damp, orange sand pocket at 1.14m to 1.19m, becomes grey, very moist to wet |       | SS1             | 67       |                            | 8                       |
| 1.0       |               |              |                                                                                                                          |       | SS2             | 63       |                            | 17                      |
| 1.5       |               |              |                                                                                                                          |       | SS3             | 84       |                            | 12                      |
| 2.0       |               |              |                                                                                                                          |       | SS4             | 13       |                            | 15                      |
| 2.5       |               |              |                                                                                                                          |       | SS5             | 83       |                            | 13                      |
| 3.0       |               |              |                                                                                                                          |       | SS6             | 42       |                            | 22                      |
| 3.5       |               |              |                                                                                                                          |       |                 |          |                            |                         |
| 3.5       | 97.08         |              | End of Borehole                                                                                                          |       |                 |          |                            |                         |
| 4.0       |               |              |                                                                                                                          |       |                 |          |                            |                         |
| 4.5       |               |              |                                                                                                                          |       |                 |          |                            |                         |

NOTES:

BOREHOLE No.: BH3ELEVATION: 100.68 m**BOREHOLE LOG**Page: 1 of 1CLIENT: Ottawa CarpentryPROJECT: Geotechnical InvestigationLOCATION: 17,19,23 Robinson Av., Ottawa, OntarioDESCRIBED BY: Andrew SolomonCHECKED BY: J.BennettDATE (START): May 12, 2008DATE (FINISH): May 12, 2008**LEGEND**

- ☒ SS Split Spoon  
☒ ST Shelby Tube  
☒ RC Rock Core  
 Water Level  
 Water content (%)  
 Atterberg limits (%)  
 Penetration Index based on Split Spoon sample  
 Penetration Index based on Dynamic Cone sample  
 Shear Strength based on Field Vane  
 Shear Strength based on Lab Vane  
 Sensitivity Value of Soil  
 Shear Strength based on Pocket Penetrometer

| SCALE     |               | STRATIGRAPHY |                                                                                                  | MONITOR WELL | SAMPLE DATA |                 |          |                            |                         | SCALE FOR TEST RESULTS                                   |  |  |  |  |  |  |  |  |  |
|-----------|---------------|--------------|--------------------------------------------------------------------------------------------------|--------------|-------------|-----------------|----------|----------------------------|-------------------------|----------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Depth BGS | Elevation (m) | Stratigraphy | DESCRIPTION OF SOIL AND BEDROCK                                                                  |              | State       | Type and Number | Recovery | Organic Vapour ppm or %LEL | Penetration Index / RQD |                                                          |  |  |  |  |  |  |  |  |  |
| meters    | 100.68        |              | GROUND SURFACE                                                                                   |              |             |                 | %        | ppm                        | N                       | 50kPa 100kPa 150kPa 200kPa<br>10 20 30 40 50 60 70 80 90 |  |  |  |  |  |  |  |  |  |
|           | 100.53        |              | FILL- crushed granular                                                                           | 0.00         |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              | FILL- silty sand, trace roots, loose, brown, damp                                                | 0.00         |             | SS1             | 67       |                            | 4                       |                                                          |  |  |  |  |  |  |  |  |  |
| 0.5       |               |              |                                                                                                  |              |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  | CUTTINGS     |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  | RISER        |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
| 1.0       | 99.66         |              |                                                                                                  | 0.99         |             | SS2             | 50       |                            | 13                      |                                                          |  |  |  |  |  |  |  |  |  |
|           | 99.61         |              | FILL- crushed granular                                                                           |              |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              | TILL SILTY SAND WITH TRACE OF GRAVEL- compact, brown, moist to very, becoming grey, wet at 3.56m | 1.37         |             | SS3             | 59       |                            | 11                      |                                                          |  |  |  |  |  |  |  |  |  |
| 1.5       |               |              |                                                                                                  |              |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  | BENTONITE    |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
| 2.0       |               |              |                                                                                                  |              |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  |              |             | SS4             | 59       |                            | 13                      |                                                          |  |  |  |  |  |  |  |  |  |
| 2.5       |               |              |                                                                                                  |              |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  | SCREEN       |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
| 3.0       |               |              |                                                                                                  |              |             | SS5             | 67       |                            | 13                      |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  | SAND         |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
| 3.5       |               |              |                                                                                                  | 3.05         |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  |              |             | SS6             | 59       |                            | 18                      |                                                          |  |  |  |  |  |  |  |  |  |
| 4.0       |               |              |                                                                                                  |              |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              |                                                                                                  | WL 3.63      |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |
| 4.5       | 96.11         |              |                                                                                                  |              |             | SS7             | 71       |                            | 4                       |                                                          |  |  |  |  |  |  |  |  |  |
|           |               |              | End of Borehole                                                                                  | 4.57         |             |                 |          |                            |                         |                                                          |  |  |  |  |  |  |  |  |  |

NOTES:

# **A P P E N D I X   I**

## **CHEMICAL RAW DATA RESULTS SOIL AND GROUNDWATER**



Your Project #: T020465  
Site: 17,19,23 ROBINSON  
Your C.O.C. #: 514782

**Attention: Andrew Solomon**

Inspec-Sol Inc  
179 Colonnade Rd  
Suite 400  
Nepean, ON  
CANADA K2E 7J4

**Report Date: 2008/05/15**

**CERTIFICATE OF ANALYSIS**

**MAXXAM JOB #: A848059**

**Received: 2008/05/13, 12:10**

Sample Matrix: Soil  
# Samples Received: 3

| Analyses                                  | Quantity | Date<br>Extracted | Date<br>Analyzed | Laboratory Method | Method<br>Reference |
|-------------------------------------------|----------|-------------------|------------------|-------------------|---------------------|
| Petroleum Hydro. CCME F1 & BTEX in Soil ☐ | 3        | 2008/05/14        | 2008/05/14       | CAM SQP-00315     | CCME CWS            |
| Petroleum Hydrocarbons F2-F4 in Soil ☐    | 3        | 2008/05/14        | 2008/05/14       | CAM SOP-00316     | CCME CWS            |
| MOISTURE ☐                                | 3        | N/A               | 2008/05/14       | CAM SOP-00445     | MOE HANDBOOK(1983)  |

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Maxxam Ottawa

Encryption Key



Ivana Vukovic

15 May 2008 12:52:14 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

IVANA VUKOVIC, Env Project Manager  
Email: ivana.vukovic@maxxamanalytics.com  
Phone# (905) 817-5700

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A848059  
Report Date: 2008/05/15

Inspec-Sol Inc  
Client Project #: T020465  
Project name: 17,19,23 ROBIHSON

### RESULTS OF ANALYSES OF SOIL

|               |       |            |            |            |     |          |
|---------------|-------|------------|------------|------------|-----|----------|
| Maxxam ID     |       | Y59350     | Y59351     | Y59352     |     |          |
| Sampling Date |       | 2008/05/12 | 2008/05/12 | 2008/05/12 |     |          |
| COC Number    |       | 514782     | 514782     | 514782     |     |          |
|               | Units | BH1 SS3    | BH2 SS5    | BH3 SS5    | RDL | QC Batch |

|            |   |    |     |    |     |         |
|------------|---|----|-----|----|-----|---------|
| Inorganics |   |    |     |    |     |         |
| Moisture   | % | 10 | 9.5 | 11 | 0.2 | 1513550 |

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch

Maxxam Job #: A848059  
Report Date: 2008/05/15

Inspec-Sol Inc  
Client Project #: T020465  
Project name: 17,19,23 ROBIHSON

### PETROLEUM HYDROCARBONS (CCME)

|               |       |            |            |            |     |          |
|---------------|-------|------------|------------|------------|-----|----------|
| Maxxam ID     |       | Y59350     | Y59351     | Y59352     |     |          |
| Sampling Date |       | 2008/05/12 | 2008/05/12 | 2008/05/12 |     |          |
| COC Number    |       | 514782     | 514782     | 514782     |     |          |
|               | Units | BH1 SS3    | BH2 SS5    | BH3 SS5    | RDL | QC Batch |

|                                   |      |     |     |     |    |         |
|-----------------------------------|------|-----|-----|-----|----|---------|
| <b>BTEX &amp; F1 Hydrocarbons</b> |      |     |     |     |    |         |
| F1 (C6-C10)                       | ug/g | ND  | ND  | ND  | 10 | 1513554 |
| F1 (C6-C10) - BTEX                | ug/g | ND  | ND  | ND  | 10 | 1513554 |
| <b>F2-F4 Hydrocarbons</b>         |      |     |     |     |    |         |
| F2 (C10-C16 Hydrocarbons)         | ug/g | ND  | ND  | ND  | 10 | 1513544 |
| F3 (C16-C34 Hydrocarbons)         | ug/g | ND  | ND  | ND  | 10 | 1513544 |
| F4 (C34-C50 Hydrocarbons)         | ug/g | ND  | ND  | ND  | 10 | 1513544 |
| Reached Baseline at C50           | ug/g | Yes | Yes | Yes |    | 1513544 |
| <b>Surrogate Recovery (%)</b>     |      |     |     |     |    |         |
| 1,4-Difluorobenzene               | %    | 90  | 90  | 90  |    | 1513554 |
| 4-Bromofluorobenzene              | %    | 110 | 109 | 109 |    | 1513554 |
| D10-Ethylbenzene                  | %    | 74  | 85  | 91  |    | 1513554 |
| D4-1,2-Dichloroethane             | %    | 81  | 80  | 80  |    | 1513554 |
| o-Terphenyl                       | %    | 79  | 83  | 82  |    | 1513544 |

ND = Not detected  
RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch

Maxxam Job #: A848059  
Report Date: 2008/05/15

Inspec-Sol Inc  
Client Project #: T020465  
Project name: 17,19,23 ROBIHSON

**GENERAL COMMENTS**

Results relate only to the items tested.



Inspec-Sol Inc  
Attention: Andrew Solomon  
Client Project #: T020465  
P.O. #:  
Project name: 17,19,23 ROBIHSON

### Quality Assurance Report

Maxxam Job Number: TA848059

| QA/QC<br>Batch<br>Num Init                                                                                | QC Type                     | Parameter                 | Date<br>Analyzed<br>yyyy/mm/dd | Value      | Recovery | Units | QC Limits |
|-----------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------|--------------------------------|------------|----------|-------|-----------|
| 1513544 PRB                                                                                               | MATRIX SPIKE<br>[Y59351-01] | o-Terphenyl               | 2008/05/14                     |            | 109      | %     | 30 - 130  |
|                                                                                                           |                             | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     |            | 102      | %     | 60 - 130  |
|                                                                                                           |                             | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     |            | 102      | %     | 60 - 130  |
|                                                                                                           |                             | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     |            | 102      | %     | 60 - 130  |
|                                                                                                           | Spiked Blank                | o-Terphenyl               | 2008/05/14                     |            | 99       | %     | 30 - 130  |
|                                                                                                           |                             | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     |            | 87       | %     | 60 - 130  |
|                                                                                                           |                             | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     |            | 87       | %     | 60 - 130  |
|                                                                                                           |                             | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     |            | 87       | %     | 60 - 130  |
|                                                                                                           | Method Blank                | o-Terphenyl               | 2008/05/14                     |            | 80       | %     | 30 - 130  |
|                                                                                                           |                             | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     | ND, RDL=10 |          | ug/g  |           |
|                                                                                                           |                             | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     | ND, RDL=10 |          | ug/g  |           |
|                                                                                                           |                             | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     | ND, RDL=10 |          | ug/g  |           |
|                                                                                                           | RPD [Y59350-01]             | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     | NC         |          | %     | 50        |
|                                                                                                           |                             | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     | NC         |          | %     | 50        |
|                                                                                                           |                             | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     | NC         |          | %     | 50        |
| 1513550 PRB                                                                                               | RPD [Y59350-01]             | Moisture                  | 2008/05/14                     | 6.0        |          | %     | 50        |
| 1513554 STE                                                                                               | MATRIX SPIKE<br>[Y59351-01] | 1,4-Difluorobenzene       | 2008/05/14                     |            | 90       | %     | 60 - 140  |
|                                                                                                           |                             | 4-Bromofluorobenzene      | 2008/05/14                     |            | 110      | %     | 60 - 140  |
|                                                                                                           |                             | D10-Ethylbenzene          | 2008/05/14                     |            | 79       | %     | 30 - 130  |
|                                                                                                           |                             | D4-1,2-Dichloroethane     | 2008/05/14                     |            | 82       | %     | 60 - 140  |
|                                                                                                           |                             | F1 (C6-C10)               | 2008/05/14                     |            | 84       | %     | 60 - 140  |
|                                                                                                           | Spiked Blank                | 1,4-Difluorobenzene       | 2008/05/14                     |            | 90       | %     | 60 - 140  |
|                                                                                                           |                             | 4-Bromofluorobenzene      | 2008/05/14                     |            | 110      | %     | 60 - 140  |
|                                                                                                           |                             | D10-Ethylbenzene          | 2008/05/14                     |            | 80       | %     | 30 - 130  |
|                                                                                                           |                             | D4-1,2-Dichloroethane     | 2008/05/14                     |            | 81       | %     | 60 - 140  |
|                                                                                                           |                             | F1 (C6-C10)               | 2008/05/14                     |            | 81       | %     | 60 - 140  |
|                                                                                                           | Method Blank                | 1,4-Difluorobenzene       | 2008/05/14                     |            | 90       | %     | 60 - 140  |
|                                                                                                           |                             | 4-Bromofluorobenzene      | 2008/05/14                     |            | 109      | %     | 60 - 140  |
|                                                                                                           |                             | D10-Ethylbenzene          | 2008/05/14                     |            | 83       | %     | 30 - 130  |
|                                                                                                           |                             | D4-1,2-Dichloroethane     | 2008/05/14                     |            | 81       | %     | 60 - 140  |
|                                                                                                           |                             | F1 (C6-C10)               | 2008/05/14                     | ND, RDL=10 |          | ug/g  |           |
|                                                                                                           |                             | F1 (C6-C10) - BTEX        | 2008/05/14                     | ND, RDL=10 |          | ug/g  |           |
|                                                                                                           | RPD [Y59350-01]             | F1 (C6-C10)               | 2008/05/14                     | NC         |          | %     | 50        |
|                                                                                                           |                             | F1 (C6-C10) - BTEX        | 2008/05/14                     | NC         |          | %     | 50        |
| ND = Not detected<br>NC = Non-calculable<br>RPD = Relative Percent Difference<br>SPIKE = Fortified sample |                             |                           |                                |            |          |       |           |

# Maxam

32 Colomade Unit 1000, Nepean, Ontario Canada K2E 7L5  
Tel: (613) 274-5773 Fax: (613) 817-5779 www.maxamcanada.com

Page  of

## CHAIN OF CUSTODY RECORD

### INVOICE INFORMATION:

Company Name: **#20928 Inspic-Sol Inc**  
 Contact Name: **BRANDON SMITH**  
 Address: **379 Colomade Rd Suite 400**  
**Nepean ON K2E 7L4**  
 Phone: **(613) 727-0895** Fax: **(613) 727-0581**  
 Email: **BTSMITH@INSPEC-SOL.COM**

### REPORT INFORMATION (if differs from Invoice):

Company Name: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_

### REGULATORY CRITERIA:

☐ MISA Reg. 15204 ☐ Sewer Use ☐ Siltation ☐ Combined  
☐ PWGO ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table 6  
☐ Reg. 558 ☐ Municipality \_\_\_\_\_  
 Other (specify): \_\_\_\_\_

### SPECIAL INSTRUCTIONS:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form  
 SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXAM

### PROJECT INFORMATION:

Quotation #: \_\_\_\_\_  
 P.O. #: \_\_\_\_\_  
 Project #: \_\_\_\_\_  
 Project Name: **Robinson Avenue**  
 Site Location: **17, 19, 23 Robinson Ave**  
 Sampled By: **Brandon Smith**

### LABORATORY USE ONLY:

MAXAM JOB #: \_\_\_\_\_  
 BOTTLE ORDER #: **82595**  
 CHAIN OF CUSTODY #: \_\_\_\_\_  
 PROJECT MANAGER: **MANA VUKOVIC**

### ANALYSIS REQUESTED (Please be specific):

| Sample Barcode Label | Sample (Location) Identification | Date Sampled | Matrix | Regulated Drinking Water? (Y/N) | Petroleum Hydro. CCMET-1 | F4 in Water | Time   |
|----------------------|----------------------------------|--------------|--------|---------------------------------|--------------------------|-------------|--------|
| 1                    | MW1-08                           | 05/13/08     | WT     | N                               | ✓                        | ✓           | 4:30pm |
| 2                    | MW3-08                           | 05/13/08     | WT     | N                               | ✓                        | ✓           | 4:30pm |
| 3                    |                                  |              |        |                                 |                          |             |        |
| 4                    |                                  |              |        |                                 |                          |             |        |
| 5                    |                                  |              |        |                                 |                          |             |        |
| 6                    |                                  |              |        |                                 |                          |             |        |
| 7                    |                                  |              |        |                                 |                          |             |        |
| 8                    |                                  |              |        |                                 |                          |             |        |
| 9                    |                                  |              |        |                                 |                          |             |        |
| 10                   |                                  |              |        |                                 |                          |             |        |

### TURNAROUND TIME (TAT) REQUIRED:

Regular (Standard) TAT: \_\_\_\_\_  
 (Not to be applied if Rush TAT is not specified)  
 Standard TAT = 6-7 Working days for most tests.  
 Please note: Standard TAT for certain tests such as BOD and Dissolved Solids are > 5 days - contact your Project Manager for details.  
 Rush TAT (if applies to entire submission) \_\_\_\_\_  
 Date Required: \_\_\_\_\_ Time Required: \_\_\_\_\_  
 Rush Confirmation Number: \_\_\_\_\_  
 # of Bottles: **5** **3 Lrg bottles F2-F4**  
**3 Small bottles VOC's**  
**5 SAME AS ABOVE**

### RECEIVED BY: (Signature/Print)

**Brandon Smith** Date: **08/05/13** Time: **4:30PM**

### RECEIVED BY: (Signature/Print)

**Mana Vukovic** Date: **13 May 08** Time: **4:30pm**

### RELINQUISHED BY: (Signature/Print)

**Brandon Smith** Date: **08/05/13** Time: **4:30PM**

### LABORATORY USE ONLY:

Condition of Sample on Receipt: ☐ OK ☐ SIF ☐ Yes ☐ No  
 Custody Seal intact on delivery: ☐ Yes ☐ No  
 Temperature (°C) on Receipt: \_\_\_\_\_  
 Time Sealed: ☐ \_\_\_\_\_  
 Wink: Maxam Yellow Clear

\*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

Your Project #: T020465-E1 ROBINSON AVE  
Site: 17,19,23, ROBINSON AVE  
Your C.O.C. #: 82595-01

**Attention: Brandon Smith**

Inspec-Sol Inc  
179 Colonnade Rd  
Suite 400  
Nepean, ON  
CANADA K2E 7J4

**Report Date: 2008/05/16****CERTIFICATE OF ANALYSIS****MAXXAM JOB #: A848551****Received: 2008/05/13, 16:30**

Sample Matrix: Water  
# Samples Received: 2

| Analyses                                   | Quantity | Date<br>Extracted | Date<br>Analyzed | Laboratory Method | Method<br>Reference |
|--------------------------------------------|----------|-------------------|------------------|-------------------|---------------------|
| Petroleum Hydro. CCME F1 & BTEX in Water ¶ | 2        | N/A               | 2008/05/14       | CAM SOP-00315     | CCME CWS            |
| Petroleum Hydrocarbons F2-F4 in Water ¶    | 2        | 2008/05/14        | 2008/05/14       | CAM SOP-00316     | CCME Hydrocarbons   |

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Maxxam Ottawa

**Encryption Key**

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

IVANA VUKOVIC, Env Project Manager  
Email: ivana.vukovic@maxxamanalytics.com  
Phone# (905) 817-5700

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

Total cover pages: 1

Maxxam Job #: A848551  
Report Date: 2008/05/16

Inspec-Sol Inc  
Client Project #: T020465-E1 ROBINSON AVE  
Project name: 17,19,23, ROBINSON AVE

### PETROLEUM HYDROCARBONS (CCME)

|               |       |            |            |     |          |
|---------------|-------|------------|------------|-----|----------|
| Maxxam ID     |       | Y61379     | Y61380     |     |          |
| Sampling Date |       | 2008/05/13 | 2008/05/13 |     |          |
| COC Number    |       | 82595-01   | 82595-01   |     |          |
|               | Units | MW1-08     | MW3-08     | RDL | QC Batch |

|                                                                                           |      |     |     |     |         |
|-------------------------------------------------------------------------------------------|------|-----|-----|-----|---------|
| <b>BTEX &amp; F1 Hydrocarbons</b>                                                         |      |     |     |     |         |
| Benzene                                                                                   | ug/L | ND  | ND  | 0.2 | 1513830 |
| Toluene                                                                                   | ug/L | ND  | ND  | 0.2 | 1513830 |
| Ethylbenzene                                                                              | ug/L | ND  | ND  | 0.2 | 1513830 |
| o-Xylene                                                                                  | ug/L | ND  | ND  | 0.2 | 1513830 |
| p+m-Xylene                                                                                | ug/L | ND  | ND  | 0.4 | 1513830 |
| Total Xylenes                                                                             | ug/L | ND  | ND  | 0.4 | 1513830 |
| F1 (C6-C10)                                                                               | ug/L | ND  | ND  | 100 | 1513830 |
| F1 (C6-C10) - BTEX                                                                        | ug/L | ND  | ND  | 100 | 1513830 |
| <b>F2-F4 Hydrocarbons</b>                                                                 |      |     |     |     |         |
| F2 (C10-C16 Hydrocarbons)                                                                 | ug/L | ND  | ND  | 100 | 1513908 |
| F3 (C16-C34 Hydrocarbons)                                                                 | ug/L | ND  | ND  | 100 | 1513908 |
| F4 (C34-C50 Hydrocarbons)                                                                 | ug/L | ND  | ND  | 100 | 1513908 |
| Reached Baseline at C50                                                                   | ug/L | Yes | Yes |     | 1513908 |
| <b>Surrogate Recovery (%)</b>                                                             |      |     |     |     |         |
| 1,4-Difluorobenzene                                                                       | %    | 84  | 84  |     | 1513830 |
| 4-Bromofluorobenzene                                                                      | %    | 111 | 110 |     | 1513830 |
| D10-Ethylbenzene                                                                          | %    | 97  | 98  |     | 1513830 |
| D4-1,2-Dichloroethane                                                                     | %    | 78  | 83  |     | 1513830 |
| o-Terphenyl                                                                               | %    | 79  | 82  |     | 1513908 |
| ND = Not detected<br>RDL = Reportable Detection Limit<br>QC Batch = Quality Control Batch |      |     |     |     |         |

Maxxam Job #: A848551  
Report Date: 2008/05/16

Inspec-Sol Inc  
Client Project #: T020465-E1 ROBINSON AVE  
Project name: 17,19,23, ROBINSON AVE

**GENERAL COMMENTS**

**Results relate only to the items tested.**

Inspec-Sol Inc  
Attention: Brandon Smith  
Client Project #: T020465-E1 ROBINSON AVE  
P.O. #:  
Project name: 17,19,23, ROBINSON AVE

Quality Assurance Report  
Maxxam Job Number: TA848551

| QA/QC<br>Batch<br>Num Init | QC Type      | Parameter                 | Date<br>Analyzed<br>yyyy/mm/dd | Value       | Recovery | Units | QC Limits |
|----------------------------|--------------|---------------------------|--------------------------------|-------------|----------|-------|-----------|
| 1513830 STE                | MATRIX SPIKE | 1,4-Difluorobenzene       | 2008/05/14                     |             | 86       | %     | 70 - 130  |
|                            |              | 4-Bromofluorobenzene      | 2008/05/14                     |             | 112      | %     | 70 - 130  |
|                            |              | D10-Ethylbenzene          | 2008/05/14                     |             | 85       | %     | 70 - 130  |
|                            |              | D4-1,2-Dichloroethane     | 2008/05/14                     |             | 82       | %     | 70 - 130  |
|                            |              | Benzene                   | 2008/05/14                     |             | 81       | %     | 70 - 130  |
|                            |              | Toluene                   | 2008/05/14                     |             | 73       | %     | 70 - 130  |
|                            |              | Ethylbenzene              | 2008/05/14                     |             | 71       | %     | 70 - 130  |
|                            |              | o-Xylene                  | 2008/05/14                     |             | 75       | %     | 70 - 130  |
|                            |              | p+m-Xylene                | 2008/05/14                     |             | 75       | %     | 70 - 130  |
|                            |              | F1 (C6-C10)               | 2008/05/14                     |             | 90       | %     | 70 - 130  |
|                            | Spiked Blank | 1,4-Difluorobenzene       | 2008/05/14                     |             | 88       | %     | 70 - 130  |
|                            |              | 4-Bromofluorobenzene      | 2008/05/14                     |             | 110      | %     | 70 - 130  |
|                            |              | D10-Ethylbenzene          | 2008/05/14                     |             | 100      | %     | 70 - 130  |
|                            |              | D4-1,2-Dichloroethane     | 2008/05/14                     |             | 78       | %     | 70 - 130  |
|                            |              | Benzene                   | 2008/05/14                     |             | 92       | %     | 70 - 130  |
|                            |              | Toluene                   | 2008/05/14                     |             | 89       | %     | 70 - 130  |
|                            |              | Ethylbenzene              | 2008/05/14                     |             | 88       | %     | 70 - 130  |
|                            |              | o-Xylene                  | 2008/05/14                     |             | 91       | %     | 70 - 130  |
|                            |              | p+m-Xylene                | 2008/05/14                     |             | 94       | %     | 70 - 130  |
|                            |              | F1 (C6-C10)               | 2008/05/14                     |             | 93       | %     | 70 - 130  |
|                            | Method Blank | 1,4-Difluorobenzene       | 2008/05/14                     |             | 87       | %     | 70 - 130  |
|                            |              | 4-Bromofluorobenzene      | 2008/05/14                     |             | 110      | %     | 70 - 130  |
|                            |              | D10-Ethylbenzene          | 2008/05/14                     |             | 102      | %     | 70 - 130  |
|                            |              | D4-1,2-Dichloroethane     | 2008/05/14                     |             | 78       | %     | 70 - 130  |
|                            |              | Benzene                   | 2008/05/14                     | ND, RDL=0.2 |          | ug/L  |           |
|                            |              | Toluene                   | 2008/05/14                     | ND, RDL=0.2 |          | ug/L  |           |
|                            |              | Ethylbenzene              | 2008/05/14                     | ND, RDL=0.2 |          | ug/L  |           |
|                            |              | o-Xylene                  | 2008/05/14                     | ND, RDL=0.2 |          | ug/L  |           |
|                            |              | p+m-Xylene                | 2008/05/14                     | ND, RDL=0.4 |          | ug/L  |           |
|                            |              | Total Xylenes             | 2008/05/14                     | ND, RDL=0.4 |          | ug/L  |           |
|                            | RPD          | F1 (C6-C10)               | 2008/05/14                     | ND, RDL=100 |          | ug/L  |           |
|                            |              | F1 (C6-C10) - BTEX        | 2008/05/14                     | ND, RDL=100 |          | ug/L  |           |
|                            |              | Benzene                   | 2008/05/14                     | 3.6         |          | %     | 40        |
|                            |              | Toluene                   | 2008/05/14                     | 3.2         |          | %     | 40        |
|                            |              | Ethylbenzene              | 2008/05/14                     | 2.2         |          | %     | 40        |
|                            |              | o-Xylene                  | 2008/05/14                     | 2.7         |          | %     | 40        |
|                            |              | p+m-Xylene                | 2008/05/14                     | 2.4         |          | %     | 40        |
|                            |              | Total Xylenes             | 2008/05/14                     | 2.4         |          | %     | 40        |
|                            |              | F1 (C6-C10)               | 2008/05/14                     | NC          |          | %     | 40        |
|                            |              | F1 (C6-C10) - BTEX        | 2008/05/14                     | NC          |          | %     | 40        |
| 1513908 PRB                | MATRIX SPIKE | o-Terphenyl               | 2008/05/14                     |             | 101      | %     | 30 - 130  |
|                            |              | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     |             | 86       | %     | 60 - 130  |
|                            |              | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     |             | 86       | %     | 60 - 130  |
|                            |              | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     |             | 86       | %     | 60 - 130  |
|                            | Spiked Blank | o-Terphenyl               | 2008/05/14                     |             | 83       | %     | 30 - 130  |
|                            |              | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     |             | 77       | %     | 60 - 130  |
|                            |              | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     |             | 77       | %     | 60 - 130  |
|                            |              | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     |             | 77       | %     | 60 - 130  |
|                            | Method Blank | o-Terphenyl               | 2008/05/14                     |             | 72       | %     | 30 - 130  |
|                            |              | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     | ND, RDL=100 |          | ug/L  |           |
|                            |              | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     | ND, RDL=100 |          | ug/L  |           |
|                            |              | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     | ND, RDL=100 |          | ug/L  |           |
|                            | RPD          | F2 (C10-C16 Hydrocarbons) | 2008/05/14                     | NC          |          | %     | 50        |
|                            |              | F3 (C16-C34 Hydrocarbons) | 2008/05/14                     | NC          |          | %     | 50        |
|                            |              | F4 (C34-C50 Hydrocarbons) | 2008/05/14                     | NC          |          | %     | 50        |

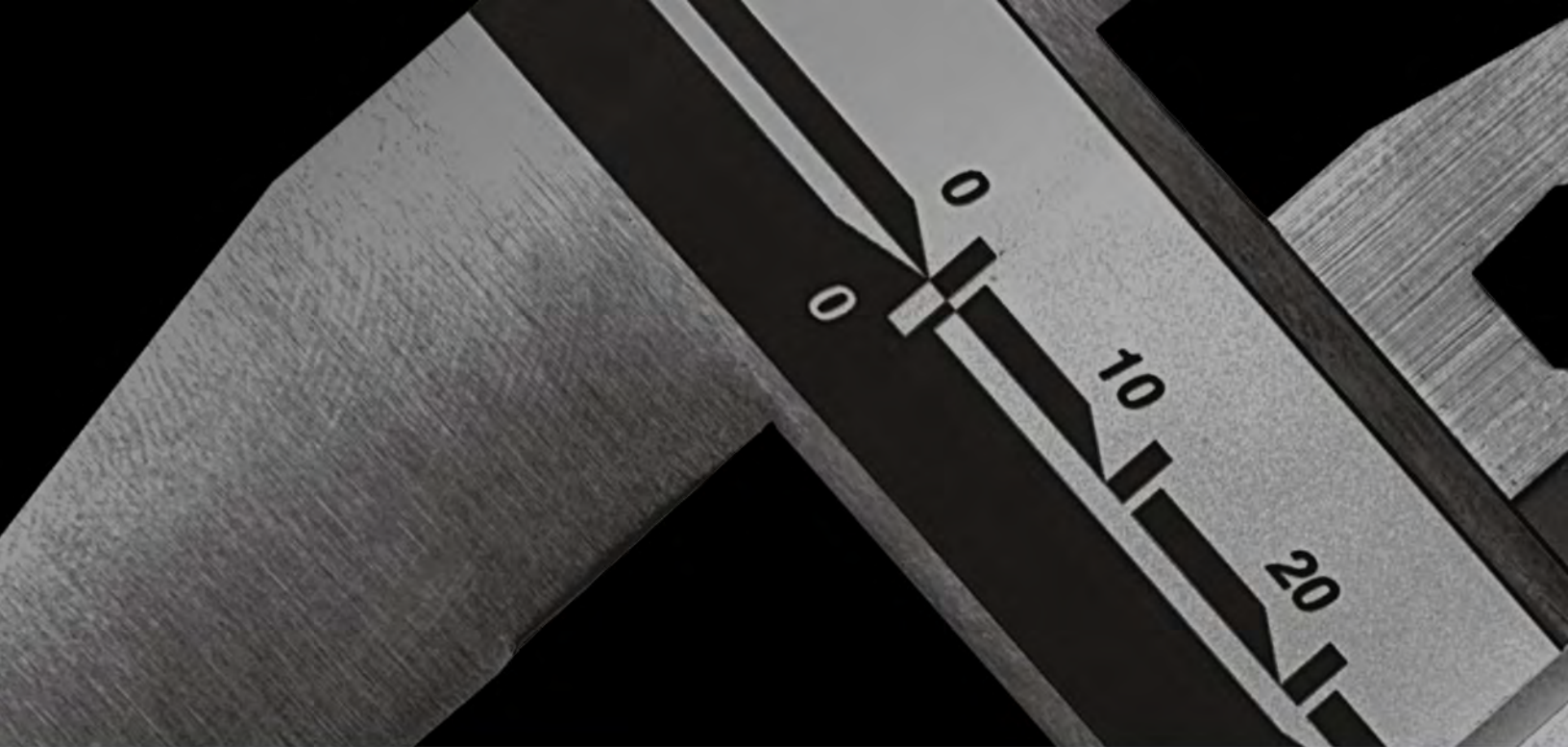
Inspec-Sol Inc  
Attention: Brandon Smith  
Client Project #: T020465-E1 ROBINSON AVE  
P.O. #:  
Project name: 17,19,23, ROBINSON AVE

**Quality Assurance Report (Continued)**

Maxxam Job Number: TA848551

ND = Not detected  
NC = Non-calculable  
RPD = Relative Percent Difference  
SPIKE = Fortified sample

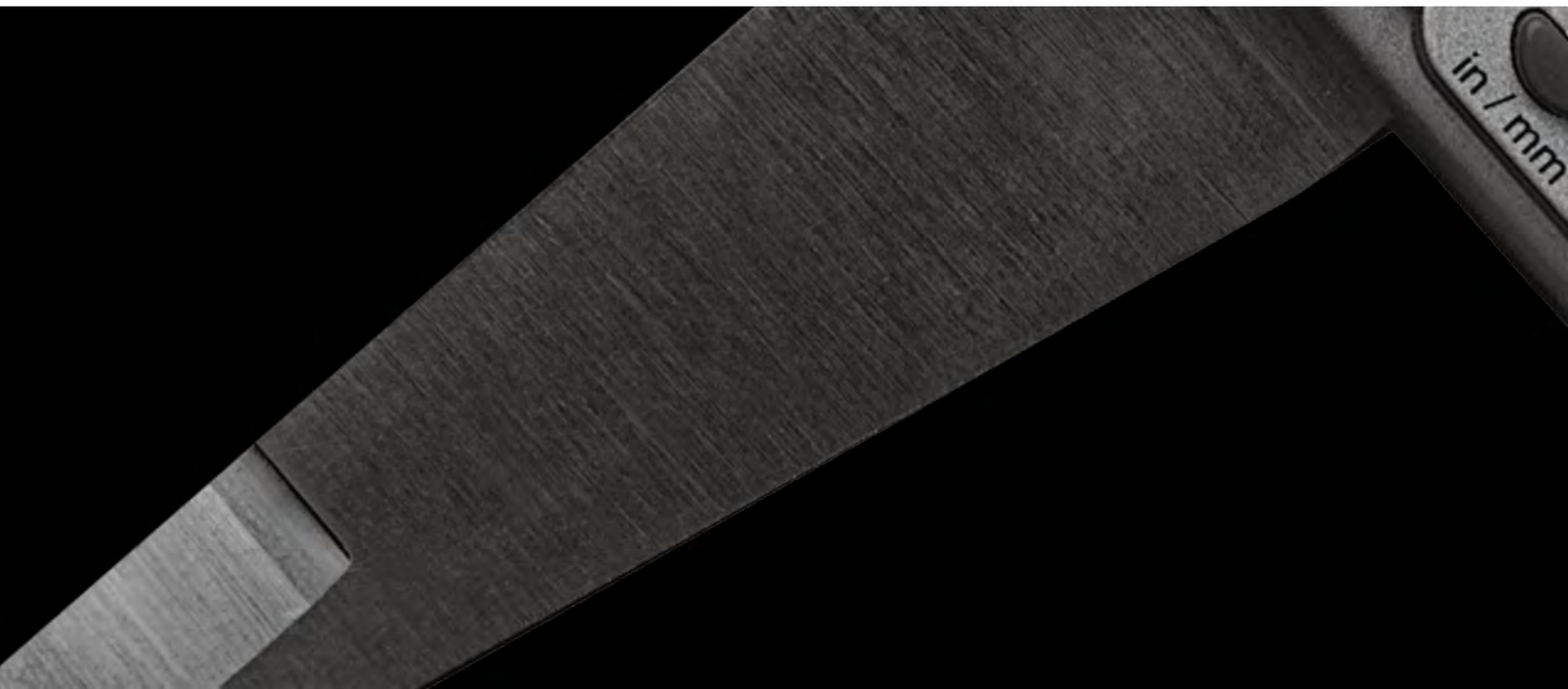




## REPORT: T021226-E1

ROBINSON PARK DEVELOPMENT  
Phase Two Environmental Site Assessment  
Residential Properties  
17, 19 and 23 Robinson Avenue  
Ottawa, Ontario

November 22, 2013



**Robinson Park Development**  
**Phase Two Environmental Site Assessment**  
**Residential Properties**  
**17, 19 and 23 Robinson Avenue**  
**Ottawa, Ontario**



Date : **November 22, 2013**

Our Ref. : **T021226-E1**

**Robinson Park Development  
5669 Power Road  
Gloucester, ON  
K1G-3N4**

**Phase Two Environmental Site Assessment  
Residential Properties  
17, 19 and 23 Robinson Avenue  
Ottawa, Ontario**

**Reference No. T021226-E1  
November 22, 2013**

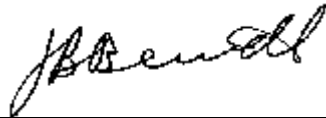
**Prepared by :**



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**Approved by :**



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- ◆ Inspec-Sol Wash/Pass Sieve Analysis Results



## 1.0 EXECUTIVE SUMMARY

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Inspec-Sol has previously prepared a *Limited Phase II Environmental Site Assessment (ESA)* (Ref No: T020465-E1, dated June 4, 2008) for the current owner of the Site. The Phase II ESA was conducted in response to the client's lending institution's request to assess the potential presence of contaminated soil and groundwater on the Site related to fuel oil usage on the Properties. The City of Ottawa issued comments based on a Site Plan Application requesting a revised Phase Two ESA be submitted for the Site.

It is our understanding that a Phase One ESA has not been conducted for the Site and, no Phase One ESA reports were available from the client. A brief historical review was conducted of the Phase Two Study Area prior to completing this ESA. Known information suggests that potential contaminating activities (PCAs) exist in the Phase Two Study area and consist of a former railway and rail storage facility located to the north of the Site, a former retail fuel outlet located further southwest of the Site, a former automotive garage located further southwest of the Site and the former Lees Avenue Coal Gasification Plant located further west of the Site.

The current Phase Two Environmental Site assessment was conducted based on the known information to determine if contamination was present at the Site. The investigation involved the advancement of four (4) new boreholes, all of which were completed with groundwater monitoring wells with screens set within the overburden glacial till, on October 8, 2013. Eight (8) soil samples, including two (2) duplicate samples, were submitted for laboratory analysis of a combination of metals, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (PHCs), volatile organic compounds (VOC) and pH parameters. Seven (7) groundwater samples, including a duplicate sample, were submitted for laboratory analysis of metals, PAHs, PHCs, VOCs and pH. One (1) composite soil sample was also submitted for toxicity characteristic leaching procedure (TCLP) analysis to determine options for off-Site disposal.

Analysis of the overburden soil revealed lead and benzo(a)pyrene exceedances of the O.Reg. 153/04 criteria in one (1) of the analysed soil samples from the northeast portion of the Site. All other soil parameters were in compliance with the O.Reg. 153/04 criteria. All of final analysed groundwater sample results were in compliance with the O.Reg. 153/04 Table 3 criteria.

Based on the information collected to date, a local soil removal program must be completed to allow the property to be in compliance for the existing or proposed land use (Table 3, residential, coarse grained soils). Information collected to date has not identified the source of the contamination. The principle area of concern is the fill on the northeast portion of the Site. A soil management program will be developed with the client in order to manage and dispose of the contaminated soil at the time of development and ensure verification testing is completed to document that the removal was successful.

## **2.0 INTRODUCTION**

---

### **2.1 Site Description**

#### Location and Identifier

The Site is located at 17, 19 and 23 Robinson Avenue in Ottawa, Ontario. The Site is legally described as Lots 43 and 45 and Part of Lot 190 on Plan 190 and Part 2 on Registered Plan 4R7177 in the City of Ottawa in the Province of Ontario. The PIN for the Site is 042070357. The location of the Site within the City of Ottawa is shown on Drawing T021226-E1-1 Site Location Plan, in the Figures Section following the text of this report. In all aspects of this report the Phase Two property is referred to as the Site or Phase Two Property.

#### Size and Boundaries

The Site is rectangular in shape and covers an area of approximately 1142 m<sup>2</sup>. The Site is located in an area that is developed for mixed residential and community (open space) use and is bordered to the east and west by residential properties, to the south by Robinson Avenue followed by residential properties and to the north by Parkland. The boundaries of the Site and location of the subject buildings (three residential dwellings) are shown on Drawing T021226-E1-2 Borehole Location Plan, in the Figures Section following the text of this report.

### **2.2 Property Ownership**

The Site is currently owned by Robinson Park Development. The Site has been used for residential purposes since at least 1958. Robinson Park Development has a corporate address of 5669 Power Road, Ottawa (Gloucester), Ontario, K1G 3N4 and is represented by Mr. Americo Rego.

### **2.3 Current and Proposed Future Uses**

The current property use is residential and the current property zoning is residential fifth density zone (R5N).

It is understood that the intended property use is to remain residential use.

### **2.4 Applicable Site Condition Standard**

The Site is located in an urban developed area of the City of Ottawa that is supplied with municipally treated water and sewer services and is considered as being non-potable water use as per section 35 of the Ontario Regulation 153/04 as amended 2011 (O.Reg. 153/04).

The proposed property use is currently, and is to remain residential.

The nearest surface water body is the Rideau River, located approximately 180m east-northeast of the east Property limit. There is no portion of the site within 30m of a surface water body, and the Site does not include a surface water body.

The Site is not within or adjacent to an area of natural significance. The pH of the soil was tested and observed to be within the range of 5-9. The site is not classified as an environmentally sensitive property, hence the generic criteria of Tables 1 to 9 of O.Reg. 153 are considered applicable.

Based upon boreholes completed on the property and known geology of the area, the depth to bedrock is expected to be greater than a range of 6 to 15m. The site is hence not classified as a shallow soil property.

Borehole advancement has identified a significant layer of till, and grain size analysis indicated the soils are coarse textured soils as defined in O.Reg. 153/04. The site will be compared to coarse grained soil criteria.

Accordingly, the generic O.Reg.153/04 Table 3 (residential) criteria are considered the applicable Site comparison.

This report presents the information, data and interpretation in a format in general accordance with O.Reg. 153/04. It is understood that a Record of Site Condition (RSC) is

not required for the Site at this time. If an RSC is required, additional work would be required to be fully compliant with report format and scope requirements.

### 3.0 BACKGROUND INFORMATION

---

#### 3.1 Physical Setting

##### Surface Water

The Site does not contain any surface water bodies. The nearest surface water body is the Rideau River, located approximately 180m east-northeast of the east Property limit.

##### Topography and Drainage

The Site is relatively flat and is approximately level with Robinson Avenue to the south and the neighboring properties. The regional topography in the general area of the Site slopes gently downwards towards the east and northeast towards the Rideau River.

Stormwater at the Site is directed by overland flow on improved Site surface to catch basins located on Robinson Avenue, which drain into the municipal storm sewer system. Some infiltration can be expected in the grassed/vegetated areas of the Site.

#### 3.2 Past Investigation

The following environmental report was reviewed prior to conducting this Phase Two ESA:

**“Limited Phase II Environmental Site Assessment, 17-23 Robinson Avenue, Ottawa, Ontario” Reference No. T020465-E1, prepared by Inspec-Sol Inc., dated June 4, 2008.**

- ◆ The Site contained three (3) residential two storey buildings located at the front of the lot (i.e. the Robinson Avenue side of the lot). Each building had an open backyard ringed with older growth trees. A private garage/shed building was located at the rear of the driveway to 23 Robinson Avenue.
- ◆ The purpose of the Limited Phase II ESA was to investigate, through an intrusive investigation, the potential presence of contaminated soil and groundwater on the Site related to fuel oil usage on the properties, which may have caused environmental impact with the Site, or the immediate vicinity of the Site. It was understood that the client’s lending institution did not request a Phase I ESA and only requested a limited

Phase II due to presence of a fuel oil AST for heating. At the time of the Limited Phase II ESA, there was only one current Fuel Oil AST located at 23 Robinson.

- ◆ Three (3) boreholes were placed on the Site in 2008, two (2) of which were instrumented with groundwater monitoring wells. None of the analysed soil and groundwater samples had concentrations of petroleum hydrocarbons above the laboratory method detection limits; the analytical results were hence, in compliance with the MOE criteria for the Site.

## 4.0 SCOPE OF THE INVESTIGATION

---

### 4.1 Overview of Site Investigation

Underground utilities were identified prior to drilling activities for any private and public services on behalf of **Inspec-Sol**. Copies of the underground utility clearances are included in Appendix A.

Borehole advancement was conducted on October 8, 2013, by means of a track mounted CME 55 power drill rig equipped for environmental soil sampling. Samples were recovered using 50 mm diameter split spoon samplers advanced to the sampling depth with a hydraulic hammer.

- ◆ Borehole BH4(MW) was advanced to a depth of 5.5m, and was located to the north of the dwelling at 23 Robinson Avenue, near the east property boundary, to investigate quality of the soil and groundwater on the southeast portion of the Site. It should be noted that access to the southern portion of the Site was limited by the presence of underground and overhead utility services.
- ◆ Borehole BH5(MW) was advanced to a depth of 5.5m, and was located on the northeast portion of 23 Robinson Avenue, near the north and east property boundaries, to investigate quality of the soil and groundwater on the northeast portion of the Site.
- ◆ Borehole BH6(MW) was advanced to a depth of 5.2m, and was located on the northwest portion of 17 Robinson Avenue, near the north and west property boundaries, to investigate quality of the soil and groundwater on the northwest portion of the Site.

- ♦ Borehole BH7(MW) was advanced to a depth of 5.2m, and was located to the northwest of the dwelling at 17 Robinson Avenue, near the west property boundary, in the general area of the former BH3, to investigate quality of the soil and groundwater on the southwest portion of the Site.

Soil samples were collected during borehole advancement. The following six (6) samples were submitted to the laboratory: BH4/SS6, BH5/SS1, BH5/SS6, BH6/SS1, BH6/SS5, BH7/SS6. Two (2) duplicate samples DUP-S1 (BH6/SS5) and DUP-S2 (BH7/SS6) were also submitted to the laboratory. The samples were submitted to Exova Laboratories Ltd. in Ottawa, under Chain of Custody (COC) 174169 on October 9, 2013. The analysis was carried out according to O.Reg 153/04 requirements. The samples were tested for a combination of Metals, Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons F1-F4 (PHCs), Volatile Organic Compounds (VOCs) and pH parameters. One (1) composite sample was submitted to Exova Laboratories in Ottawa Ontario on October 18, 2013 under Chain of Custody 174539 for TCLP analysis of VOC, inorganics, and ignitability for comparison to Ontario Regulation 558/00.

Monitoring wells were installed in all four (4) of the advanced boreholes. The monitoring wells were developed the day of drilling by removing at least three well volumes, or purging the wells dry three (3) times. On October 15, 2013, **Inspec-Sol** returned to the Site to measure the static water levels of the four (4) monitoring wells BH1(MW), BH2(MW), BH3(MW) and BH4(MW) and to collect water samples. The groundwater samples were submitted to Exova Laboratories Ltd. in Ottawa, under COC No.: 174169 on October 15, 2013. The samples were submitted for analysis of metals, PAHs, PHCs, VOCs and pH parameters. The analysis was carried according to O. Reg. 153/04 requirements.

Analytical results for the groundwater sample collected from BH5(MW) on October 15, 2013 revealed a single exceedance for tetrachloroethylene (PCE) under the O.Reg. 153/04 Table 3 criteria. The reported concentration of PCE in this groundwater sample marginally exceeded the O.Reg. 153/04 criteria (1.7 µg/L detected vs. criteria of 1.6 µg/L). The client was informed of the results and additional sampling was completed. On October 29 and November 5, 2013, these groundwater samples were submitted to Exova Laboratories Ltd. in Ottawa for VOC analysis, under COC Nos.: 1323988 and 1324828, respectively.

## 4.2 Media Investigated

### Rationale for Inclusion of Various Media

Based on known historic potentially contaminating activities (PCAs) in the Phase One Study Area area of the Site, it was suspected that there may have been contamination in the overburden soil and groundwater. A Phase One study area is defined in O.Reg. 153/04 as 250m from the Site's property limits, or any other property beyond this limit that the qualified person considers should be included. Known PCAs in the Phase Two Study area consisted of a former railway and rail storage facility located to the north of the Site, a former retail fuel outlet located further southwest of the Site, a former automotive garage located further southwest of the Site and the former Lees Avenue Coal Gasification Plant located further west of the Site. Accordingly, analysis of soil samples was proposed in the borehole locations. As noted in Section 4.1, soil samples were collected using stainless steel split spoons during drilling. The presence of heating oil storage on the Site was considered a PCA; however, this was investigated in the 2008 limited investigation and did not warrant further assessment during this Phase Two ESA.

The aforementioned PCAs were considered to have had the potential to have impacted the Site groundwater. To investigate the potential presence of contamination in the groundwater, four (4) groundwater monitoring wells (BH4(MW), BH5(MW), BH6(MW) and BH7(MW)) were advanced and screened in the overburden. A seal was installed above the sand pack to the ground surface. The groundwater was sampled from the aforementioned monitoring wells using a peristaltic pump following well development, a period of stabilization and purging the day of sampling.

There were no surface water bodies or sediments observed at the Site during the Phase Two ESA, and therefore no sampling of surface water or sediment was conducted at the time of this investigation.

## 4.3 Phase One Conceptual Site Model

It should be noted that a Phase One ESA has not been completed for the Site which would need to be done to be fully compliant with O.Reg. 153/04, however, a review of known information was conducted for the purpose of this section of the Phase Two ESA report.

The property is located at 17, 19 and 23 Robinson Avenue, in Ottawa, Ontario. The City of Ottawa website indicated the Site is legally described as Lots 43 and 45 and Part of Lot 190



on Plan 190 and Part 2 on Registered Plan 4R7177 in the City of Ottawa in the Province of Ontario.

The Site has been is serviced by municipal water services and is in a non-potable area.

The Site is generally surrounded by residential properties to the east and west. Robinson Avenue is present to the south of the Site followed by properties used for residential purposes. The properties to the north of the Site are used for parkland and community purposes.

Historical development at the Site has included the existing residential dwellings (civically addressed 17, 19 and 23 Robinson Avenue) that have been present since at least 1958, determined from a review of aerial photography. The subject buildings are two-storey residential dwellings with basement levels. General exterior building construction materials consist of exterior vinyl siding, concrete foundation walls, vinyl and wood framed glass windows and wood doors. The balance of the property is occupied by asphalt or gravel parking areas to the southeast and southwest of the dwellings, and landscaped/vegetated areas to the north and south of the dwellings.

The Site is relatively flat and at grade with the neighboring properties. A dry drainage ditch was identified to the north of the Site. Regional topography is relatively flat, with a gentle slope downwards to the east and northeast towards the Rideau River.

#### Subsurface Conditions

Underground services enter the buildings from Robinson Avenue, to the south of the Site.

Based on the known geology of the area, the natural soil conditions are expected to be a glacial till, with the upper surface reworked and sorted by fluvial action. The depths of overburden vary, but generally are expected to range from greater than 6 to 15m in thickness and are expected to be underlain by shale bedrock of the Carlsbad Formation. Groundwater flow directions in the overburden were expected to be generally east or northeast, towards the Rideau River.

#### Potentially Contaminating Activities (PCAs)

Based on the known information of the general area of the Site, there was one (1) on-Site PCA, and four (4) off-Site PCAs identified:

1. A heating oil aboveground storage tank (AST) was identified to the west of the 23 Robinson Avenue dwelling. Former ASTs were suspected to have been associated with the dwellings addressed 17 and 19 Robinson Avenue.
2. Former railway line and rail storage facilities were located approximately 10m north and 100 m northwest of the Site, respectively.
3. A former automotive repair garage was located approximately 60m south of the Site.
4. A former retail fuel outlet was located approximately 95m south-southeast of the Site.
5. The former Lees Avenue coal gasification plant was located approximately 150m southwest of the Site.
6. The potential placement of impacted fill material, used to grade the Site.

#### Areas of Potential Environmental Concern (APECs)

There were four (4) areas of potential environmental concern:

1. Surficial soil contamination associated with a former railway line to the north of the Site, including the potential placement of fill material.
2. Potential soil and groundwater contamination from the former railway and rail storage facilities to the north and northwest of the Site.
3. Potential soil and groundwater contamination from the former Lees Avenue coal tar gasification plant to the west of the Site.
4. Potential soil and groundwater contamination from the former automotive service garage located to the south of the Site.

#### Contaminants of Potential Concern (CPCs)

The contaminants of potential concern (CPCs) in soil and groundwater for the Site were based on the APECs identified at the Site during a historical review and were discussed with technical reviewers at the City of Ottawa. The following CPCs for the Site were suspected to be associated with historical railway lines, a rail storage yard and a former coal gasification plant in the area of the Site:

1. Petroleum Hydrocarbons ranges F1-F4 (PHCs).
2. Polycyclic Aromatic Hydrocarbons (PAHs)
3. Metals.
4. Volatile Organic Compounds (VOCs).

#### **4.4 Deviations From Sampling and Analysis Plan**

The inferred groundwater table was encountered deeper than anticipated in BH4(MW) and BH5(MW), as a result these boreholes were advanced to 5.5m with screens installed to straddle the groundwater table.

No other deviations were made to the Sampling and Analysis Plan (SAP). A copy of the SAP is presented in Appendix A.

#### **4.5 Impediments**

No impediments were encountered during the drilling or groundwater sampling program.

### **5.0 INVESTIGATION METHOD**

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#### **5.1 General**

The investigation method took into account the surficial features of the Site, previous investigations on the Site and the PCAs and APECs on the Site and in the Phase Two Study area. Based upon these conditions, four (4) boreholes with split spoon soil sampling and installation of four (4) groundwater monitoring wells were considered adequate to assess if contaminants of potential concern (CPCs) would be detected within the soil and groundwater. The fieldwork included advancement of four (4) boreholes, and selection of soil samples for testing based upon visual, olfactory and quantitative vapour readings of head space. All four (4) of the boreholes were then equipped with groundwater monitoring wells to allow collection of water level data, and sample collection for testing of CPC from the overburden aquifer. The boreholes were surveyed relative to an easily identified benchmark (top of spindle of a fire hydrant on Robinson Avenue) in the field.

Samples were immediately returned and turned over to an accepted laboratory under Chain of Custody control for chemical analysis of CPCs. Quality control procedures were followed.

The following sections present more detailed descriptions of each activity of the investigation.

#### **5.2 Drilling and Excavating**

Drilling of BH4(MW), BH5(MW), BH6(MW) and BH7(MW) was conducted on October 8, 2013 by Downing Estate Drilling Ltd. of Hawkesbury Ontario, using a track mounted CME 55

power drill rig. Drilling was conducted under full-time supervision and direction by **Inspec-Sol** personnel. Samples were recovered using 50 mm diameter split spoon samplers advanced to the sampling depth with a hydraulic hammer, and washed with soapy water between uses to avoid cross contamination. Soil samples were collected continuously to the maximum proposed depth of drilling.

### 5.3 Soil: Sampling

#### Equipment

Split spoon soil samples were recovered from BH4(MW), BH5(MW), BH6(MW) and BH7(MW) on October 8, 2013 using 50 mm diameter continually advanced stainless steel split spoon samplers advanced with a hydraulic hammer, and washed between uses, as stated in the SAP. Samples of soil intended for PHCs F1 range and VOCs analysis were collected using 2cc syringes and placed in methanol vials supplied by the laboratory. Additional soil samples were collected in laboratory supplied jars, and in Ziploc bags for headspace analysis.

#### Description

The findings reflect that there are generally four (4) main soil types within the depth investigated, namely:

- ◆ Topsoil;
- ◆ Fill;
- ◆ Sandy Silt; and,
- ◆ Glacial Till.

The subsurface soil encountered in the four (4) boreholes locations is described in the following sections, and is presented graphically on the Field Logs, in Appendix A, at the end of this report.

#### Topsoil

A layer of sandy clay topsoil was encountered in three (3) of the borehole locations on the Site. This material was found to be dark brown and contained some roots and organics. This layer was found to begin at near the ground surface and extended down approximately 0.2-0.6m.

No petroleum odours were noted within any of the topsoil samples. Furthermore, there were no significant readings of organic vapour recorded within any of the topsoil samples.

#### Sandy Clay with Gravel (fill)

A layer of fill consisting of sandy clay with gravel was observed in all four of the boreholes. Petroleum odours were not noted within any of the sandy clay fill within the boreholes. Furthermore, there were no significant readings of organic vapour recorded within any of the sandy clay fill samples found in the borehole locations.

#### Sandy Silt

Light brown sandy silt was observed in one (1) of the borehole locations (BH6) on the northwest portion of the Site. This material was found to be loose to compact, was damp to moist and was suspected to contain some gravel or cobbles. This layer was found to begin at approximately 0.8m below ground surface in BH6 and extended down approximately 0.8m to the underlying till layer.

No petroleum odours were noted within any of the sandy silt soils within BH6. Furthermore, there were no significant readings of organic vapour recorded within any of the sandy silt soil samples found in BH6.

#### Till (native)

Till consisting of silty sand and gravel was encountered in all four (4) boreholes starting at 0.8m below grade (BG) and extending down to the maximum depth of investigation, approximately 5.2m BG. This material was found to be light brown to grey in colour, was compact and was recovered in varying moisture conditions.

No petroleum odours were noted within any of the till samples recovered from the boreholes. Furthermore, there were no significant readings of organic vapour recorded within any of the till soil samples.

### **5.4 Field Screening Measurements**

Field screening was conducted using a photo ionization detector (PID). Pertinent to this investigation, the device measures organic vapours in parts per million (PPM) (+/- 0.1ppm or +/-1%reading) or lower explosive limit (LEL) (+/- 0.1% or +/-1%reading). The device was auto calibrated using isobutylene in August 2013, and zeroed in the contained environment prior to use.

Samples of the soil were placed in Ziploc bags, allowed to stabilize for 10-30 minutes, and then the headspace gas was sampled using the PID. Generally, the highest reading material is assumed to contain the greatest volatile organic compound (VOC) or petroleum hydrocarbon content, and is submitted for lab analysis. No readings of combustible gasses were identified using the PID. Accordingly, samples were selected at based on depth, colour and location, to assess the identified APECs.

## **5.5 Ground Water: Monitoring Well Installation**

Drilling of BH4(MW), BH5(MW), BH6(MW) and BH7(MW) on October 8, 2013 by Downing Estate Drilling Ltd., using a track mounted CME 55 power drill rig.

All four (4) boreholes were equipped with 51 mm diameter temporary groundwater monitoring wells identified as BH4(MW), BH5(MW), BH6(MW) and BH7(MW). The well screens consisted of slotted No. 10, 1.5m long, 51mm diameter PVC, installed at the finished depth of the borehole. 51mm PVC risers extended from the top of the screen to near the ground surface. The risers were encased in well covers in BH4(MW) and BH7(MW) and were finished with riser stickups in BH5(MW) and BH6(MW). A PVC slip cap was installed at the base of the screen to prevent sediment infiltration. A J-plug was used in the installations in BH4(MW) and BH7(MW) near ground surface to prevent surface water influence while a PVC slip cap was placed on the top of the risers at BH5(MW) and BH6(MW).

Each well was backfilled with clean sand to 0.3m above the top of the screen. The remaining annular space was backfilled with hole plug to within 0.15-0.3m of the ground surface, than backfilled with sand and equipped with a flushmount well cover in BH4(MW) and BH7(MW).

Each well was equipped with dedicated 12mm LDPE Waterra tubing and a dedicated Waterra footvalve. The Waterra tubing/footvalve was then used to develop the well. A minimum of three (3) well volumes were purged from each monitoring well the day of drilling; up to ten (10) well volumes were removed from monitoring wells which had sufficient recovery and observable amounts of sediment. If a monitoring well was observed to go dry during development, the well was left for a period of at least 30 minutes and was subsequently purged dry up to three (3) times. A period of stabilization of at least 1 week was allowed to pass prior to sampling. Wells were purged dry or up to three (3) additional well volumes were removed on the day of sampling, prior to sampling to allow the collection of fresh groundwater and stabilization of field parameters.

## **5.6 Ground Water: Field Measurement of Water Quality Parameters**

Field measurements of groundwater quality were measured in the field using a Horiba U-22 Water Quality Meter. Measurements of pH, electrical conductivity (EC), total dissolved solids (TDS) and temperature were collected during purging prior to sampling. Measurements were collected at following the removal of 1L, 1 well volume and each subsequent well volume until the water quality parameters stabilized (subsequent readings within 10% difference).

## **5.7 Ground Water: Sampling**

Stabilized groundwater levels were recorded in each monitoring well prior to disturbance of the water column.

All wells were then developed then purged prior to sampling using a peristaltic pump with dedicated 6 mm LDPE tubing in each monitoring well. Field measurements of water quality parameters were collected, as described above, to ensure stabilization of these parameters.

Following the purging of the well, a groundwater sample was collected from each well using the peristaltic pump with dedicated 6 mm LDPE tubing. The pump was set to low flow during sampling to minimize volatilization. Samples were collected in dedicated amber glass bottles and vials prepared by the laboratory. The PAH, PHC, VOC, and general chemistry (pH) bottles and vials were not field filtered. The metals sample from each monitoring well was filtered using a dedicated 45 micron Waterra filter and was preserved in a laboratory supplied bottle.

Following acquisition, the groundwater samples were stored in an ice chilled cooler and were taken directly to the laboratory following the sampling event.

## **5.8 Sediment Sampling**

Sediment was not present at the Site, and was not sampled as part of this assessment.

## **5.9 Analytical Testing**

All soil and groundwater analytical testing as part of this assessment was conducted by Exova Laboratories. Exova is a member of the Standards Council of Canada (SCC) and Canadian Association of Environmental Analytical Laboratories (CAEAL).

### **5.10 Residue Management Procedures**

Soil cuttings were placed in steel drums in designated areas of the Site. The analytical results indicated the presence of soil contamination in one of the boreholes; hence, these cuttings will be disposed of by an approved waste disposal contractor licensed for these works.

Purge water was contained in a steel drum in the field and was retained on-Site. Upon receipt of laboratory analytical results, the purge water was disposed of in the municipal storm sewer.

### **5.11 Elevation Surveying**

Survey data of the ground surface elevation of all boreholes and elevation of the top of pipe (riser) of all groundwater monitoring wells was collected as part of this assessment. Survey elevations were based on an assumed elevation of a temporary benchmark of 100.00m for the top of spindle of a fire hydrant on the north side of Robinson Avenue, approximately 5 m west of the Site.

### **5.12 Quality Assurance and Quality Control Measures**

All soil sample jars were provided by Exova Laboratories. All PHC F1 range and VOC soil samples were collected with laboratory provided single use 2cc soil syringes. Each sample was given a unique identification, following the format of (sample point)/(type of sample; SS=split spoon, GS=grab sample)(sequence number). Stainless steel spilt spoons were used to recover soil samples from the boreholes; the spoons were washed in soapy water between uses. A metal spatula was used to transfer samples from the split spoons to the sample jars; this spatula was cleaned between uses.

All groundwater sample jars were provided by Exova Laboratories. All groundwater samples were transferred directly from the dedicated 6 mm LDPE tubing directly to the sampling containers. The PAH, PHCs, general chemistry, and VOCs bottles and vials were not field filtered. The metals sample from each monitoring well was filtered using a dedicated 45 micron Waterra filter and was preserved in a laboratory supplied bottle.

To ensure laboratory quality control, blind field duplicates were submitted for laboratory analysis of soil and groundwater samples. Two (2) blind field duplicates (DUP-S1 and DUP-



S2 as representative samples from BH6/SS5 and BH7/SS6, respectively) were submitted for laboratory analysis on October 9, 2013 for a combination of PHCs, VOCs, metals and PAHs in soil. These duplicates provide quality assurance and quality control of all parameter sets analysed for soil samples submitted as part of this assessment. One (1) blind field duplicate (DUP-GW1) was submitted for laboratory analysis of PHCs, VOCs, metals and PAHs and pH in groundwater. This duplicate provides quality assurance and quality control of all parameter sets analysed for groundwater samples submitted as part of this assessment.

There were no deviations from the original sampling plan.

## **6.0 REVIEW AND EVALUATION**

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### **6.1 Geology**

#### Topsoil

A layer of sandy clay topsoil was encountered in three (3) of the borehole locations on the Site. This material was found to be dark brown and contained some roots and organics. This layer was found to begin at near the ground surface and was present in locations which were not paved surfaces. The thickness of this geological unit ranged from approximately 0.2-0.6m. Soil conditions in this unit dry to moist; groundwater was not encountered in this unit, nor was groundwater expected at the depths encountered in this unit.

#### Sandy Clay with Gravel (fill)

A layer of fill consisting of sandy clay with gravel was observed in all four of the boreholes. This layer was found to begin at approximately 0.2 m BG and was approximately 0.6 to 1.5m in thickness. Soil conditions in this unit were damp to moist; groundwater was not encountered in this unit, nor was groundwater expected at the depths encountered in this unit.

#### Sandy Silt

Light brown sandy silt was observed in one (1) of the borehole locations (BH6) on the northwest portion of the Site. This material was found to be loose to compact, was damp to moist and was suspected to contain some gravel or cobbles. This layer was found to begin at approximately 0.8m below ground surface in BH6 and extended down approximately 0.8m to the underlying till layer. Groundwater was not encountered in this unit, nor was groundwater expected at the depths encountered in this unit.

### Silty Sand Till (native)

Silty Sand Till was encountered in all four (4) boreholes starting at 0.8m below grade (BG) and extending down to the maximum depth of investigation, approximately 5.2m BG. This material was found to be light brown to grey in colour, was compact and was recovered in varying moisture conditions. Groundwater was encountered at depths ranging from 2.9-4.0m below surface grade in this unit.

## **6.2 Ground Water: Elevations and Flow Direction**

### Overburden Aquifer

In order to assess the impact to the Site groundwater from APECs identified on the Site and neighbouring properties, four (4) groundwater monitoring wells were installed on the subject Property as part of this assessment. The wells were screened in the glacial till geological unit in order to intercept the overburden aquifer (aquifer of interest). A bentonite seal to above the monitoring well screen/sandpack was formed during all monitoring well installations. Monitoring well construction details are presented in Table A below.

**Table A**  
**Monitoring Well Installation**

| Well ID          | Grade Elevation<br>m | TOP elevation<br>m | well bottom elevation<br>m | screen elevation<br>m | sand pack elevation<br>m | bentonite seal<br>m | well bottom depth<br>m |
|------------------|----------------------|--------------------|----------------------------|-----------------------|--------------------------|---------------------|------------------------|
| OVERBURDEN WELLS |                      |                    |                            |                       |                          |                     |                        |
| BH4(MW)          | 99.07                | 98.99              | 93.58                      | 93.58 – 96.63         | 93.58 – 96.93            | 96.93 – 98.84       | 5.49                   |
| BH5(MW)          | 98.74                | 99.21              | 93.25                      | 93.25 – 96.30         | 93.25 – 96.60            | 96.60 – 98.74       | 5.49                   |
| BH6(MW)          | 98.36                | 99.35              | 93.79                      | 93.79 – 96.84         | 93.79 – 97.14            | 97.14 – 98.36       | 4.57                   |
| BH7(MW)          | 99.04                | 98.96              | 94.47                      | 94.47 – 97.52         | 94.47 – 97.82            | 97.82 – 98.81       | 4.57                   |

Following a period of stabilization of the groundwater in the overburden wells, water levels were collected on October 15, 2013. Groundwater elevations were determined based on the assumed elevation of the surveyed temporary benchmark, the monitoring well survey and the measured groundwater level within each monitoring well. Water table elevation details are presented in Table B below.

**Table B**  
**Water Table Details**

| Well ID          | Grade Elevation<br>m | TOP elevation<br>m | Depth to Groundwater<br>(below TOP)<br>m | Water Table Elevation (Oct. 15, 2013)<br>m |
|------------------|----------------------|--------------------|------------------------------------------|--------------------------------------------|
| OVERBURDEN WELLS |                      |                    |                                          |                                            |
| BH4(MW)          | 99.07                | 98.99              | 3.56                                     | 95.40                                      |
| BH5(MW)          | 98.74                | 99.21              | 3.97                                     | 95.24                                      |
| BH6(MW)          | 98.36                | 99.35              | 3.80                                     | 95.55                                      |
| BH7(MW)          | 99.04                | 98.96              | 2.92                                     | 96.04                                      |

Free product was not identified in any overburden well at any time, as measured with an oil/water interface meter.

Three (3) groundwater monitoring wells are required to triangulate groundwater elevations and provide a direction of groundwater flow. Four (4) wells were installed as part of this investigation and provide a determinate direction of groundwater flow. Based on the water table elevations recorded in the four (4) monitoring wells installed as part of this investigation on the Site, the direction of groundwater flow was determined to be from the southwest to northeast. This direction of groundwater flow is logical based on the location of the Rideau River (closest water body) approximately 180m east-northeast of the Site and the flow of the Rideau River from south to north. The surficial topography also slopes downward in the same direction.

Temporal variability is not expected to significantly impact the groundwater flow direction, given that there is a significant distance to the nearest surface water body, the Rideau River.

The presence of buried utilities is not expected to impact measurements of the groundwater table, given that the underground services are expected to be present within the shallow overburden upper 3m and that the measured groundwater table was observed approximately 3-3.5m below ground surface.

### **6.3 Ground Water: Hydraulic Gradients**

The hydraulic gradient was calculated by dividing the difference in hydraulic head by the lateral distance between monitoring locations. Based on the recorded groundwater

elevations in Table B above, and a lateral separation distance of approximately 39m between BH7(MW) and BH5(MW), the horizontal hydraulic gradient is approximately 0.0205m/m.

Vertical hydraulic gradients could not be calculated for the Site at this time as all monitoring wells were screened in the same aquifer and at similar depths.

#### **6.4 Fine-Medium or Coarse Soil Texture**

A wash/pass sieve analysis was conducted on four (4) soil samples as part of this investigation. One (1) soil sample from each borehole advanced as part of this investigation was selected for sieve analysis. The percent of soil which passed through a 0.075mm sieve by weight varied between 34% and 45%. Accordingly, the Site soil is considered to be coarse grain size; which was used for comparison to the O.Reg. 153/04 criteria. It should be noted that coarse grain soil considerations are a more conservative comparison for analytical results.

#### **6.5 Soil: Field Screening**

Combustible gas readings were recorded as noted previously in Section 5.4; no significant soil vapour readings were obtained during the Site investigation.

#### **6.6 Soil Quality**

##### Location and Depth of Sampling

The locations of the boreholes and sampling locations are indicated on the Borehole Location Plan, Drawing No. T021226-E1 in the Figures section of this report. During the investigation, two (2) main soil layers were identified, and sampled for PHCs, VOCs and pH as follows:

- ◆ Fill
  - BH5/SS1 (0-0.6m) and BH6/SS1 (0-0.6m) collected on October 8, 2013.
- ◆ Till
  - BH4/SS6 (3.8-4.4m), BH5/SS6 (3.8-4.4m), BH6/SS5 (3.1-3.7m), DUP-S1 (Duplicate of BH6/SS5), BH7/SS6 (3.8-4.4m) and DUP-S2 (Duplicate of BH7/SS6) collected on October 8, 2013.

### Contaminants of Concern

The contaminants of concern in soil for the Site were based on the APECs identified at the Site during a brief historical review and were discussed with technical reviewers at the City of Ottawa. Petroleum Hydrocarbons ranges F1-F4 (PHCs), Polycyclic Aromatic Hydrocarbons (PAHs), metals and Volatile Organic Compounds (VOCs) were suspected to be associated with historical railway lines, a rail storage yard and a former coal gasification plant in the area of the Site.

### Comparison of Analytical Results to O.Reg. 153/04 Criteria

A complete summary of the analytical soil testing conducted as part of this Phase Two ESA and comparison to O.Reg. 153/04 criteria are present in Table D, following the text of this report. Analytical testing of the aforementioned soil samples indicated the following parameter exceedances of the O.Reg. 153/04 Table 3 criteria, which was selected based on residential land use, in a non-potable groundwater situation with coarse grained soil conditions.

- ◆ Table 3 (Residential Land Use)
  - Lead BH5/SS1 (0-0.6mBG)
  - Benzo(a)pyrene BH5/SS1 (0-0.6mBG)

All of the other analysed soil samples were in compliance with the O.Reg. 153/04 Table 3 criteria.

Analytical testing of the soil samples was also compared to the O.Reg. 153/04 Table 1 criteria, for the purpose of characterization of soil for potential off-Site disposal purposes. In the event soil is required to be removed from the Site, all soil with concentrations in excess of the O.Reg. 153/04 Table 1 criteria would need to be taken to an approved waste disposal facility. The following soil samples were reported to have the following parameter exceedances of the O.Reg. 153/04 Table 1 criteria:

- ◆ Table 1 (Background characterization - all land uses)
  - Lead BH5/SS1 (0-0.6mBG)
  - Benzo(a)anthracene BH5/SS1 (0-0.6mBG)
  - Benzo(a)pyrene BH5/SS1 (0-0.6mBG)
  - Fluorancene BH5/SS1 (0-0.6mBG)
  - Indeno(1,2,3-cd)pyrene BH5/SS1 (0-0.6mBG)

All of the other analysed soil samples were in compliance with the O.Reg. 153/04 Table 1 criteria.

#### Chemical or Biological Transformations

Parameters related to chemical or biological transformations of CPCs were not suspected to be present and were not detected in the analytical results as part of this investigation.

#### Soil Acting as a Contaminant Mass Contributing to Other Media

The soil near BH5/SS1(0-0.6mBG), which was reported to be impacted with Lead and Benzo(a)pyrene does not appear to act as a source for groundwater contamination, as Lead and PAHs were not reported in excess of the O.Reg. 153/04 Table 3 criteria in any of the analysed groundwater samples collected at the Site.

#### LNAPL/DNAPL

Lead and low levels of PAHs were detected in several of the analysed soil samples from various locations on the Site. The observed concentrations of Lead and PAHs are generally dissolved in water and hence are not suspected to contribute to the presence of Light (LNAPL) or Dense Non Aqueous Phase Liquids (DNAPL).

### **6.7 Ground Water Quality**

#### Location and Depth of Sampling

The locations of the monitoring wells are indicated on the Borehole Location Plan, Drawing No. T021226-E1 in the Figures section of this report. The depths of the screens are indicated in Table A in Section 6.2 of this report; the screened intervals were situated in glacial till and were approximately 2.5-5.5 mBG or 1.5-4.5mBG.

#### Field Filtering

Field filtering was conducted during groundwater sampling for metals using a dedicated 45 micron Waterra filter for each groundwater sample. Field filtering is not conducted under standard field protocols for groundwater sampling of PHCs, VOCs, PAHs or pH.

#### Contaminants of Concern

The contaminants of concern in groundwater for the Site were based on the APECs identified at the Site during a brief historical review and were discussed with technical reviewers at the City of Ottawa. Petroleum Hydrocarbons ranges F1-F4 (PHCs), Polycyclic Aromatic Hydrocarbons (PAHs), metals and Volatile Organic Compounds (VOCs) were suspected to be associated with historical railway lines, a rail storage yard and a former coal gasification plant in the area of the Site.



#### Comparison of Analytical Results to O.Reg. 153/04 Criteria

A complete summary of the analytical groundwater testing conducted as part of this Phase Two ESA and comparison to O.Reg. 153/04 criteria are present in Table E, following the text of this report. The O.Reg. 153/04 Table 3 criteria was selected based on residential land use, in a non-potable groundwater situation with coarse grained soil conditions.

Analytical groundwater results from the initial groundwater sample collected from BH5(MW) on October 15, 2013 revealed a single exceedance for tetrachloroethylene (PCE) under the O.Reg. 153/04 Table 3 criteria. The concentration of PCE in this groundwater sample marginally exceeded the O.Reg. 153/04 Table 3 criteria (1.7 µg/L detected vs. criteria of 1.6 µg/L); additionally no degradation by-products were detected.

The client was informed of the results of the investigation and it was determined that further investigation was warranted. On October 29, 2013 and November 5, 2013, **Inspecc-Sol** returned to the Site to collect additional groundwater samples from BH5(MW). The analytical results of the subsequent consecutive groundwater samples collected from BH5(MW) determined and confirmed that the PCE concentrations in the Site groundwater were in compliance with the O.Reg. 153/04 Table 3 criteria.

All of final analysed groundwater sample results were in compliance with the O.Reg. 153/04 Table 3 criteria.

#### Chemical or Biological Transformations

Parameters related to chemical or biological transformations of the CPCs were not suspected to be present and were not detected in the analytical results as part of this investigation.

#### LNAPL/DNAPL

LNAPL was not identified in the overburden aquifer during the groundwater sampling program.

A low concentration of tetrachloroethylene (PCE), a DNAPL, was initially identified in one of the groundwater monitoring wells installed in the shallow overburden aquifer during the groundwater sampling program. The presence of DNAPL was not detected by the interface probe.

## **6.8 Sediment Quality**

Sediment was not present on the Site; as such sediment sampling was not conducted at the Site as part of the Phase Two ESA.

## **6.9 Quality Assurance and Quality Control Results**

### Quality Control

Two (2) blind field duplicates (DUP-S1 and DUP-S2) were submitted for laboratory analysis on October 9, 2013 for a combination of PHCs, VOCs, metals and PAHs in soil. These duplicates provide quality assurance and quality control of all parameter sets analysed for soil samples submitted as part of this assessment.

One (1) blind field duplicate (DUP-GW1) was submitted for laboratory analysis of PHCs, VOCs, metals and PAHs and pH in groundwater. This duplicate provides quality assurance and quality control of all parameter sets analysed for groundwater samples submitted as part of this assessment.

In general, all of the soil and groundwater duplicate sample results had relative percent differences of less than 20%, or were too close to the laboratory method detection limit to provide an accurate comparison. In general the duplicate soil and groundwater results indicate consistency in the laboratory data.

### Handling and Transport

All samples were delivered to the laboratory in laboratory supplied containers. All samples were delivered to the Laboratory within the mandated holding time and temperature requirements. Samples were hand delivered to the laboratory in coolers, equipped with ice packs.

### Analytical Documentation

The documentation provided from the laboratory meets the requirements of O.Reg. 153/04 47(3). Documentation for each laboratory submitted sample has been included as an appendix to this report. Full documentation, including the laboratory certificates of analysis, is provided in Appendix A.

### Analytical Qualifiers

No analytical qualifiers were reported on laboratory reports with respect to submissions as part of this assessment.

### General Comments on Field Data

For the purposes of this investigation, the quality of the field data

- ◆ Meets the objectives of the investigation; and,
- ◆ Did not affect the decision making process.

## **6.10 Phase Two Conceptual Site Model**

### Potentially Contaminating Activities (PCAs)

Based on our knowledge of the general area of the Site, there was one (1) on-Site PCA, and four (4) off-Site PCAs identified:

1. A heating oil aboveground storage tank (AST) was identified to the west of the 23 Robinson Avenue dwelling. Former ASTs were suspected to have been associated with the dwellings addressed 17 and 19 Robinson Avenue (Assessed in 2008 Limited Phase II ESA).
2. Former railway line and rail storage facilities were located approximately 10m north and 100 m northwest of the Site, respectively.
3. A former automotive repair garage was located approximately 60m south of the Site.
4. A former retail fuel outlet was located approximately 95m south-southeast of the Site.
5. The former Lees Avenue coal gasification plant was located approximately 150m southwest of the Site.
6. The potential placement of impacted fill material, used to grade the Site.

### Areas of Potential Environmental Concern (APECs)

There were four (4) areas of potential environmental concern:

1. Surficial soil contamination associated with a former railway line to the north of the Site.
2. Potential soil and groundwater contamination from the former railway and rail storage facilities to the north and northwest of the Site.
3. Potential soil and groundwater contamination from the former Lees Avenue coal tar gasification plant to the west of the Site.
4. Potential soil and groundwater contamination from the former automotive service garage located to the south of the Site.

### Contaminants of Potential Concern (CPCs)

The contaminants of potential concern (CPCs) in soil and groundwater for the Site were based on the APECs identified at the Site during a historical review and were discussed with technical reviewers at the City of Ottawa. The following CPCs for the Site were suspected to be associated with historical railway lines, a rail storage yard and a former coal gasification plant in the area of the Site:

1. Petroleum Hydrocarbons ranges F1-F4 (PHCs).
2. Polycyclic Aromatic Hydrocarbons (PAHs)
3. Metals.
4. Volatile Organic Compounds (VOCs).

### Subsurface Conditions

Underground services enter the buildings from Robinson Avenue to the south of the Site. An in active underground hydro conduit is present leading from the dwelling at 17 Robinson Avenue to the centre of the Site. The service orientation, location, and shallow depth are not considered to impact overburden groundwater movement due to the locations relative to the recorded water levels.

### Physical Setting - Stratigraphy

As diagrammed in the Borehole Logs in Appendix A, the investigation identified four (4) subsurface soil types within the depth investigated, namely:

- ◆ Topsoil;
- ◆ Sandy Clay with Gravel (fill);
- ◆ Sandy Silt; and,
- ◆ Till (native).

### Physical Setting – Hydrogeological

The interpretation of groundwater flow was based upon the generally known geology, the location and flow direction of surface water bodies and the static water levels collected from monitoring wells completed on the Site as part of this assessment. The overburden groundwater on the Site flows to the northeast. Based on the recorded groundwater elevations in Table B above, and a lateral separation distance of approximately 39m between BH7(MW) and BH5(MW), the horizontal hydraulic gradient is approximately 0.0205m/m. The hydraulic gradient is expected to vary with seasonal and weather conditions.

Based on differences in the geology observed on the Site, it appears that the overburden aquifer is unconfined.

#### Physical Setting – Bedrock

The bedrock was not encountered at the time of this investigation. Based on the soil information collected at the time of this investigation and the available geological mapping, bedrock is expected to be present at depths ranging from 7-15mBG (meters below grade).

#### Physical Setting – Groundwater Table

The overburden groundwater table was measured at depths ranging from 2.9-3.8mBG on October 15, 2013. It should be noted that the water table elevation is expected to vary with seasonal and weather conditions.

#### Physical Setting – Sensitive or Shallow or Surface Water

The Site is not classified as a sensitive site (Table 1), as the Site does not contain or is not within 30m of an area of natural significance and the pH of the soil is within the 5-9 range. As greater than 2/3 of the property has more than 2.0m of natural occurring overburden, the Site is not classified as Shallow Soil Property (Table 6/7). As there are no natural surface water bodies on-Site or within 30m of the Site, the property is not classified as Surface Water Property (Table 8/9).

Borehole advancement revealed the site is underlain by silty sand till. Four (4) wash-pass sieve analyses were conducted on the Site soils, which determined that less than 50% of soil by weight would pass through a 0.075mm sieve. The soil is hence classified as 'coarse grained' soil.

#### Physical Setting – Fill

A layer of fill (sandy clay with gravel) ranging from 0.5 to 1.5m in thickness was observed in all of the boreholes advanced as part of this assessment.

#### Physical Setting – Existing and Proposed Structures

Three (3) residential dwellings are present on the south portion of the Site. It is our understanding that the owner of the Site intends to redevelop the Property with a multi-storey, multi-tenant residential building. The proposed design and layout of the building were not finalized and had not been provided for review at the time of this assessment.

#### Contamination - Soil

Soil samples were collected from the boreholes advanced on October 8, 2013 and were analysed for PHCs, PAHs, VOCs, metals and pH.

One soil sample BH5/SS1 (0-0.6mBG) presented O.Reg. 153/04 Table 3 exceedances of **Lead** and **Benzo(a)pyrene**. The sample was collected from the fill material on the northeast portion of the Site. Soil samples collected from the fill and native soils in other locations on the Site had lead and Benzo(a)pyrene concentrations in compliance with the O.Reg. 153/04 criteria. Accordingly, this sample is not considered representative of Site conditions. It is suspected that an area of contaminated fill is present on the northeast portion of the Site.

#### Contamination - Groundwater

Groundwater was sampled and analysed for PHCs, PAHs, VOCs, metals, pH on October 15, 2013. On October 29, 2013 and November 5, 2013, **Inspecc-Sol** returned to the Site to collect additional groundwater samples from BH5(MW).

Analytical groundwater results from the initial groundwater sample collected from BH5(MW) on October 15, 2013 revealed a single exceedance for tetrachloroethylene (PCE) under the O.Reg. 153/04 Table 3 criteria. The concentration of PCE in this groundwater sample marginally exceeded the O.Reg. 153/04 Table 3 criteria (1.7 µg/L detected vs. criteria of 1.6 µg/L); additionally no degradation by-products were detected. The analytical results of the subsequent consecutive groundwater samples collected from BH5(MW) determined and confirmed that the PCE concentrations in the Site groundwater were in compliance with the O.Reg. 153/04 Table 3 criteria.

All of final analysed groundwater sample results were in compliance with the O.Reg. 153/04 Table 3 criteria.

## **7.0 CONCLUSIONS**

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#### Contaminants - Soil

Soil samples were collected from the boreholes advanced on October 8, 2013 and were analysed for PHCs, PAHs, VOCs, metals and pH.

One soil sample BH5/SS1 (0-0.6mBG) presented O.Reg. 153/04 Table 3 exceedances of **Lead** and **Benzo(a)pyrene**. The sample was collected from the fill material on the northeast



portion of the Site. Soil samples collected from the fill and native soils in other locations on the Site had lead and Benzo(a)pyrene concentrations in compliance with the O.Reg. 153/04 criteria. Accordingly, this sample is not considered representative of Site conditions. It is suspected that an area of contaminated fill is present on the northeast portion of the Site.

A soil management program will be developed with the client in order to manage and dispose of the contaminated soil at the time of development.

#### Contaminants - Groundwater

Groundwater was sampled and analysed for PHCs, PAHs, VOCs, metals, pH on October 15, 2013. On October 29, 2013 and November 5, 2013, **Inspecc-Sol** returned to the Site to collect additional groundwater samples from BH5(MW).

All of final analysed groundwater sample results were in compliance with the O.Reg. 153/04 Table 3 criteria.

#### Risk Assessment

There are Table 3 exceedances in soil. The site may be considered for a Risk Assessment, however, it is recommended that the generic remediation approach be conducted during Site redevelopment to remove and dispose of any contaminated soil on the Site.

#### Site Compliance

There are O.Reg. 153/03 Table 3 exceedances in one soil sample (**Lead** and **Benzo(a)pyrene** in BH5/SS1(0-0.6mBG)). The site is not considered to be in compliance with the O.Reg. 153/04 criteria and requires soil remediation/removal or a risk assessment.

#### Confirmation

I, Luke Lopers, Qualified Person for Environmental Site Assessment under O.Reg. 153/04, confirm the carrying out of the phase two environmental site assessment and the findings and conclusions of this report.

Respectfully,  
INSPEC-SOL INC



Luke Lopers, P.Eng.  
Environmental Engineer, Project Manager

## 8.0 REFERENCES

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- ◆ Ontario Regulation 153/04
- ◆ *Limited Phase II Environmental Site Assessment, 17-23 Robinson Avenue, Ottawa, Ontario.* Reference No. T020465-E1, prepared by Inspec-Sol Inc., dated June 4, 2008.
- ◆ Certificate of Analysis – Exova #1322570 – Soil - October 18, 2013
- ◆ Certificate of Analysis – Exova #1322830 – Groundwater – October 22, 2013
- ◆ Certificate of Analysis – Exova #1323988 – Groundwater – November 5, 2013
- ◆ Certificate of Analysis – Exova #1324828 – Groundwater – November 13, 2013
- ◆ Certificate of Analysis – Exova #1323130 – TCLP – October 25, 2013
- ◆ Inspec-Sol Wash/Pass Sieve Analysis Results

## Tables

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- ◆ Table C - DNAPL / LNAPL Layer
- ◆ Table D - Summary of Soil Analysis
- ◆ Table E - Summary of Groundwater Analysis
- ◆ Table F - Maximum Soil Parameter Concentrations
- ◆ Table G - Maximum Groundwater Parameter Concentrations

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17, 19 AND 23 ROBINSON AVENUE, OTTAWA, ON

**TABLE C**

DNAPL/LNAPL Layer

O.REG.153/04(2011)

| ID               | Grade<br>Elevation<br>m | TOP<br>elevation<br>m | bottom<br>depth<br>m | bottom<br>elevation<br>m | depth to<br>watertable<br>(Oct.15,2013)<br>m | elevation<br>watertable<br>(Oct.15,2013)<br>m | thickness of<br>LNAPL<br>(Oct.15,2013)<br>m | thickness of<br>DNAPL<br>(Oct.15,2013)<br>m |
|------------------|-------------------------|-----------------------|----------------------|--------------------------|----------------------------------------------|-----------------------------------------------|---------------------------------------------|---------------------------------------------|
| OVERBURDEN WELLS |                         |                       |                      |                          |                                              |                                               |                                             |                                             |
| BH4(MW)          | 99.07                   | 98.99                 | 5.49                 | 93.58                    | 3.56                                         | 95.4                                          | 0.00                                        | 0.00                                        |
| BH5(MW)          | 98.74                   | 99.21                 | 5.49                 | 93.25                    | 3.97                                         | 95.24                                         | 0.00                                        | 0.00                                        |
| BH6(MW)          | 98.36                   | 99.35                 | 4.57                 | 93.79                    | 3.8                                          | 95.55                                         | 0.00                                        | 0.00                                        |
| BH7(MW)          | 99.04                   | 98.96                 | 4.57                 | 94.47                    | 2.92                                         | 96.04                                         | 0.00                                        | 0.00                                        |

| Reg. 153/04 (2011)<br>Parameter      | O.Reg.153/04<br>(2011)<br>TABLE 1 | O.Reg.153/04<br>(2011)<br>TABLE 3 | O.Reg.153/04<br>(2011)                     |           |                    |           |                      |           |                      |           |                      |           |                         |           |                      |           |                         |      |
|--------------------------------------|-----------------------------------|-----------------------------------|--------------------------------------------|-----------|--------------------|-----------|----------------------|-----------|----------------------|-----------|----------------------|-----------|-------------------------|-----------|----------------------|-----------|-------------------------|------|
|                                      |                                   |                                   | BH4/SS6                                    |           | BH5/SS1            |           | BH5/SS6              |           | BH6/SS1              |           | BH6/SS5              |           | DUP-S1                  |           | BH7/SS6              |           | DUP-S2                  |      |
|                                      |                                   |                                   | 8-Oct-13<br>3.8-4.4m                       |           | 8-Oct-13<br>0-0.6m |           | 8-Oct-13<br>3.8-4.4m |           | 8-Oct-13<br>0.0-0.6m |           | 8-Oct-13<br>3.1-3.7m |           | 8-Oct-13<br>3.1-3.7m    |           | 8-Oct-13<br>3.8-4.4m |           | 8-Oct-13<br>3.8-4.4m    |      |
|                                      | Units                             | Background                        | residential/<br>parkland/<br>institutional |           |                    |           |                      |           |                      |           |                      |           | Duplicate of<br>BH6/SS5 |           |                      |           | Duplicate of<br>BH7/SS6 |      |
| IONS AND METALS                      |                                   |                                   | TIII                                       | FIII      | TIII               | FIII      | TIII                 | FIII      | TIII                 | FIII      | TIII                 | FIII      | TIII                    | FIII      | TIII                 | FIII      | TIII                    | FIII |
| Antimony                             | ug/g                              | 1.3                               | 7.5                                        | ND (1)    | ND (1)             | -         | -                    | ND (1)    | -                    | -         | -                    | -         | -                       | -         | -                    | ND (1)    | ND (1)                  | -    |
| Arsenic                              | ug/g                              | 18                                | 18                                         | 2         | 7                  | -         | -                    | 2         | -                    | -         | -                    | -         | -                       | -         | -                    | 2         | 2                       | -    |
| Barium                               | ug/g                              | 220                               | 390                                        | 96        | 220                | -         | -                    | 67        | -                    | -         | -                    | -         | -                       | -         | -                    | 130       | 148                     | -    |
| Beryllium                            | ug/g                              | 2.5                               | (5) 4                                      | ND (1)    | ND (1)             | -         | -                    | ND (1)    | -                    | -         | -                    | -         | -                       | -         | -                    | ND (1)    | ND (1)                  | -    |
| Boron (total, for >1.5m BG)          | ug/g                              | 36                                | 120                                        | 20        | 20                 | -         | -                    | 20        | -                    | -         | -                    | -         | -                       | -         | -                    | 20        | 20                      | -    |
| Cadmium                              | ug/g                              | 1.2                               | 1.2                                        | ND (0.5)  | 0.7                | -         | -                    | ND (0.5)  | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.5)  | ND (0.5)                | -    |
| Chromium (Total)                     | ug/g                              | 70                                | 160                                        | 18        | 20                 | -         | -                    | 14        | -                    | -         | -                    | -         | -                       | -         | -                    | 14        | 13                      | -    |
| Cobalt                               | ug/g                              | 21                                | 22                                         | 6         | 7                  | -         | -                    | 4         | -                    | -         | -                    | -         | -                       | -         | -                    | 6         | 6                       | -    |
| Copper                               | ug/g                              | 92                                | (180) 140                                  | 14        | 27                 | -         | -                    | 18        | -                    | -         | -                    | -         | -                       | -         | -                    | 13        | 13                      | -    |
| Lead                                 | ug/g                              | 120                               | 120                                        | 5         | 171                | -         | -                    | 64        | -                    | -         | -                    | -         | -                       | -         | -                    | 5         | 5                       | -    |
| Molybdenum                           | ug/g                              | 2                                 | 6.9                                        | 1         | 2                  | -         | -                    | ND (1)    | -                    | -         | -                    | -         | -                       | -         | -                    | 1         | 1                       | -    |
| Nickel                               | ug/g                              | 82                                | (130) 100                                  | 20        | 18                 | -         | -                    | 12        | -                    | -         | -                    | -         | -                       | -         | -                    | 16        | 16                      | -    |
| Selenium                             | ug/g                              | 1.5                               | 2.4                                        | ND (1)    | ND (1)             | -         | -                    | ND (1)    | -                    | -         | -                    | -         | -                       | -         | -                    | ND (1)    | ND (1)                  | -    |
| Silver                               | ug/g                              | 0.5                               | (25) 20                                    | ND (0.2)  | 0.2                | -         | -                    | ND (0.2)  | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.2)  | ND (0.2)                | -    |
| Thallium                             | ug/g                              | 1                                 | 1                                          | ND (1)    | ND (1)             | -         | -                    | ND (1)    | -                    | -         | -                    | -         | -                       | -         | -                    | ND (1)    | ND (1)                  | -    |
| Uranium                              | ug/g                              | 2.5                               | 23                                         | 0.9       | 0.6                | -         | -                    | ND (0.5)  | -                    | -         | -                    | -         | -                       | -         | -                    | 0.9       | 1.4                     | -    |
| Vanadium                             | ug/g                              | 86                                | 86                                         | 22        | 25                 | -         | -                    | 18        | -                    | -         | -                    | -         | -                       | -         | -                    | 23        | 22                      | -    |
| Zinc                                 | ug/g                              | 290                               | 340                                        | 35        | 215                | -         | -                    | 123       | -                    | -         | -                    | -         | -                       | -         | -                    | 26        | 22                      | -    |
| FUELS & BTEX                         |                                   |                                   |                                            |           |                    |           |                      |           |                      |           |                      |           |                         |           |                      |           |                         |      |
| PHC F1 (C6-C10)****                  | ug/g                              | 25                                | (65) 55                                    | ND (10)   | -                  | ND (10)   | -                    | ND (10)   | -                    | ND (10)   | -                    | ND (10)   | -                       | ND (10)   | -                    | ND (10)   | -                       | -    |
| PHC F2 (>C10-C16)                    | ug/g                              | 10                                | (150) 98                                   | ND (10)   | -                  | ND (10)   | -                    | ND (10)   | -                    | ND (10)   | -                    | ND (10)   | -                       | ND (10)   | -                    | ND (10)   | -                       | -    |
| PHC F3 (>C16-C34)                    | ug/g                              | 240                               | (1300) 300                                 | ND (20)   | -                  | ND (20)   | -                    | ND (20)   | -                    | ND (20)   | -                    | ND (20)   | -                       | ND (20)   | -                    | ND (20)   | -                       | -    |
| PHC F4 (>C34-C50)                    | ug/g                              | 120                               | (5600) 2800                                | ND (20)   | -                  | ND (20)   | -                    | ND (20)   | -                    | ND (20)   | -                    | ND (20)   | -                       | ND (20)   | -                    | ND (20)   | -                       | -    |
| Benzene                              | ug/g                              | 0.02                              | (0.17) 0.21                                | ND (0.02) | -                  | ND (0.02) | -                    | ND (0.02) | -                    | ND (0.02) | -                    | ND (0.02) | -                       | ND (0.02) | -                    | ND (0.02) | -                       | -    |
| Toluene                              | ug/g                              | 0.2                               | (6) 2.3                                    | ND (0.20) | -                  | ND (0.20) | -                    | ND (0.20) | -                    | ND (0.20) | -                    | ND (0.20) | -                       | ND (0.20) | -                    | ND (0.20) | -                       | -    |
| Ethylbenzene                         | ug/g                              | 0.05                              | (15) 2                                     | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Xylene, m,p-                         | ug/g                              | --                                | --                                         | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Xylene, o-                           | ug/g                              | --                                | --                                         | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Xylene Mixture                       | ug/g                              | 0.05                              | (25) 3.1                                   | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| PAHs                                 |                                   |                                   |                                            |           |                    |           |                      |           |                      |           |                      |           |                         |           |                      |           |                         |      |
| Acenaphthene                         | ug/g                              | 0.072                             | (58) 7.9                                   | ND (0.05) | ND (0.05)          | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Acenaphthylene                       | ug/g                              | 0.093                             | (0.17) 0.15                                | ND (0.05) | ND (0.05)          | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Anthracene                           | ug/g                              | 0.16                              | (0.74) 0.67                                | ND (0.05) | 0.09               | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Benzo(a)anthracene                   | ug/g                              | 0.36                              | (0.63) 0.5                                 | ND (0.05) | 0.4                | -         | -                    | 0.08      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Benzo(a)pyrene                       | ug/g                              | 0.3                               | 0.3                                        | ND (0.05) | 0.35               | -         | -                    | 0.09      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Benzo(b)fluoranthene                 | ug/g                              | 0.47                              | 0.78                                       | ND (0.05) | 0.24               | -         | -                    | 0.08      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Benzo(g,h,i)perylene                 | ug/g                              | 0.68                              | (7.8) 6.6                                  | ND (0.05) | 0.26               | -         | -                    | 0.08      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Benzo(k)fluoranthene                 | ug/g                              | 0.48                              | 0.78                                       | ND (0.05) | 0.27               | -         | -                    | 0.09      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Chrysene                             | ug/g                              | 2.8                               | (7.8) 7                                    | ND (0.05) | 0.36               | -         | -                    | 0.1       | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Dibenz(a,h)anthracene                | ug/g                              | 0.1                               | 0.1                                        | ND (0.05) | 0.05               | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Fluoranthene                         | ug/g                              | 0.56                              | 0.69                                       | ND (0.05) | 0.65               | -         | -                    | 0.12      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Fluorene                             | ug/g                              | 0.12                              | (69) 62                                    | ND (0.05) | ND (0.05)          | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Indeno(1,2,3-cd)pyrene               | ug/g                              | 0.23                              | (0.48) 0.38                                | ND (0.05) | 0.33               | -         | -                    | 0.1       | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Methylnaphthalene,1-                 | ug/g                              | --                                | --                                         | ND (0.05) | 0.06               | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Methylnaphthalene,2-                 | ug/g                              | --                                | --                                         | ND (0.05) | 0.08               | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Methylnaphthalene (1+2)              | ug/g                              | 0.59                              | (3.4) 0.99                                 | ND (0.10) | 0.14               | -         | -                    | ND (0.10) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.10) | ND (0.10)               | -    |
| Naphthalene                          | ug/g                              | 0.09                              | (0.75) 0.6                                 | ND (0.05) | 0.08               | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Phenanthrene                         | ug/g                              | 0.69                              | (7.8) 6.2                                  | ND (0.05) | 0.33               | -         | -                    | ND (0.05) | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| Pyrene                               | ug/g                              | 1                                 | 78                                         | ND (0.05) | 0.61               | -         | -                    | 0.12      | -                    | -         | -                    | -         | -                       | -         | -                    | ND (0.05) | ND (0.05)               | -    |
| VOCs                                 |                                   |                                   |                                            |           |                    |           |                      |           |                      |           |                      |           |                         |           |                      |           |                         |      |
| Acetone                              | ug/g                              | 0.5                               | (28) 16                                    | ND (0.50) | -                  | ND (0.50) | -                    | ND (0.50) | -                    | ND (0.50) | -                    | ND (0.50) | -                       | ND (0.50) | -                    | ND (0.50) | -                       | -    |
| Benzene                              | ug/g                              | 0.02                              | (0.17) 0.21                                | ND (0.02) | -                  | ND (0.02) | -                    | ND (0.02) | -                    | ND (0.02) | -                    | ND (0.02) | -                       | ND (0.02) | -                    | ND (0.02) | -                       | -    |
| Bromodichloromethane                 | ug/g                              | 0.05                              | 13                                         | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Bromoform                            | ug/g                              | 0.05                              | (0.26) 0.27                                | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Bromomethane                         | ug/g                              | 0.05                              | 0.05                                       | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Carbon Tetrachloride                 | ug/g                              | 0.05                              | (0.12) 0.05                                | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Chloroform                           | ug/g                              | 0.05                              | (0.18) 0.05                                | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dibromochloromethane                 | ug/g                              | 0.05                              | 9.4                                        | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichlorobenzene,1,2-(o, m, or p)     | ug/g                              | 0.05                              | (4.3) 3.4                                  | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichlorobenzene,1,3-                 | ug/g                              | 0.05                              | (6) 4.8                                    | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichlorobenzene,1,4-                 | ug/g                              | 0.05                              | (0.097) 0.083                              | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichlorodifluoromethane              | ug/g                              | 0.05                              | (25) 16                                    | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichloroethane,1,1-                  | ug/g                              | 0.05                              | (11) 3.5                                   | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichloroethane,1,2-                  | ug/g                              | 0.05                              | 0.05                                       | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichloroethylene,1,1-                | ug/g                              | 0.05                              | 0.05                                       | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichloroethylene, cis-1,2-           | ug/g                              | 0.05                              | (30) 3.4                                   | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichloroethylene, trans-1,2-         | ug/g                              | 0.05                              | (0.75) 0.084                               | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Dichloromethane (Methylene Chloride) | ug/g                              | 0.05                              | (0.96) 0.1                                 | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Cis-1,3-Dichloropropylene            | ug/g                              | 0.05                              | (0.083) 0.05                               | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Trans-1,3-Dichloropropylene          | ug/g                              | 0.05                              | (0.083) 0.05                               | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Ethylbenzene                         | ug/g                              | 0.05                              | (15) 2                                     | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Methyl Ethyl Ketone                  | ug/g                              | 0.5                               | (44) 16                                    | ND (0.50) | -                  | ND (0.50) | -                    | ND (0.50) | -                    | ND (0.50) | -                    | ND (0.50) | -                       | ND (0.50) | -                    | ND (0.50) | -                       | -    |
| Methyl Isobutyl Ketone               | ug/g                              | 0.5                               | (4.3) 1.7                                  | ND (2.00) | -                  | ND (2.00) | -                    | ND (2.00) | -                    | ND (2.00) | -                    | ND (2.00) | -                       | ND (2.00) | -                    | ND (2.00) | -                       | -    |
| Methyl tert-Butyl Ether (MTBE)       | ug/g                              | 0.05                              | (1.4) 0.75                                 | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Monochlorobenzene (Chlorobenzene)    | ug/g                              | 0.05                              | (2.7) 2.4                                  | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Styrene                              | ug/g                              | 0.05                              | (2.2) 0.7                                  | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) | -                       | -    |
| Tetrachloroethane,1,1,1,2-           | ug/g                              | 0.05                              | (0.05) 0.058                               | ND (0.05) | -                  | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                    | ND (0.05) | -                       | ND (0.05) | -                    | ND (0.05) |                         |      |

| Reg. 153/04 (2011)<br>Parameter       | Units | O.Reg.153 (2011)<br><br>TABLE 3<br><br>non-potable | BH4(MW)-GW1 | BH5(MW)-GW1 | BH5(MW)-GW2 | BH5(MW)-GW3 | BH6(MW)-GW1 | DUP1-GW1                            | BH7(MW)-GW1 |
|---------------------------------------|-------|----------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------------------------------|-------------|
|                                       |       |                                                    | 15-Oct-2013 | 15-Oct-2013 | 29-Oct-2013 | 7-Nov-2013  | 15-Oct-2013 | Duplicate of BH6(MW)<br>15-Oct-2013 | 15-Oct-2013 |
|                                       |       | All Property Types                                 | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater                         | Groundwater |
| <b>IONS AND METALS</b>                |       |                                                    |             |             |             |             |             |                                     |             |
| Antimony                              | ug/L  | 20000                                              | ND (0.5)    | ND (0.5)    | -           | -           | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Arsenic                               | ug/L  | 1900                                               | ND (1)      | ND (1)      | -           | -           | ND (10)     | ND (10)                             | ND (1)      |
| Barium                                | ug/L  | 29000                                              | 120         | 60          | -           | -           | 50          | 50                                  | 80          |
| Beryllium                             | ug/L  | 67                                                 | ND (0.5)    | ND (0.5)    | -           | -           | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Boron (total, for >1.5m BG)           | ug/L  | 45000                                              | 150         | 150         | -           | -           | 200         | 190                                 | 50          |
| Cadmium                               | ug/L  | 2.7                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Chromium (Total)                      | ug/L  | 810                                                | 6           | 4           | -           | -           | 3           | 3                                   | 1           |
| Cobalt                                | ug/L  | 66                                                 | 6.5         | 4.7         | -           | -           | 5.8         | 6                                   | 0.9         |
| Copper                                | ug/L  | 87                                                 | 2           | 1           | -           | -           | 1           | 1                                   | ND (1)      |
| Lead                                  | ug/L  | 25                                                 | ND (1)      | ND (1)      | -           | -           | ND (1)      | ND (1)                              | ND (1)      |
| Molybdenum                            | ug/L  | 9200                                               | ND (5)      | ND (5)      | -           | -           | ND (5)      | ND (5)                              | ND (5)      |
| Nickel                                | ug/L  | 490                                                | 15          | 10          | -           | -           | 16          | 16                                  | ND (5)      |
| Selenium                              | ug/L  | 63                                                 | ND (10)     | ND (1)      | -           | -           | ND (10)     | ND (10)                             | ND (10)     |
| Silver                                | ug/L  | 1.5                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Sodium                                | ug/L  | 2300000                                            | 167000      | 110000      | -           | -           | 140000      | 137000                              | 40000       |
| Thallium                              | ug/L  | 510                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Uranium                               | ug/L  | 420                                                | 3           | 3           | -           | -           | 33          | 30                                  | 2           |
| Vanadium                              | ug/L  | 250                                                | 5           | 6           | -           | -           | 6           | 5                                   | 3           |
| Zinc                                  | ug/L  | 1100                                               | ND (10)     | ND (10)     | -           | -           | 10          | ND (10)                             | ND (10)     |
| <b>FUELS &amp; BTEX</b>               |       |                                                    |             |             |             |             |             |                                     |             |
| PHC F1 (C6-C10)***                    | ug/L  | 750                                                | ND (100)    | ND (100)    | -           | -           | ND (100)    | ND (100)                            | ND (100)    |
| PHC F2 (>C10-C16)                     | ug/L  | 150                                                | ND (100)    | ND (100)    | -           | -           | ND (100)    | ND (100)                            | ND (100)    |
| PHC F3 (>C16-C34)                     | ug/L  | 500                                                | ND (200)    | ND (200)    | -           | -           | ND (200)    | ND (200)                            | ND (200)    |
| PHC F4 (>C34-C50)                     | ug/L  | 500                                                | ND (200)    | ND (200)    | -           | -           | ND (200)    | ND (200)                            | ND (200)    |
| Benzene                               | ug/L  | (430) 44                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Toluene                               | ug/L  | 18000                                              | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Ethylbenzene                          | ug/L  | 2300                                               | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Xylene, m,p-                          | ug/L  | --                                                 | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Xylene, o-                            | ug/L  | --                                                 | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Xylene Mixture                        | ug/L  | 4200                                               | ND (1.0)    | ND (1.0)    | ND (1.0)    | ND (1.0)    | ND (1.0)    | ND (1.0)                            | ND (1.0)    |
| <b>PAHs</b>                           |       |                                                    |             |             |             |             |             |                                     |             |
| Acenaphthene                          | ug/L  | (1700) 600                                         | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Acenaphthylene                        | ug/L  | 1.8                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Anthracene                            | ug/L  | 2.4                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Benzo(a)anthracene                    | ug/L  | 4.7                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Benzo(a)pyrene                        | ug/L  | 0.81                                               | ND (0.01)   | ND (0.01)   | -           | -           | ND (0.01)   | ND (0.01)                           | ND (0.01)   |
| Benzo(b)fluoranthene                  | ug/L  | 0.75                                               | ND (0.05)   | ND (0.05)   | -           | -           | ND (0.05)   | ND (0.05)                           | ND (0.05)   |
| Benzo(k)fluoranthene                  | ug/L  | 0.4                                                | ND (0.05)   | ND (0.05)   | -           | -           | ND (0.05)   | ND (0.05)                           | ND (0.05)   |
| Benzo(g,h,i)perylene                  | ug/L  | 0.2                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Chrysene                              | ug/L  | 1                                                  | ND (0.05)   | ND (0.05)   | -           | -           | ND (0.05)   | ND (0.05)                           | ND (0.05)   |
| Dibenz(a,h)anthracene                 | ug/L  | 0.52                                               | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Fluoranthene                          | ug/L  | 130                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Fluorene                              | ug/L  | 400                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Indeno(1,2,3-cd)pyrene                | ug/L  | 0.2                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Methylnaphthalene, 1-                 | ug/L  | --                                                 | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Methylnaphthalene, 2-                 | ug/L  | --                                                 | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Methylnaphthalene (1+2)               | ug/L  | 1800                                               | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Naphthalene                           | ug/L  | (6400) 1400                                        | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| Phenanthrene                          | ug/L  | 580                                                | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | 0.1         |
| Pyrene                                | ug/L  | 68                                                 | ND (0.1)    | ND (0.1)    | -           | -           | ND (0.1)    | ND (0.1)                            | ND (0.1)    |
| <b>VOCs</b>                           |       |                                                    |             |             |             |             |             |                                     |             |
| Acetone                               | ug/L  | 130000                                             | ND (50)     | ND (50)     | ND (50)     | ND (50)     | ND (50)     | ND (50)                             | ND (50)     |
| Benzene                               | ug/L  | (430) 44                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Bromodichloromethane                  | ug/L  | 85000                                              | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)                            | ND (0.3)    |
| Bromoform                             | ug/L  | (770) 380                                          | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Bromomethane                          | ug/L  | (56) 5.6                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Carbon Tetrachloride                  | ug/L  | (8.4) 0.79                                         | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)                            | ND (0.2)    |
| Chloroform                            | ug/L  | (22) 2.4                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Dibromochloromethane                  | ug/L  | 82000                                              | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)                            | ND (0.3)    |
| Dichlorobenzene, 1,2- (o, m, or p)    | ug/L  | (9600) 4600                                        | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Dichlorobenzene, 1,3-                 | ug/L  | 9600                                               | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Dichlorobenzene, 1,4-                 | ug/L  | (67) 8                                             | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Dichlorodifluoromethane               | ug/L  | 4400                                               | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Dichloroethane, 1,1-                  | ug/L  | (3100) 320                                         | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Dichloroethane, 1,2-                  | ug/L  | (12) 1.6                                           | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)                            | ND (0.2)    |
| Dichloroethylene, 1,1-                | ug/L  | (17) 1.6                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Dichloroethylene, cis-1,2-            | ug/L  | (17) 1.6                                           | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Dichloroethylene, trans-1,2-          | ug/L  | (17) 1.6                                           | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Dichloromethane (Methylene Chloride)  | ug/L  | (5500) 610                                         | ND (4.0)    | ND (4.0)    | ND (4.0)    | ND (4.0)    | ND (4.0)    | ND (4.0)                            | ND (4.0)    |
| Dichloropropane, 1,2-                 | ug/L  | (140) 16                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Cis-1,3-Dichloropropylene             | ug/L  | --                                                 | ND (0.5)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)                            | ND (0.2)    |
| Trans-1,3-Dichloropropylene           | ug/L  | --                                                 | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Dichloropropene, (1,3-c & t combined) | ug/L  | (45) 5.2                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Ethylbenzene                          | ug/L  | 2300                                               | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Ethylene Dibromide                    | ug/L  | (0.83) 0.25                                        | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)                            | ND (0.2)    |
| Hexane (n)                            | ug/L  | (520) 51                                           | ND (5.0)    | ND (5.0)    | ND (5.0)    | ND (5.0)    | ND (5.0)    | ND (5.0)                            | ND (5.0)    |
| Methyl Ethyl Ketone                   | ug/L  | (1500000) 470000                                   | ND (10)     | ND (10)     | ND (10)     | ND (10)     | ND (10)     | ND (10)                             | ND (10)     |
| Methyl Isobutyl Ketone                | ug/L  | (580000) 140000                                    | ND (10)     | ND (10)     | ND (10)     | ND (10)     | ND (10)     | ND (10)                             | ND (10)     |
| Methyl tert-Butyl Ether (MTBE)        | ug/L  | (1400) 190                                         | ND (10)     | ND (10)     | ND (10)     | ND (10)     | ND (10)     | ND (10)                             | ND (10)     |
| Monochlorobenzene (Chlorobenzene)     | ug/L  | 630                                                | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)                            | ND (0.2)    |
| Styrene                               | ug/L  | (9100) 1300                                        | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Tetrachloroethane, 1,1,1,2-           | ug/L  | (28) 3.3                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Tetrachloroethane, 1,1,2,2-           | ug/L  | (15) 3.2                                           | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Tetrachloroethylene                   | ug/L  | (17) 1.6                                           | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)                            | ND (0.3)    |
| Toluene                               | ug/L  | 18000                                              | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Trichloroethane, 1,1,1-               | ug/L  | (6700) 640                                         | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Trichloroethane, 1,1,2-               | ug/L  | (30) 4.7                                           | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)    | ND (0.4)                            | ND (0.4)    |
| Trichloroethylene                     | ug/L  | (17) 1.6                                           | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)    | ND (0.3)                            | ND (0.3)    |
| Trichlorofluoromethane                | ug/L  | 2500                                               | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Vinyl Chloride                        | ug/L  | (1.7) 0.5                                          | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)    | ND (0.2)                            | ND (0.2)    |
| Xylene, m,p-                          | ug/L  | --                                                 | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Xylene, o-                            | ug/L  | --                                                 | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)    | ND (0.5)                            | ND (0.5)    |
| Xylene Mixture                        | ug/L  | 4200                                               | ND (1.0)    | ND (1.0)    | ND (1.0)    | ND (1.0)    | ND (1.0)    | ND (1.0)                            | ND (1.0)    |
| <b>INDICES</b>                        |       |                                                    |             |             |             |             |             |                                     |             |
| pH                                    |       | --                                                 | 7.17        | 7.18        | 7.43        | 7.9         | 7.24        | 7.26                                | 7.46        |
| Sample date (d/m/y)                   |       |                                                    | 15/10/2013  | 15/10/2013  | 29/10/2013  | 7/11/2013   | 15/10/2013  | 15/10/2013                          | 15/10/2013  |
| Laboratory Sample Number              |       |                                                    | 1065417     | 1065418     | 1069025     | 1071566     | 1065419     | 1065421                             | 1065420     |
| Laboratory Report date (d/m/y)        |       |                                                    | 22/10/2013  | 22/10/2013  | 5/11/2013   | 13/11/2013  | 22/10/2013  | 22/10/2013                          | 22/10/2013  |
| Laboratory Report Number              |       |                                                    | 1322830     | 1322830     | 1323988     | 1324828     | 1322830     | 1322830                             | 1322830     |

**DETECTION OF CONTAMINANT**

**TABLE 1 EXCEEDENCE**

**TABLE 3 EXCEEDENCE**

\* the site is automatically Environmentally Sensitive (a Table 1) if pH is outside the range of 5<pH<9 (shallow soils <1.5m) or 5<pH<11 (subsurface soils >1.5m)

\*\*\*\* F1 does not include BTEX, proponent may subtract BTEX from the analytical result

N/A - Not applicable

N/V - No Value Derived

-- Not listed in standards

- Not Analysed



| Reg. 153/04 (2011)<br>Parameter      | O.Reg. 153/04<br>(2011)<br>TABLE 1 | O.Reg. 153/04<br>(2011)<br>TABLE 3         | Maximum Soil<br>Concentration | Sample ID | Depth    |
|--------------------------------------|------------------------------------|--------------------------------------------|-------------------------------|-----------|----------|
| Units                                | Background                         | residential/<br>parkland/<br>institutional |                               |           |          |
| <b>IONS AND METALS</b>               |                                    |                                            |                               |           |          |
| Antimony                             | ug/g 1.3                           | 7.5                                        | ND (1)                        | ALL       | N/A      |
| Arsenic                              | ug/g 18                            | 18                                         | 7                             | BH5/SS1   | 0-0.6m   |
| Barium                               | ug/g 220                           | 390                                        | 220                           | BH5/SS1   | 0-0.6m   |
| Beryllium                            | ug/g 2.5                           | (5) 4                                      | ND (1)                        | ALL       | N/A      |
| Boron (total, for >1.5m BG)          | ug/g 36                            | 120                                        | 20                            | ALL       | N/A      |
| Cadmium                              | ug/g 1.2                           | 1.2                                        | 0.7                           | BH5/SS1   | 0-0.6m   |
| Chromium (Total)                     | ug/g 70                            | 160                                        | 20                            | BH5/SS1   | 0-0.6m   |
| Cobalt                               | ug/g 21                            | 22                                         | 7                             | BH5/SS1   | 0-0.6m   |
| Copper                               | ug/g 92                            | (180) 140                                  | 27                            | BH5/SS1   | 0-0.6m   |
| Lead                                 | ug/g 120                           | 120                                        | 171                           | BH5/SS1   | 0-0.6m   |
| Molybdenum                           | ug/g 2                             | 6.9                                        | 2                             | BH5/SS1   | 0-0.6m   |
| Nickel                               | ug/g 82                            | (130) 100                                  | 20                            | BH4/SS6   | 3.8-4.4m |
| Selenium                             | ug/g 1.5                           | 2.4                                        | ND (1)                        | ALL       | N/A      |
| Silver                               | ug/g 0.5                           | (25) 20                                    | 0.2                           | BH5/SS1   | 0-0.6m   |
| Thallium                             | ug/g 1                             | 1                                          | ND (1)                        | ALL       | N/A      |
| Uranium                              | ug/g 2.5                           | 23                                         | 1.4                           | BH7/SS6   | 3.8-4.4m |
| Vanadium                             | ug/g 86                            | 86                                         | 25                            | BH5/SS1   | 0-0.6m   |
| Zinc                                 | ug/g 290                           | 340                                        | 215                           | BH5/SS1   | 0-0.6m   |
| <b>FUELS &amp; BTEX</b>              |                                    |                                            |                               |           |          |
| PHC F1 (C6-C10)****                  | ug/g 25                            | (65) 55                                    | ND (10)                       | ALL       | N/A      |
| PHC F2 (>C10-C16)                    | ug/g 10                            | (150) 98                                   | ND (10)                       | ALL       | N/A      |
| PHC F3 (>C16-C34)                    | ug/g 240                           | (1300) 300                                 | ND (20)                       | ALL       | N/A      |
| PHC F4 (>C34-C50)                    | ug/g 120                           | (5600) 2800                                | ND (20)                       | ALL       | N/A      |
| Benzene                              | ug/g 0.02                          | (0.17) 0.21                                | ND (0.02)                     | ALL       | N/A      |
| Ethylbenzene                         | ug/g 0.2                           | (6) 2.3                                    | ND (0.20)                     | ALL       | N/A      |
| Xylene, m,p-                         | ug/g 0.05                          | (15) 2                                     | ND (0.05)                     | ALL       | N/A      |
| Xylene, o-                           | ug/g --                            | --                                         | ND (0.05)                     | ALL       | N/A      |
| Xylene Mixture                       | ug/g 0.05                          | (25) 3.1                                   | ND (0.05)                     | ALL       | N/A      |
| <b>PAHs</b>                          |                                    |                                            |                               |           |          |
| Acenaphthene                         | ug/g 0.072                         | (58) 7.9                                   | ND (0.05)                     | ALL       | N/A      |
| Acenaphthylene                       | ug/g 0.093                         | (0.17) 0.15                                | ND (0.05)                     | ALL       | N/A      |
| Anthracene                           | ug/g 0.16                          | (0.74) 0.67                                | 0.09                          | BH5/SS1   | 0-0.6m   |
| Benzo(a)anthracene                   | ug/g 0.36                          | (0.63) 0.5                                 | 0.4                           | BH5/SS1   | 0-0.6m   |
| Benzo(a)pyrene                       | ug/g 0.3                           | 0.3                                        | 0.35                          | BH5/SS1   | 0-0.6m   |
| Benzo(b)fluoranthene                 | ug/g 0.47                          | 0.78                                       | 0.24                          | BH5/SS1   | 0-0.6m   |
| Benzo(g,h,i)perylene                 | ug/g 0.68                          | (7.8) 6.6                                  | 0.26                          | BH5/SS1   | 0-0.6m   |
| Benzo(k)fluoranthene                 | ug/g 0.48                          | 0.78                                       | 0.27                          | BH5/SS1   | 0-0.6m   |
| Chrysene                             | ug/g 2.8                           | (7.8) 7                                    | 0.36                          | BH5/SS1   | 0-0.6m   |
| Dibenz(a,h)anthracene                | ug/g 0.1                           | 0.1                                        | 0.05                          | BH5/SS1   | 0-0.6m   |
| Fluoranthene                         | ug/g 0.56                          | 0.69                                       | 0.65                          | BH5/SS1   | 0-0.6m   |
| Fluorene                             | ug/g 0.12                          | (69) 62                                    | ND (0.05)                     | ALL       | N/A      |
| Indeno(1,2,3,-cd)pyrene              | ug/g 0.23                          | (0.48) 0.38                                | 0.33                          | BH5/SS1   | 0-0.6m   |
| Methylnaphthalene,1-                 | ug/g --                            | --                                         | 0.06                          | BH5/SS1   | 0-0.6m   |
| Methylnaphthalene,2-                 | ug/g --                            | --                                         | 0.08                          | BH5/SS1   | 0-0.6m   |
| Methylnaphthalene (1+2)              | ug/g 0.59                          | (3.4) 0.99                                 | 0.14                          | BH5/SS1   | 0-0.6m   |
| Naphthalene                          | ug/g 0.09                          | (0.75) 0.6                                 | 0.08                          | BH5/SS1   | 0-0.6m   |
| Phenanthrene                         | ug/g 0.69                          | (7.8) 6.2                                  | 0.33                          | BH5/SS1   | 0-0.6m   |
| Pyrene                               | ug/g 1                             | 78                                         | 0.61                          | BH5/SS1   | 0-0.6m   |
| <b>VOCs</b>                          |                                    |                                            |                               |           |          |
| Acetone                              | ug/g 0.5                           | (28) 16                                    | ND (0.50)                     | ALL       | N/A      |
| Benzene                              | ug/g 0.02                          | (0.17) 0.21                                | ND (0.02)                     | ALL       | N/A      |
| Bromodichloromethane                 | ug/g 0.05                          | 13                                         | ND (0.05)                     | ALL       | N/A      |
| Bromoform                            | ug/g 0.05                          | (0.26) 0.27                                | ND (0.05)                     | ALL       | N/A      |
| Bromomethane                         | ug/g 0.05                          | 0.05                                       | ND (0.05)                     | ALL       | N/A      |
| Carbon Tetrachloride                 | ug/g 0.05                          | (0.12) 0.05                                | ND (0.05)                     | ALL       | N/A      |
| Chloroform                           | ug/g 0.05                          | (0.18) 0.05                                | ND (0.05)                     | ALL       | N/A      |
| Dibromochloromethane                 | ug/g 0.05                          | 9.4                                        | ND (0.05)                     | ALL       | N/A      |
| Dichlorobenzene,1,2-(o, m, or p)     | ug/g 0.05                          | (4.3) 3.4                                  | ND (0.05)                     | ALL       | N/A      |
| Dichlorobenzene,1,3-                 | ug/g 0.05                          | (6) 4.8                                    | ND (0.05)                     | ALL       | N/A      |
| Dichlorobenzene,1,4-                 | ug/g 0.05                          | (0.097) 0.083                              | ND (0.05)                     | ALL       | N/A      |
| Dichlorodifluoromethane              | ug/g 0.05                          | (25) 16                                    | ND (0.05)                     | ALL       | N/A      |
| Dichloroethane,1,1-                  | ug/g 0.05                          | (11) 3.5                                   | ND (0.05)                     | ALL       | N/A      |
| Dichloroethane,1,2-                  | ug/g 0.05                          | 0.05                                       | ND (0.05)                     | ALL       | N/A      |
| Dichloroethylene,1,1-                | ug/g 0.05                          | 0.05                                       | ND (0.05)                     | ALL       | N/A      |
| Dichloroethylene, cis-1,2-           | ug/g 0.05                          | (30) 3.4                                   | ND (0.05)                     | ALL       | N/A      |
| Dichloroethylene, trans-1,2-         | ug/g 0.05                          | (0.75) 0.084                               | ND (0.05)                     | ALL       | N/A      |
| Dichloromethane (Methylene Chloride) | ug/g 0.05                          | (0.96) 0.1                                 | ND (0.05)                     | ALL       | N/A      |
| Cis-1,3-Dichloropropylene            | ug/g 0.05                          | (0.083) 0.05                               | ND (0.05)                     | ALL       | N/A      |
| Trans-1,3-Dichloropropylene          | ug/g 0.05                          | (0.083) 0.05                               | ND (0.05)                     | ALL       | N/A      |
| Ethylbenzene                         | ug/g 0.05                          | (15) 2                                     | ND (0.05)                     | ALL       | N/A      |
| Methyl Ethyl Ketone                  | ug/g 0.5                           | (44) 16                                    | ND (0.50)                     | ALL       | N/A      |
| Methyl Isobutyl Ketone               | ug/g 0.5                           | (4.3) 1.7                                  | ND (2.00)                     | ALL       | N/A      |
| Methyl tert-Butyl Ether (MTBE)       | ug/g 0.05                          | (1.4) 0.75                                 | ND (0.05)                     | ALL       | N/A      |
| Monochlorobenzene (Chlorobenzene)    | ug/g 0.05                          | (2.7) 2.4                                  | ND (0.05)                     | ALL       | N/A      |
| Styrene                              | ug/g 0.05                          | (2.2) 0.7                                  | ND (0.05)                     | ALL       | N/A      |
| Tetrachloroethane,1,1,1,2-           | ug/g 0.05                          | (0.05) 0.058                               | ND (0.05)                     | ALL       | N/A      |
| Tetrachloroethane,1,1,2,2-           | ug/g 0.05                          | 0.05                                       | ND (0.05)                     | ALL       | N/A      |
| Tetrachloroethylene                  | ug/g 0.05                          | (2.3) 0.28                                 | ND (0.05)                     | ALL       | N/A      |
| Toluene                              | ug/g 0.2                           | (6) 2.3                                    | ND (0.05)                     | ALL       | N/A      |
| Trichloroethane,1,1,1-               | ug/g 0.05                          | (3.4) 0.38                                 | ND (0.05)                     | ALL       | N/A      |
| Trichloroethane,1,1,2-               | ug/g 0.05                          | 0.05                                       | ND (0.05)                     | ALL       | N/A      |
| Trichloroethylene                    | ug/g 0.05                          | (0.52) 0.061                               | ND (0.05)                     | ALL       | N/A      |
| Trichlorofluoromethane               | ug/g 0.25                          | (5.8) 4                                    | ND (0.05)                     | ALL       | N/A      |
| Vinyl Chloride                       | ug/g 0.02                          | (0.022) 0.02                               | ND (0.02)                     | ALL       | N/A      |
| Xylene, m,p-                         | ug/g --                            | --                                         | ND (0.05)                     | ALL       | N/A      |
| Xylene, o-                           | ug/g --                            | --                                         | ND (0.05)                     | ALL       | N/A      |
| Xylene Mixture                       | ug/g 0.05                          | (25) 3.1                                   | ND (0.05)                     | ALL       | N/A      |

**DETECTION OF CONTAMINANT**

**TABLE 1 EXCEEDENCE**

**TABLE 3 EXCEEDENCE**

( ) Standard value in brackets applies to medium and fine textured soils

\* the site is automatically Environmentally Sensitive (a Table 1) if pH is outside the range of 5<pH<9 (shallow soils <1.5m) or 5<pH<11 (subsurface soils >1.5m)

\*\*\*\* F1 does not include BTEX, proponent may subtract BTEX from the analytical result

-- Not listed in standards

- Not Analysed

| Reg. 153/04 (2011)<br>Parameter       | Units | O.Reg.153 (2011)<br><br>TABLE 3<br>non-potable | Maximum Groundwater<br>Concentration | Sample ID   |
|---------------------------------------|-------|------------------------------------------------|--------------------------------------|-------------|
| IONS AND METALS                       |       | All Property Types                             |                                      |             |
| Antimony                              | ug/L  | 20000                                          | ND (0.5)                             | ALL         |
| Arsenic                               | ug/L  | 1900                                           | ND (1)                               | ALL         |
| Barium                                | ug/L  | 29000                                          | 120                                  | BH4(MW)-GW1 |
| Beryllium                             | ug/L  | 67                                             | ND (0.5)                             | ALL         |
| Boron (total, for >1.5m BG)           | ug/L  | 45000                                          | 200                                  | BH6(MW)-GW1 |
| Cadmium                               | ug/L  | 2.7                                            | ND (0.1)                             | ALL         |
| Chromium (Total)                      | ug/L  | 810                                            | 6                                    | BH4(MW)-GW1 |
| Cobalt                                | ug/L  | 66                                             | 6.5                                  | BH4(MW)-GW1 |
| Copper                                | ug/L  | 87                                             | 2                                    | BH4(MW)-GW1 |
| Lead                                  | ug/L  | 25                                             | ND (1)                               | ALL         |
| Molybdenum                            | ug/L  | 9200                                           | ND (5)                               | ALL         |
| Nickel                                | ug/L  | 490                                            | 16                                   | BH6(MW)-GW1 |
| Selenium                              | ug/L  | 63                                             | ND (10)                              | ALL         |
| Silver                                | ug/L  | 1.5                                            | ND (0.1)                             | ALL         |
| Sodium                                | ug/L  | 2300000                                        | 167000                               | BH4(MW)-GW1 |
| Thallium                              | ug/L  | 510                                            | ND (0.1)                             | ALL         |
| Uranium                               | ug/L  | 420                                            | 33                                   | BH6(MW)-GW1 |
| Vanadium                              | ug/L  | 250                                            | 6                                    | BH6(MW)-GW1 |
| Zinc                                  | ug/L  | 1100                                           | 10                                   | ALL         |
| FUELS & BTEX                          |       |                                                |                                      |             |
| PHC F1 (C6-C10)****                   | ug/L  | 750                                            | ND (100)                             | ALL         |
| PHC F2 (>C10-C16)                     | ug/L  | 150                                            | ND (100)                             | ALL         |
| PHC F3 (>C16-C34)                     | ug/L  | 500                                            | ND (200)                             | ALL         |
| PHC F4 (>C34-C50)                     | ug/L  | 500                                            | ND (200)                             | ALL         |
| Benzene                               | ug/L  | (430) 44                                       | ND (0.5)                             | ALL         |
| Toluene                               | ug/L  | 18000                                          | ND (0.5)                             | ALL         |
| Ethylbenzene                          | ug/L  | 2300                                           | ND (0.5)                             | ALL         |
| Xylene, m,p-                          | ug/L  | --                                             | ND (0.5)                             | ALL         |
| Xylene, o-                            | ug/L  | --                                             | ND (0.5)                             | ALL         |
| Xylene Mixture                        | ug/L  | 4200                                           | ND (1.0)                             | ALL         |
| PAHs                                  |       |                                                |                                      |             |
| Acenaphthene                          | ug/L  | (1700) 600                                     | ND (0.1)                             | ALL         |
| Acenaphthylene                        | ug/L  | 1.8                                            | ND (0.1)                             | ALL         |
| Anthracene                            | ug/L  | 2.4                                            | ND (0.1)                             | ALL         |
| Benzo(a)anthracene                    | ug/L  | 4.7                                            | ND (0.1)                             | ALL         |
| Benzo(a)pyrene                        | ug/L  | 0.81                                           | ND (0.01)                            | ALL         |
| Benzo(b)fluoranthene                  | ug/L  | 0.75                                           | ND (0.05)                            | ALL         |
| Benzo(k)fluoranthene                  | ug/L  | 0.4                                            | ND (0.05)                            | ALL         |
| Benzo(g,h,i)perylene                  | ug/L  | 0.2                                            | ND (0.1)                             | ALL         |
| Chrysene                              | ug/L  | 1                                              | ND (0.05)                            | ALL         |
| Dibenz(a,h)anthracene                 | ug/L  | 0.52                                           | ND (0.1)                             | ALL         |
| Fluoranthene                          | ug/L  | 130                                            | ND (0.1)                             | ALL         |
| Fluorene                              | ug/L  | 400                                            | ND (0.1)                             | ALL         |
| Indeno(1,2,3-cd)pyrene                | ug/L  | 0.2                                            | ND (0.1)                             | ALL         |
| Methylnaphthalene,1-                  | ug/L  | --                                             | ND (0.1)                             | ALL         |
| Methylnaphthalene,2-                  | ug/L  | --                                             | ND (0.1)                             | ALL         |
| Methylnaphthalene (1+ 2)              | ug/L  | 1800                                           | ND (0.1)                             | ALL         |
| Naphthalene                           | ug/L  | (6400) 1400                                    | ND (0.1)                             | ALL         |
| Phenanthrene                          | ug/L  | 580                                            | 0.1                                  | BH7(MW)-GW1 |
| Pyrene                                | ug/L  | 68                                             | ND (0.1)                             | ALL         |
| VOCs                                  |       |                                                |                                      |             |
| Acetone                               | ug/L  | 130000                                         | ND (50)                              | ALL         |
| Benzene                               | ug/L  | (430) 44                                       | ND (0.5)                             | ALL         |
| Bromodichloromethane                  | ug/L  | 85000                                          | ND (0.3)                             | ALL         |
| Bromoform                             | ug/L  | (770) 380                                      | ND (0.4)                             | ALL         |
| Bromomethane                          | ug/L  | (56) 5.6                                       | ND (0.5)                             | ALL         |
| Carbon Tetrachloride                  | ug/L  | (8.4) 0.79                                     | ND (0.2)                             | ALL         |
| Chloroform                            | ug/L  | (22) 2.4                                       | ND (0.5)                             | ALL         |
| Dibromochloromethane                  | ug/L  | 82000                                          | ND (0.3)                             | ALL         |
| Dichlorobenzene,1,2-(o, m, or p)      | ug/L  | (9600) 4600                                    | ND (0.4)                             | ALL         |
| Dichlorobenzene,1,3-                  | ug/L  | 9600                                           | ND (0.4)                             | ALL         |
| Dichlorobenzene,1,4-                  | ug/L  | (67) 8                                         | ND (0.4)                             | ALL         |
| Dichlorodifluoromethane               | ug/L  | 4400                                           | ND (0.5)                             | ALL         |
| Dichloroethane,1,1-                   | ug/L  | (3100) 320                                     | ND (0.4)                             | ALL         |
| Dichloroethane,1,2-                   | ug/L  | (12) 1.6                                       | ND (0.2)                             | ALL         |
| Dichloroethylene,1,1-                 | ug/L  | (17) 1.6                                       | ND (0.5)                             | ALL         |
| Dichloroethylene, cis-1,2-            | ug/L  | (17) 1.6                                       | ND (0.4)                             | ALL         |
| Dichloroethylene, trans-1,2-          | ug/L  | (17) 1.6                                       | ND (0.4)                             | ALL         |
| Dichloromethane (Methylene Chloride)  | ug/L  | (5500) 610                                     | ND (4.0)                             | ALL         |
| Dichloropropane,1,2-                  | ug/L  | (140) 16                                       | ND (0.5)                             | ALL         |
| Cis-1,3-Dichloropropylene             | ug/L  | --                                             | ND (0.2)                             | ALL         |
| Trans-1,3-Dichloropropylene           | ug/L  | --                                             | ND (0.5)                             | ALL         |
| Dichloropropene, (1,3-c & t combined) | ug/L  | (45) 5.2                                       | ND (0.5)                             | ALL         |
| Ethylbenzene                          | ug/L  | 2300                                           | ND (0.5)                             | ALL         |
| Ethylene Dibromide                    | ug/L  | (0.83) 0.25                                    | ND (0.2)                             | ALL         |
| Hexane (n)                            | ug/L  | (520) 51                                       | ND (5.0)                             | ALL         |
| Methyl Ethyl Ketone                   | ug/L  | (1500000) 470000                               | ND (10)                              | ALL         |
| Methyl isobutyl Ketone                | ug/L  | (580000) 140000                                | ND (10)                              | ALL         |
| Methyl tert-Butyl Ether (MTBE)        | ug/L  | (1400) 190                                     | ND (10)                              | ALL         |
| Monochlorobenzene (Chlorobenzene)     | ug/L  | 630                                            | ND (0.2)                             | ALL         |
| Styrene                               | ug/L  | (9100) 1300                                    | ND (0.5)                             | ALL         |
| Tetrachloroethane,1,1,1,2-            | ug/L  | (28) 3.3                                       | ND (0.5)                             | ALL         |
| Tetrachloroethane,1,1,2,2-            | ug/L  | (15) 3.2                                       | ND (0.5)                             | ALL         |
| Tetrachloroethylene                   | ug/L  | (17) 1.6                                       | 1.2                                  | BH5(MW)-GW1 |
| Toluene                               | ug/L  | 18000                                          | ND (0.5)                             | ALL         |
| Trichloroethane,1,1,1-                | ug/L  | (6700) 640                                     | ND (0.4)                             | ALL         |
| Trichloroethane,1,1,2-                | ug/L  | (30) 4.7                                       | ND (0.4)                             | ALL         |
| Trichloroethylene                     | ug/L  | (17) 1.6                                       | ND (0.3)                             | ALL         |
| Trichlorofluoromethane                | ug/L  | 2500                                           | ND (0.5)                             | ALL         |
| Vinyl Chloride                        | ug/L  | (1.7) 0.5                                      | ND (0.2)                             | ALL         |
| Xylene, m,p-                          | ug/L  | --                                             | ND (0.5)                             | ALL         |
| Xylene, o-                            | ug/L  | --                                             | ND (0.5)                             | ALL         |
| Xylene Mixture                        | ug/L  | 4200                                           | ND (1.0)                             | ALL         |

DETECTION OF CONTAMINANT

TABLE 1 EXCEEDENCE

TABLE 3 EXCEEDENCE

\* the site is automatically Environmentally Sensitive (a Table 1) if pH is outside the range of 5<pH<9 (shallow soils <1.5m) or 5<pH<11 (subsurface soils >1.5m)

\*\*\*\* F1 does not include BTEX, proponent may subtract BTEX from the analytical result

N/A - Not applicable

N/V - No Value Derived

-- Not listed in standards

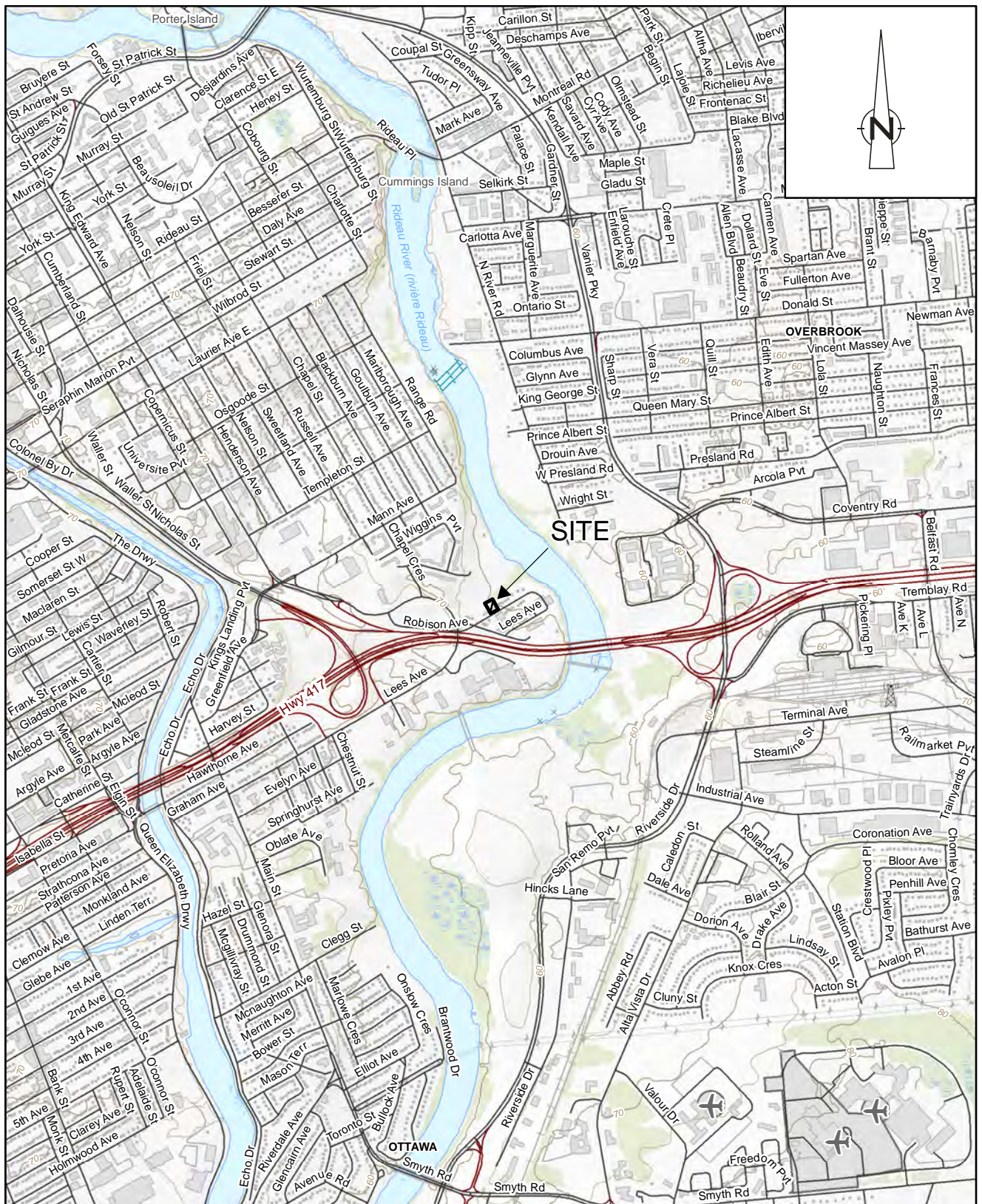
- Not Analysed

## Figures

---

- ◆ Site Location Map – T021226-E1-1
- ◆ Borehole Location Plan – T021226-E1-2





Source: MNR NRVIS, 2011. Produced by CRA under licence from Ontario Ministry of Natural Resources, © Queen's Printer 2011;  
Coordinate System: NAD 1983 UTM Zone 18N

## SITE LOCATION MAP

PHASE II ENVIRONMENTAL SITE ASSESSMENT  
ROBINSON PARK DEVELOPMENT  
17, 19 AND 23 ROBINSON AVENUE, OTTAWA, ON  
Dwg. No. T021226-E1-1







Source: MNR NRVIS, 2011. Produced by CRA under licence from Ontario Ministry of Natural Resources, © Queen's Printer 2011;  
 Coordinate System: NAD 1983 UTM Zone 18N

## BOREHOLE LOCATION PLAN

PHASE II ENVIRONMENTAL SITE ASSESSMENT  
 ROBINSON PARK DEVELOPMENT  
 17, 19 AND 23 ROBINSON AVENUE, OTTAWA, ON  
*Dwg. No. T021226-E1-2*



## **Appendix A**

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- ◆ Sampling and Analysis Plan
- ◆ Service Clearances
- ◆ Borehole Logs
- ◆ Certificate of Analysis – Exova #1322570 – Soil - October 18, 2013
- ◆ Certificate of Analysis – Exova #1322830 – Groundwater – October 22, 2013
- ◆ Certificate of Analysis – Exova #1323988 – Groundwater – November 5, 2013
- ◆ Certificate of Analysis – Exova #1324828 – Groundwater – November 13, 2013
- ◆ Certificate of Analysis – Exova #1323130 – TCLP – October 25, 2013
- ◆ Inspec-Sol Wash/Pass Sieve Analysis Results



**Robinson Park Development**  
**Sampling and Analysis Plan**  
**Phase Two Environmental Site Assessment**  
**Residential Properties**  
**17, 19 and 23 Robinson Avenue**  
**Ottawa, Ontario**

Date : **October 7, 2013**

Our Ref. : **T021226-E1**

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### Attachments

- ◆ Proposed Borehole/Monitoring Well Locations
- ◆ Service Clearances

## **1.0 BACKGROUND**

---

A Phase Two Environmental Site Assessment (Phase Two ESA) is to be completed for the properties located at 17, 19 and 23 Robinson Avenue, Ottawa, Ontario ("Site") to investigate the areas of potential environmental concern (APEC) identified by Ms. Nina Maher of the City of Ottawa planning department, dated July 16, 2013. The investigation of APECs is to consist of additional analysis of soil and groundwater undertaken in one of the three existing borehole locations (BH3) for a full comparison of contaminants (inorganics, Petroleum Hydrocarbons (PHCs), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs) and pH) parameters listed in Table 3 of MOE O.Reg. 153/04. Additionally, similar analysis of soil and groundwater was requested for three (3) new boreholes. Two (2) of which would be located in the northern portion of the site at the rear (i.e. in the northeast and northwest corners of the lot) and one located on the east side of the site at the front (i.e. opposite BH3 along the eastern lot line).

## **2.0 SPECIFIC OBJECTIVES**

---

The following are the specific objectives of the planning of the site investigation component this Phase Two ESA, as stated in O.Reg. 153/04:

1. Plan an investigation that will achieve the general objectives of a Phase Two ESA,
  - i. through the use of an appropriate and complete information base concerning the Phase Two property, and
  - ii. through the conduct of an investigation based both on information obtained before the Phase Two ESA begins and on the incorporation of information obtained during the Phase Two ESA.
2. To develop a sampling and analysis plan that will adequately assess all areas of the Phase Two property where contaminants may be present in land or water on, in or under the property.
3. To develop a quality assurance program that is designed to effectively limit errors and bias in sampling and analysis through implementation of assessment and control measures that will ensure data are useful, appropriate and accurate in the determination of whether the Phase Two property, meets applicable site condition criteria.

### **3.0 UTILITY SERVICE CLEARANCES**

---

Public and private utility service clearances will be provided to the field technician prior to commencing the drilling program. The project manager must be contacted immediately should any conflicts arise during the drilling program with the locations of underground services and the proposed borehole locations. Service clearance are attached to this Plan.

### **4.0 SPECIFIC REQUIREMENTS**

---

#### **4.1 Media For Investigation**

- ◆ Overburden soil sampling will be conducted on the day of drilling.
- ◆ Groundwater monitoring wells will be installed during the drilling program to facilitate the collection of groundwater samples at a later date.
- ◆ No sediment is present on the Site, as such; sediment sampling will not be conducted as part of this investigation.
- ◆ No surface water bodies are present on the Site, as such; surface water sampling will not be conducted as part of this investigation.

#### **4.2 Locations and Depths for Sampling**

##### **Locations**

The four (4) proposed borehole locations are illustrated on the Proposed Borehole Locations sketch attached to this Sampling and Analysis Plan. Monitoring wells have been proposed in four (4) of the borehole locations on the Site. If the monitoring well installed in BH3 as part of the 2008 investigation is intact, an additional monitoring well installation will not be required in this location. The approximate locations and labelling of the boreholes/monitoring wells are as follows:

- ◆ BH4(MW), southeast portion of 23 Robinson Avenue, within 3m of east property limit, monitoring well installation;
- ◆ BH5(MW), northeast portion of 23 Robinson Avenue, as close as possible to north and east property limits, monitoring well installation;
- ◆ BH6(MW), northwest portion of 17 Robinson Avenue, as close as possible to north and west property limits, monitoring well installation;

- ◆ BH7(MW), southeast portion of 8 Hamilton Avenue North, monitoring well installation ***(if monitoring well in BH3 is destroyed – otherwise existing monitoring well in BH3 is sufficient)***;

### **Depths**

Soil samples will be collected in 0.6m intervals using stainless steel split spoons, with 0.15m spacing between samples. Sampling will be conducted from ground surface down to proposed drilling depth (4.5m), provided that the groundwater table is encountered within this depth. If additional drilling is required to intercept the groundwater table, please contact the project manager.

Groundwater monitoring well screens will be installed within the overburden soil. Screens should be limited to a maximum length of 3.0m and a minimum length of 1.5m. Screens are to be installed from to the maximum depth of the borehole, have a sand pack that extends a minimum of 0.3m above the screen and must be sealed with bentonite hole plug with a thickness of at least 0.6m. If the depth of the groundwater and maximum screen length permits, monitoring well screens should straddle the groundwater table interface.

## **4.3 Parameters for Laboratory Analysis**

### **Soil**

The following soil samples from the specified depths below will be submitted for laboratory analysis of the specified analytical parameters:

| Location | Analytical Parameters        | Approximate Depth of Sample                        |
|----------|------------------------------|----------------------------------------------------|
| BH4(MW)  | Metals, PAHs, PHCs, VOCs, pH | Soil sample near water table interface (saturated) |
| BH5(MW)  | VOCs, PHCs, pH               | Soil sample near water table interface (saturated) |
| BH5(MW)  | Metals, PAHs, pH             | Shallow soil (upper 0.6m)                          |
| BH6(MW)  | PHCs, VOCs, pH               | Soil sample near water table interface (saturated) |
| BH6(MW)  | Metals, PAHs, pH             | Shallow soil (upper 0.6m)                          |
| BH7(MW)  | Metals, PAHs, PHCs, VOCs, pH | Soil sample near water table interface (saturated) |

Should any visually or olfactory observations be made with respect to the potential presence of contaminants in the soil at a specific depth in a particular borehole location, the soil sample with the suspected contaminants will be submitted for laboratory analysis in lieu of the sample depth referenced in the table above.

### **Soil Duplicate**

A duplicate sample will be selected based on visual and olfactory observations of potential contaminants. If no observations of potential contaminants are made during the drilling program, a duplicate of BH6-SS1 will be submitted for analysis of PAHs under the sample ID DUP-S1.

### **Groundwater**

The following groundwater samples from the screened intervals will be submitted for laboratory analysis of the specified analytical parameters:

| Location          | Analytical Parameters        | Approximate Depth of Sample |
|-------------------|------------------------------|-----------------------------|
| BH4(MW)           | PHCs, VOCs, Metals, PAHs, pH | Screened Interval           |
| BH5(MW)           | PHCs, VOCs, Metals, PAHs, pH | Screened Interval           |
| BH6(MW)           | PHCs, VOCs, Metals, PAHs, pH | Screened Interval           |
| BH7(MW)<br>or BH3 | PHCs, VOCs, Metals, PAHs, pH | Screened Interval           |
| Trip Blank        | VOCs                         | Provided by laboratory      |

### **Groundwater Duplicate**

A duplicate sample will be selected based on visual and olfactory observations of potential contaminants in groundwater. If no observations of potential contaminants are made during the groundwater sampling program, a duplicate of BH7-GW1 (or BH3-GW1) will be submitted for analysis of PAHs under the sample ID DUP-GW1.

## **5.0 QUALITY ASSURANCE / QUALITY CONTROL**

---

### **5.1 Decontamination of Sampling Equipment**

All non-dedicated sampling equipment such as stainless steel split spoons will be washed between uses.



Water level monitoring equipment, including water level meters and interface probes will be decontaminated with Alconox and rinsed with deionised water between water level readings to prevent cross contamination.

## **5.2 Trip Blanks**

Since groundwater samples are to be analyzed for volatile organic compounds, one trip blank sample shall be submitted for laboratory analysis with each laboratory submission.

## **5.3 Field Duplicates**

Field duplicate samples shall be collected in each medium (soil and groundwater) being sampled. At least one field duplicate sample will be submitted for laboratory analysis for every ten samples submitted for laboratory analysis. Field duplicates will be selected from samples which have the greatest probability of environmental contamination (i.e. where field observations indicate potential contamination is present). Duplicate selection was discussed further in Section 4.3.

## **5.4 Soil Vapour Screening**

All soil samples will be screened for organic vapours using a photo ionization detector (PID) or RKI Eagle gas detector. Soil samples with notably elevated organic vapour concentrations will be selected for laboratory analysis.

## **6.0 STANDARD OPERATING PROCEDURES**

---

**Inspec-Sol** standard operating procedures (SOP) shall be used during borehole drilling and soil sampling. Deviations to the SOP shall be discussed with the project manager.

### **6.1 Well Development**

Groundwater monitoring wells will be developed on the day of drilling. At least three (3) and up to ten (10) well volumes will be removed from the monitoring wells in order to remove all sediment from the wells. In cases where the monitoring well goes dry prior to purging three (3) well volumes, the well should be purged dry a minimum of three (3) times. Waterra tubing should be removed from the monitoring wells following well development.

## **6.2 Borehole Locating**

The locations of all boreholes and monitoring wells **MUST** be measured in the field on the day of drilling. Borehole locations should be measured with respect to building corners or known property boundaries and shown on a plan.

## **6.3 Elevation Survey**

An elevation survey of all boreholes and monitoring wells will be conducted following the completion of the drilling program. A fixed temporary benchmark should be used as a reference elevation; the top of spindle of a fire hydrant is preferred for this purpose as geodetic elevations can be obtained for these points. The ground surface elevation of all boreholes should be surveyed. The top of riser of each monitoring well should also be surveyed; this will ensure maximum accuracy in the interpretation of groundwater elevations.

All existing monitoring well locations should also be surveyed.

## **6.4 Groundwater Elevation Survey**

Following a period of stabilization (1 week is recommended) a groundwater elevation survey will be completed for all monitoring wells. The depth to groundwater is recorded prior to disturbance of the water column and is recorded with respect to the top of riser of the monitoring well.

## **6.5 Groundwater Sampling**

Groundwater sampling is conducted following the collection of groundwater elevations. To avoid mixture of sediment into the groundwater column and prevent volatilization during sampling, a peristaltic pump is used for groundwater sampling. The wells are purged of standing water by removing at least one (1) well volume using the peristaltic pump. Sampling is conducted on a low flow setting. Samples are collected in dedicated bottles prepared by the laboratory. Samples are field filtered in the case of metals sampling.

# PUBLIC LOCATE REPORT

DATE: OCT 7 / 13

## U.S.L.-1 Underground Service Locators Inc.

775 Taylor Creek Drive  
OTTAWA, ONTARIO, K1C 1T1  
Phone: (613) 226-8750 Fax: (613) 226-8677

Client Name: INSPECSOL

Job Location: 17 to 23 ROBINSON AVE

Nature of work: BORE HOLES

### DESCRIPTION OF PUBLIC LOCATES

① TELEPHONE: Utility in work area: Yes / No Located ☒ - Marked ☒ - See attached sketch ☒

Notes: BURIED BELL IN FRONT OF # 23. PAINTED ORANGE. SEE PROMARK REPORT

GAS: Utility in work area: Yes / No Located ☒ - Marked ☒ - See attached sketch ☒

Notes: GAS MAIN CROSSES FRONT LAWNS. HOUSE 17 AND 19 HAVE GAS SERVICE IN FRONT.

HYDRO: Utility in work area: Yes No Located ☐ - Marked ☐ - See attached sketch ☒

Notes: NO BURIED HYDRO IN YOUR WORK AREA. HOUSE # 25 HAS BURIED HYDRO OFF POLE.

② WATER: Utility in work area: Yes / No Located ☒ - Marked ☒ - See attached sketch ☒

Notes: WATER FED FROM STREET INTO FRONT OF HOUSES. PAINTED BLUE.

SEWER Utility in work area: Yes / No Located ☐ - Marked ☐ - See attached sketch ☒

Notes: SANITATION FED OUT FRONT OF HOUSES TO STREET. ONLY # 17 TRACED.

③ CABLE TV: Utility in work area: Yes No Located ☐ - Marked ☐ - See attached sketch ☐

ALLSTREAM

Notes: NO BURIED ROGERS or ALLSTREAM IN YOUR WORK AREA. SEE REPORT

④ TRAFFIC

Utility in work area: Yes / No Located ☐ - Marked ☐ - See attached sketch ☐

Notes: NO BURIED TRAFFIC DUCTS IN YOUR WORK AREA. SEE REPORT

⑤ BLACK AND  
MCDONALD

NO BURIED STREET LIGHT ASSETS IN YOUR WORK AREA.

Locators Name: DAN SPARLING

Signature: [Signature]

\*\*\* IF THERE ARE ANY QUESTIONS WITH REGARDS TO THIS OR ANY OTHER CLEARANCE SHEET PLEASE CONTACT US IMMEDIATELY \*\*\*



**UNDERGROUND SERVICE LOCATORS**

DATE: Oct 7/13

**ONE-CALL SYSTEMS INC.****775 TAYLOR CREEK DRIVE**

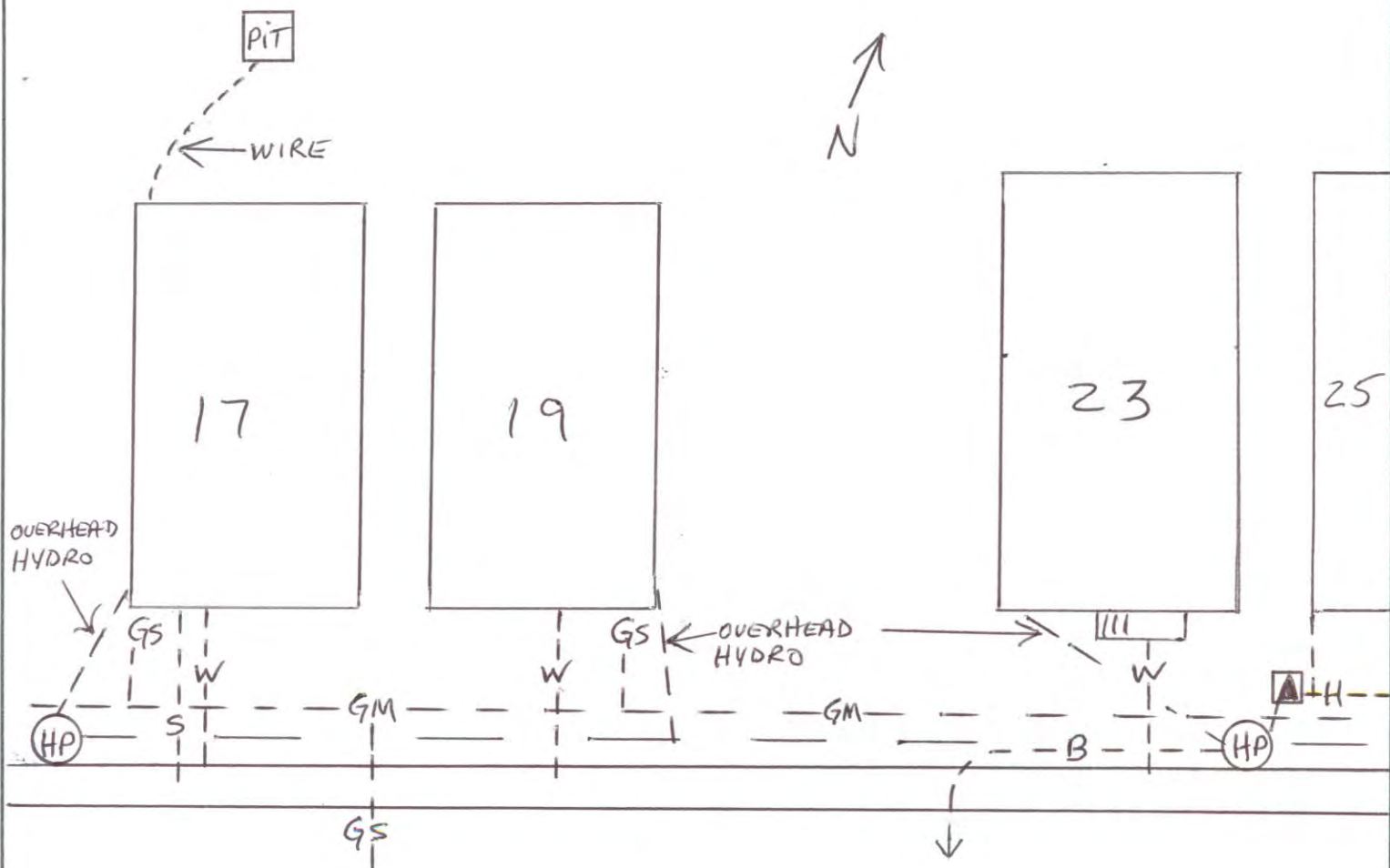
PHONE (613) 226-8750

**OTTAWA, ON, K1C 1T1**

FAX (613) 226-8677

CUSTOMER: *INSPECSOL*REQUESTED BY: *LUKE LOPERS*LOCATION OF WORK: *17 to 23 ROBINSON AVE*LIMITS OF WORK: *BORE HOLES*

|       |         |            |            |        |
|-------|---------|------------|------------|--------|
| HYDRO | -- H -- | CABLE T.V. | -- T.V. -- | OTHER: |
| GAS   | -- G -- | SANITARY   |            |        |
| BELL  | -- B -- | SEWER      | -- S --    |        |
| WATER | -- W -- | STORM      | -- ST --   |        |

**LOCATES ONLY APPLICABLE TO INFO ABOVE - LOCATES VOID AFTER 30 DAYS!**

SKETCH NOT TO SCALE

THIS SKETCH IS NOT A VALID PUBLIC UTILITY LOCATE. CONTRACTOR IS RESPONSIBLE TO ENSURE THEY HAVE PUBLIC LOCATES BEFORE COMMENCING WORK.

ASBUILTS OR PLANS PROVIDED:

YES

NO

LOCATORS NAME: *DAN SPARLING*SIGNATURE: *[Signature]***CAUTION: HAND DIG WITHIN 1.5 METERS OF MARKINGS**

## Monique Larocque

**From:** solutions@on1call.com  
**Sent:** Tuesday, September 24, 2013 2:29 PM  
**To:** moniquel@usl-1.com  
**Subject:** Request 2013395312

### ONTARIO ONE CALL Locate Request Confirmation

Ticket #:2013395312 Reason Code:STANDARD  
Work to Begin Date: 10/01/2013 Time: 08:00:00 AM  
WAP No:

#### CALLER INFORMATION

MONIQUE LAROCQUE Tel.: (613) 226-8750  
Contractor ID: 202  
U S L Cell: (613) 226-8750  
WORK BEING DONE FOR: INSPECSOL Fax: (613) 226-8677  
moniquel@usl-1.com  
ALT CONTACT: JEFF FORRESTER Tel.:

#### DIG LOCATION

City: OTTAWA , OTTAWA  
Community: OTTAWA  
Address : 17 To: 23 Lot/Unit#:  
Street : ROBINSON AVE  
Nearest Intersecting Street :  
HURDMAN RD  
Second Intersecting Street :

Nb of Segments: 5

Type of Work: BORE HOLES

Max Depth: 98.43 FT

Machine Dig: X  
Public Property: X  
Mark & Fax: X Site Meet Req.:  
Area is Marked: X  
Directional Drilling:

Hand Dig: X  
Private Property: X  
Area is Not Marked:

Work Extent/Location:  
W1309240841360 DRILLING BOREHOLES AT VARIOUS  
LOCATIONS THROUGHOUT PROPERTIES. CLEAR ENTIRE  
PROPERTIES OF 17, 19 AND 23 ROBINSON. FRONT TO  
SIDEWALKS, SIDE AND BACK TO PROPERLINES. FRONT,  
SIDE, BACK

Remarks:

The following utility owners have been notified of your proposed excavation site:

|        |                      |        |                      |
|--------|----------------------|--------|----------------------|
| AT10   | ALLSTREAM (AT10)     | BCOE01 | PROMARK FOR BELL CAN |
| ENOE01 | PROMARK FOR ENBRIDGE | HOT1   | HYDRO OTTAWA (HOT1)  |

These members have been removed due to the relocate:

Note: -C = Cleared, -S = Supressed, -L = Lookup center cleared, -A = Alternate Locate,  
-R = Existing locate valid - maintain marks

---

PLEASE REMEMBER:

Review your locate request information and contact the center for any changes.  
Note your request number and the status of our members for this request. Not all facility owners are members of Ontario One Call, you must contact non- members directly. This includes private electrical and gas lines to pool heaters, BBQ's, fuel oil tanks, etc. Do not excavate before obtaining all required locates.  
Respect the marks and instructions provided by the locators and dig with care.

Some Members may provide a clearance if you have selected a minimal depth, a low risk type of work or hand digging (shovel, pick or spade).  
If you have received a clearance (-C) from some Members, this is based on the information that you have provided.  
If there is a damage, contact the utility owner directly. Ontario One Call does not track the completion of field locates. To inquire as to the status of your locate request, please go to [www.onlcall.com](http://www.onlcall.com) and select the "Ticket Status" option. Please note that not all members participate in this program; this will be indicated in the Status program for the ticket in question.  
Non-participating members must still be contacted directly.



2013395312\_BCOE01

PR MARK  
TELEC N

UNION GAS EMERGENCY #

Primary Locate Sheet 1-877-969-0999

Request #2013395312

Phone:  
613-723-9888Fax:  
613-723-9277Toll free:  
1-800-371-8866

Email:

NORMAL

Utilities Located: ☒ Bell ☒ Gas ☒ Hydro Ottawa ☐ Street Lighting  
☐ Videotron ☐ Peel Fibre ☐ Veridian Connections

Revised Excavation Date

Excavation Date

Status

10/01/2013 08:00:00

STANDARD

Homeowner ☐Requested by:  
MONIQUE LAROCQUECompany:  
USLPhone:  
(613)-226-8750 ext.Fax/email:  
(613)-226-8677 ext.Contractor ☒Project ☐

Appt Date:

Received Date:

Locate Address: 17 to 23, ROBINSON AVE

mm/dd/yyyy

09/25/2013  
mm/dd/yyyy

1st Inters.: HURDMAN RD

2nd Inters.:

Type of work:  
BORE HOLESCity:  
OTTAWA

Caller's Remarks:

MACH. DIG

W/1309240841360 DRILLING BOREHOLES AT VARIOUS LOCATIONS THROUGHOUT PROPERTIES. CLEAR ENTIRE PROPERTIES OF 17, 19 AND 23 ROBINSON. FRONT TO SIDEWALKS, SIDE AND BACK TO PROPER LINES. FRONT, SIDE, BACK

\*\*\*SEND HYDRO OTTAWA &amp; GEMOBILE\*\*\*CA\*\*\*-75.866831, 45.418163, NB\_SEGMENTS::2, NO\_PLAN:613 241, BCOE01, BCOE01, AT10, HOT1, ROGOTT01

| Bell Mark   Clear | Enbridge Gas Mark   Clear | Hydro Ottawa Mark   Clear | Street Lighting Mark   Clear | Peel Fibre Mark   Clear | Blink Mark   Clear | Veridian Mark   Clear | Union Gas Mark   Clear | Videotron Mark   Clear |
|-------------------|---------------------------|---------------------------|------------------------------|-------------------------|--------------------|-----------------------|------------------------|------------------------|
| 1                 | 1                         | 1                         |                              |                         |                    |                       |                        |                        |

LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE.

Records Reference:

☐ Map ☐ Network X# ☒ LAC Multiviewer  
☐ Byers ☐ Datapak: 4038

Field Notes: NE197,6n1763-4

Other:

DPT Remarks:

☐ Third Party Notification

N/A

Apply Sticker Here if Required

Excavator shall notify &amp; receive a clearance from Utility prior to excavation for the following:

Telecom ☐ High Priority Cable ☐ Central Office Vicinity

Method of Field Marking: ☒ Paint ☐ Stakes ☒ Flags ☐ Offset Flags ☐ Other (Telecom=Orange, Gas=Yellow, Hydro Ott. =Red)

Caution: Locates are VOID after 30 days. See Disclaimer on reverse side for the specific Facility Owner's Guidelines.

Caution: Any changes to location or nature of work require new locate. The Excavator must not work outside the Located Area without a new locate. Privately owned services within the located area have not been marked - check with service/property owner. For all Locate requests including remarks contact:

Ontario One Call at 1-800-400-2255 or www.on1call.com.

Locator Name: BELAIR DANICK

Start Time: 1100

☒ Mark & Fax ☐ Left on Site ☐ Emailed

ID #: 1591

End Time: 1130

Print: \_\_\_\_\_

Date SEP 30 2013

Total Hours: 0.5

Signature: \_\_\_\_\_

A copy of this Primary Locate Sheet and Auxiliary Locate Sheet(s) must be on site and in the hands of the machine operator during work operations. If sketch and markings do not coincide, the Excavator must obtain a new locate

This form revised January 2010



**PRO MARK**  
**TELECON**

2013395312\_BCOE01

Auxiliary Locate Sheet

 Union Gas Emergency #  
 1-877-969-0999

 Phone:  
 613-723-9888

 Fax:  
 613-723-9277

 Toll free:  
 1-800-371-8866

Email

 Utilities ☐ Bell ☐ Gas ☒ Hydro Ottawa ☐  
 Located: ☐ Videotron ☐ Peel Fibre ☐ Veridian connections

 Date Located:  
 mm/dd/yyyy SEP 30 2013

Request # 2013395312

Number of Services marked: (Specify building/house numbers)

LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE













FROM: \_\_\_\_\_

TO: \_\_\_\_\_

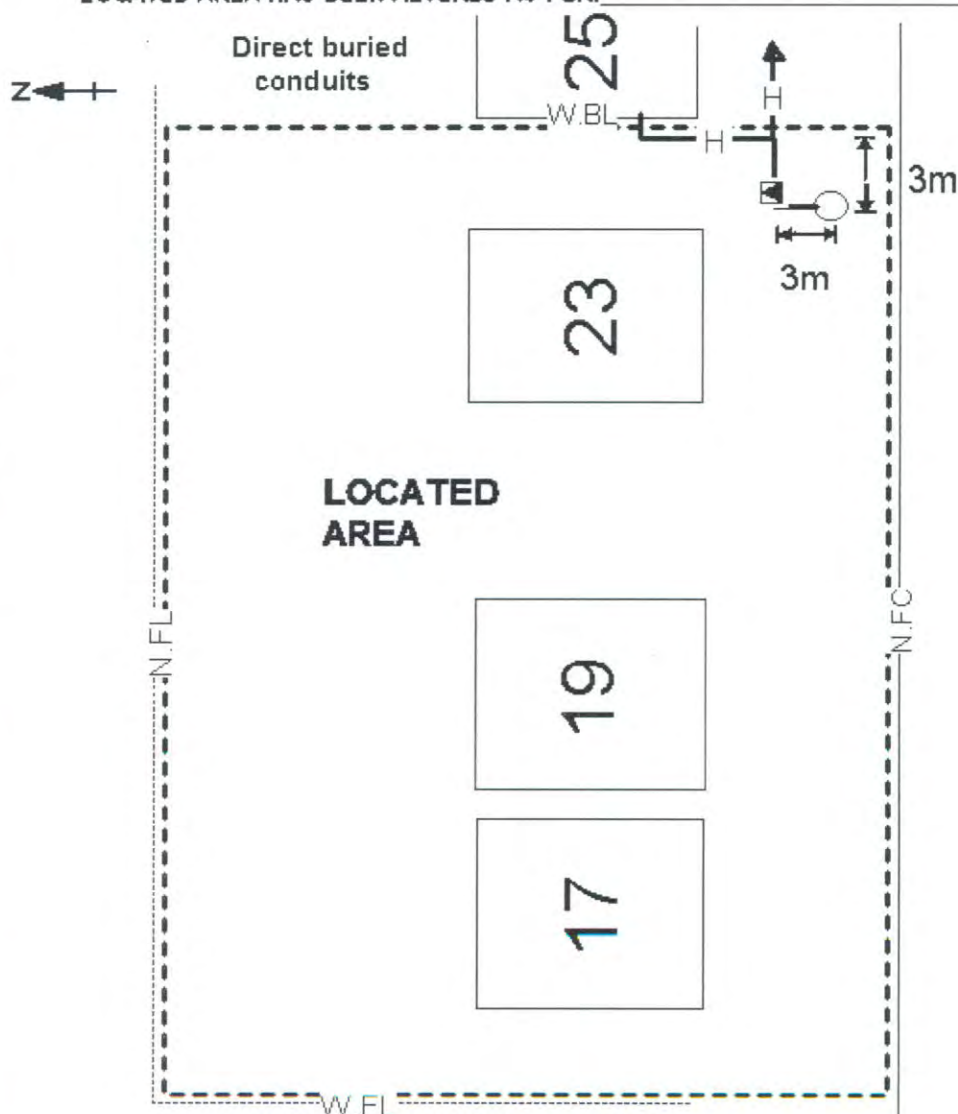
FROM: \_\_\_\_\_

TO: \_\_\_\_\_

## Legend

Building Line — BL—  
 Fence Line — FL—  
 Face of Curb — FC—  
 Road Edge — RE—  
 Property Line — PL—  
 Driveway — DW—  
 Catch Basin   
 Sidewalk   
 Demarcation   
 Railway   
 Pole   
 Flush to Grade Pedestal   
 Pedestal   
 Buried Cable — B—  
 Conduit — C—  
 Buried Service Wire — BSW—  
 Manhole   
 Fibre Optic Cable — FO—  
 Gas Main — GM—  
 Gas Service — GS—  
 Gas Valve   
 Hydrant   
 Transformer   
 Hydro Ottawa — H—  
 Hydro Pole X  
 Street Light Cable — SL—  
 Street Light   
 North N.  
 South S.  
 East E.  
 West W.

CAUTION: Hand dig within 1m as measured horizontally from the field markings to avoid  
 damaging the underground utilities. If you damage the plant, you may be held liable.  
 If you damage underground plant, contact the facility owner immediately.  
 Depth varies and MUST be verified by hand digging or vacuum excavation.  
 LOCATED AREA HAS BEEN ALTERED AS PER:



ROBINSON

THIS FORM VALID ONLY WITH Primary Locate Form. This sketch is not to scale.  
 Any privately owned services within the located area have not been marked- check with service/property owner.

A copy of this Auxiliary Locate Sheet(s) and the Primary Locate Sheet must be on site and in the hands of the machine operator during work operations. If sketch and markings do not coincide, the Excavator must obtain a new locate.





2013395312\_BCOE01  
Auxiliary Locate Sheet

Union Gas Emergency #  
1-877-969-0999

Phone:  
613-723-9888

Fax:  
613-723-9277

Toll free:  
1-800-371-8866

Email

Utilities + Bell + Gas ☐ Hydro Ottawa ☐  
Located: ☐ Videotron ☐ Peet Fibre ☐ Veridian connections

Date Located:  
mm/dd/yyyy SEP 30 2013

Request # 2013395312

Number of Services marked: (Specify building/house numbers) (3) 16 17 19 ROBINSON

LOCATED AREA: EXCAVATOR SHALL NOT WORK OUTSIDE THE LOCATED AREA WITHOUT OBTAINING ANOTHER LOCATE

FROM: W.BL of 25 ROBINSON

TO: W.FL of 17 Robinson

FROM: N.FL

TO: N.FC of Robinson

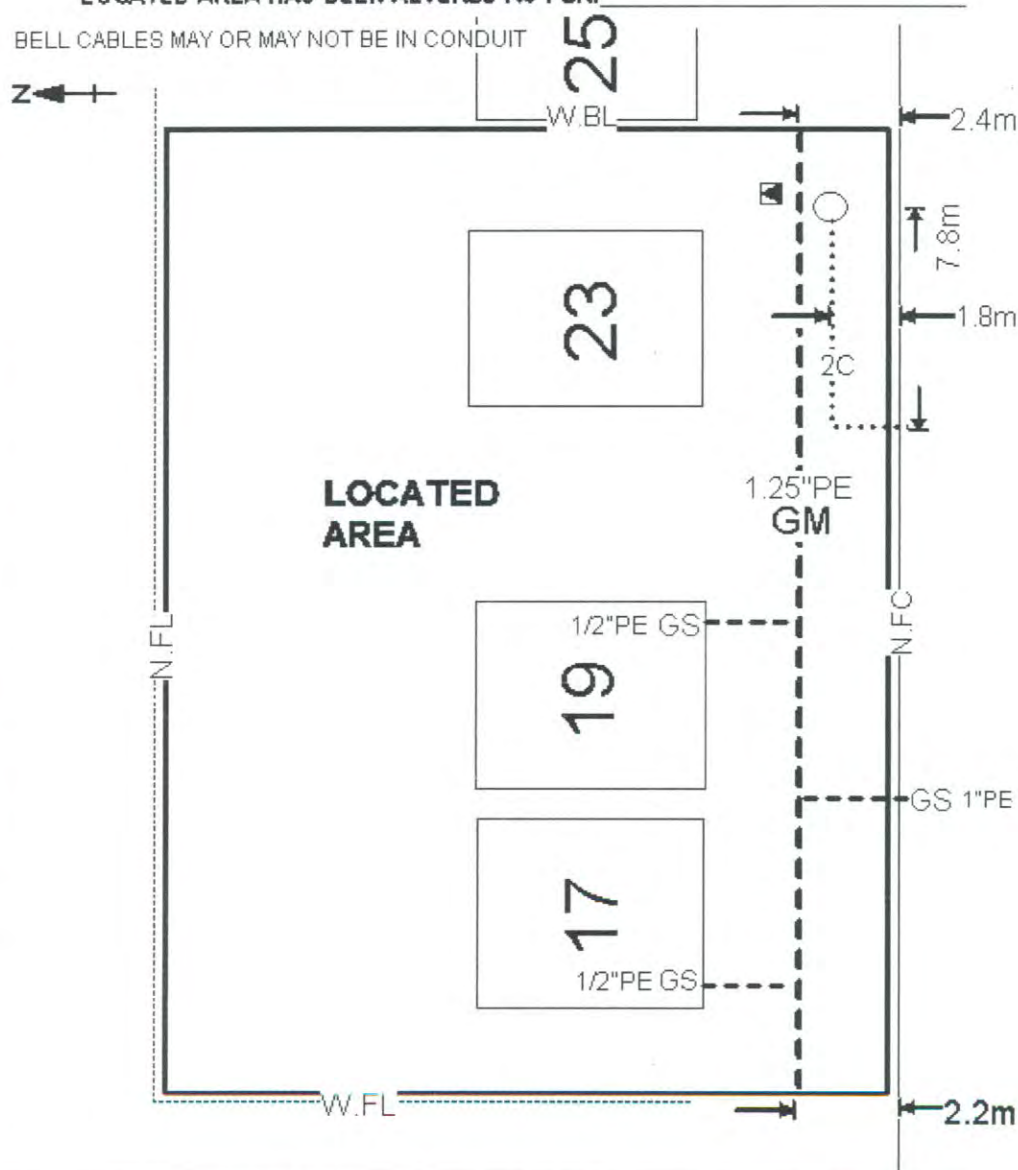
### Legend

Building Line — BL—  
Fence Line — FL—  
Face of Curb — FC—  
Road Edge — RE—  
Property Line — PL—  
  
Driveway — DW—  
Catch Basin CB  
Sidewalk SW  
Demarcation DM  
Railway   
Pole O  
Flush to Grade   
Pedestal X  
Pedestal X  
Buried Cable — B—  
Conduit — C—  
Buried Service Wire — BSW—  
Manhole MH  
Fibre Optic Cable — FO—  
  
Gas Main — GM—  
Gas Service — GS—  
Gas Valve   
Hydrant   
Transformer   
Hydro Ottawa — H—  
Hydro Pole X  
Street Light Cable — SL—  
Street Light   
North N.  
South S.  
East E.  
West W.

CAUTION: Hand dig within 1m as measured horizontally from the field markings to avoid damaging the underground utilities. If you damage the plant, you may be held liable. If you damage underground plant, contact the facility owner immediately. Depth varies and MUST be verified by hand digging or vacuum excavation.

LOCATED AREA HAS BEEN ALTERED AS PER:

BELL CABLES MAY OR MAY NOT BE IN CONDUIT



THIS FORM VALID ONLY WITH Primary Locate Form. This sketch is not to scale.

Any privately owned services within the located area have not been marked- check with service/property owner.

A copy of this Auxiliary Locate Sheet(s) and the Primary Locate Sheet must be on site and in the hands of the machine operator during work operations. If sketch and markings do not coincide, the Excavator must obtain a new locate.

## DISCLAIMER

### Warning!

**The Excavator must have a copy of this locate on the job site during excavation.**

**Located Area:** The Excavator must not work outside the area indicated by the Located Area in the Diagram without a further locate by the Company

**Locate the plant:** The plant location information provided is the best we have available but constitutes only an estimate. Depth of underground plant varies and the exact location must be determined by hand digging prior to excavation with mechanical equipment.

Mechanical equipment must not be used within one metre of the estimated location of the plant.

**\*Hydro Ottawa must be notified prior to excavation and inspector on site\***

**Expose the plant:** Once the plant has been located by hand digging, it must be exposed along its length adjacent to or in the immediate vicinity of the proposed excavation. For this purpose, mechanical equipment must not be used within 0.5 metres of the plant.

**Digging around the exposed plant:** When the plant has been exposed, any further excavation within 0.3 metres, must only be done by hand digging and not with mechanical equipment.

**Support Requirements:** If the underground plant is exposed over a distance of more than 1.25 metres, the Facility Owner must be notified. Underground plant must be supported at all times.

### O. Reg. 210/01 Oil and Gas Pipeline systems EXCERPTS

9. (1) No person shall dig, bore, trench, grade, excavate or break ground with mechanical equipment or explosives without first ascertaining the location of any pipeline that may be interfered with.

10. No person shall interfere with or damage any pipeline without authority to do so.

### Technical Standards & Safety Act 2000 EXCERPT

37 (1) Every person who contravenes or fails to comply with any provision of this act or the regulations; etc... is guilty of an offense and on conviction is liable to a fine of not more than \$50,000 or to imprisonment for a term of not more than one year, or to both.

**Caution** The markings may disappear or be misplaced. Should sketch and markings not coincide, Excavator must obtain a new locate. This is based on information given at the time. Any changes to location or nature of work require a new locate. The Excavator must not work outside the indicated Located Area without a further locate. Privately owned services within the located area have not been marked - check with service/property owner.

**Locate is VOID after 30 days.**

For remarks contact Ontario One Call 1-800-400-2255.  
or [www.on1call.com](http://www.on1call.com)





## Service Request Details

**Service Request** 757465

**Source:** Citizen  
**Priority:** 2  
**Status:** RESOLVED  
**Created By:** Sarah Ramsay  
**Initiated:** Oct 2, 2013 8:03 AM

### Location Information

**Address:** 17 ROBINSON AVE  
**Between Streets:** HURDMAN RD  
**Description:**

**Unit:** **Municipality:** 00

Drilling boreholes at various locations throughout properties. Clear entire properties of 17, 19 and 23 Robinson. Front to sidewalks, side and back to properlines.

The property is clear of underground water and sewer pipes owned by The City of Ottawa. We are sending the location of the water service shut-off valve which indicates the entry point of the water service to the property.

### Requestor Information

**Name:** Monique - USL-1  
**Address:**  
**City:** **Postal Code:** **Unit:**  
**Phones**  
**Res:** 613-226-8750 **Cell:**  
**Bus:** 613-226-8677( **Ext:**

### Call Back & Other Assignments

**Responsibilities**  
**Service Request**

**Work Order #** **Work Order**

### Request Details

**Start Date:** **Appointment Time:** **Service:** ESD  
**Finish Date:** 2013-Oct-02 **Classification:** LOCATES - PROVIDE  
**Amount Charge to Customer:** **Category:**

### Structures

**Structure ID** **Description** **Location**



2B

City of Ottawa  
Infra Svcs & Community Sustainability  
Water & Wastewater Srvc Branch  
Locates Office  
951 Clyde Ave.  
K1Z 5A6

## WATER SERVICE

S0350198000

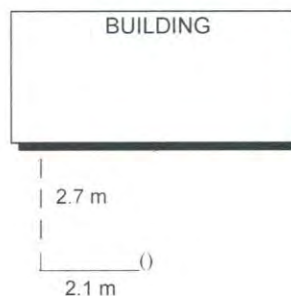
### LOCATION

|           |    |                  |  |              |       |     |        |     |
|-----------|----|------------------|--|--------------|-------|-----|--------|-----|
| Address   | 17 | to               |  | ROBINSON AVE | City  | OTT | Ward   | W12 |
| Apartment |    | Between Xstreet1 |  | HURDMAN RD   | Dist  |     | S Plan |     |
|           |    | Xstreet2         |  | LEES AVE     | Block |     |        |     |

Location Description

### Sketch indicating location of Water Shut-off Valve

|               |             |                    |          |
|---------------|-------------|--------------------|----------|
| Looking:      | Unknown     | North Degree:      |          |
| Facing:       | Front of    | The:               | Building |
| Start at the: | Left corner | Move straight out: | 2.70 m   |
| Then go:      | Right       | For:               | 2.10 m   |



If Measurements are taken from something other then the address the structure will be noted here.

Other Structure:

### NOTE:

This sketch is to indicate the location of the shut-off valve for the water service. The dotted lines DO NOT represent the water service pipes, they are to be used as measurments to locate the shut-off valve. If the valve is not visable at the indicated location then it may be buried.

The City of Ottawa is not responsible for service pipes between this valve and the water meter (in house), the pipes are private and owned by the homeowner. If there is concern over the location of the private portion of the water service, it's recommended that a private utility locating company be contacted to mark them.

### Comments

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2C

City of Ottawa  
Infra Svcs & Community Sustainability  
Water & Wastewater Srvc Branch  
Locates Office  
951 Clyde Ave.  
K1Z 5A6

## WATER SERVICE

S0350204000

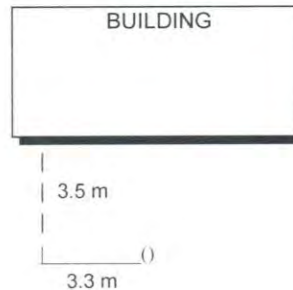
### LOCATION

|           |    |                  |  |              |       |     |        |
|-----------|----|------------------|--|--------------|-------|-----|--------|
| Address   | 23 | to               |  | ROBINSON AVE | City  | OTT |        |
| Apartment |    | Between Xstreet1 |  | HURDMAN RD   | Dist  |     | Ward   |
|           |    | Xstreet2         |  | LEES AVE     | Block |     | S Plan |

### Location Description

### Sketch indicating location of Water Shut-off Valve

|               |             |                    |          |
|---------------|-------------|--------------------|----------|
| Looking:      | Unknown     | North Degree:      |          |
| Facing:       | Front of    | The:               | Building |
| Start at the: | Left corner | Move straight out: | 3.50 m   |
| Then go:      | Right       | For:               | 3.30 m   |



If Measurements are taken from something other than the address the structure will be noted here.

Other Structure:

### NOTE:

This sketch is to indicate the location of the shut-off valve for the water service. The dotted lines DO NOT represent the water service pipes, they are to be used as measurements to locate the shut-off valve. If the valve is not visible at the indicated location then it may be buried.

The City of Ottawa is not responsible for service pipes between this valve and the water meter (in house), the pipes are private and owned by the homeowner. If there is concern over the location of the private portion of the water service, it's recommended that a private utility locating company be contacted to mark them.

### Comments

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3A

**ROGERS**

ROGERS LOCATE SERVICE

TICKET#: 2013395312

CLEARANCE #: A1745624

8200 Dixie Rd  
East Bldg, 2nd Flr  
Brampton, Ontario, L6T 0C1  
Tel: (855) 232-0342  
Fax: (905) 780-7379

**CLEAR TO DIG**

Requested By: Company: U S L  
Contact name: MONIQUE LAROCQUE Ph: (613)-226-8750 ext. Fax: (613)-226-8677 ext.

Dig Site Location :  
Municipality : OTTAWA Call Date: 24/09/2013 2:26:00 PM  
Address : 17 to 23, ROBINSON AVE Intersection : HURDMAN RD

Remarks (Additional Dig Info)

W1309240841360 DRILLING BOREHOLES AT VARIOUS LOCATIONS THROUGHOUT  
PROPERTIES. CLEAR ENTIRE PROPERTIES OF 17, 19 AND 23 ROBINSON. FRONT TO  
SIDEWALKS, SIDE AND BACK TO PROPER LINES. FRONT, SIDE, BACK

ROGOTT01 PRO-TECH FOR ROGERS

**ALL CLEAR HAS BEEN GIVEN FOR THE WORK AREA DESCRIBED ABOVE.**

YOU WILL BE LIABLE FOR ANY DAMAGES TO ROGERS FACILITIES IF EXCAVATING / DIGGING PRIOR  
TO RECEIVING A COMPLETED LOCATE OR CLEARANCE NUMBER FROM ROGERS OR IT'S AGENTS.

PLEASE CALL ROGERS LOCATE SERVICES AT (800) 738-7893, IF THERE ARE ANY CHANGES TO THIS  
LOCATE REQUEST. LOCATES AND CLEARANCES ARE VALID FOR 30 DAYS ONLY.

CAUTION: Stakes and or markings may disappear or be displaced. Should the sketches and  
markings not coincide, a new stake out must be obtained.

**FOR ALL CUT CABLES CALL  
1-800-265-9501**





# NO CONFLICT

## Cable Locate Request

ALL-000001

1-800-837-6448

|                     |                        |                     |                                  |                                 |
|---------------------|------------------------|---------------------|----------------------------------|---------------------------------|
| EXCAVATION SITE     | 17 to 23, ROBINSON AVE | OTTAWA, OTTAWA      | Xstreet: HURDMAN RD              | Xstreet2:                       |
| APPLICANT'S NAME    | MONIQUE LAROCQUE       |                     | COMPANY NAME (if applicable) USL |                                 |
| APPLICANT'S ADDRESS | 775 TAYLOR CREEK       | OTTAWA              | K1C 1T1                          | PHONE NO. (613)-226-8750 ext.   |
|                     | STREET                 | CITY                | POSTAL CODE                      |                                 |
| ALTERNATE CONTACT:  | JEFF FORRESTER         |                     | ALTERNATE PHONE NO:              |                                 |
| EMAIL ADDRESS:      | MONIQUEL@USL-1.COM     |                     | FAX NO.: (613)-226-8677 ext.     |                                 |
| ORIGINAL CALL DATE: | 9/24/2013 2:26:00 PM   | WORK TO BEGIN DATE: | 10/1/2013 8:00:00 AM             | ALLSTREAM TICKET NO. 2013395312 |

**Plant Type: No Allstream Cable Plant / Facilities Here.****Ticket Priority: STANDARD****Clearance Number:****BURIED CABLE LOCATION DETAILS (To be completed by ALLSTREAM Locator)**

1. Were facilities located at excavation site? YES Reasons:

2. How was the location of the facilities marked? ☐ PAINT ☐ STAKED ☐ OTHER (Specify Below)3. What type of facilities marked? ☐ BURIED CABLE ☐ ENCASED CONDUIT ☐ UNENCASED CONDUIT4. Was the applicant present at time of locate? YES Reasons: ☐ FIBRE WATCH REQUIRED-CALL FOR APPOINTMENT**Remarks:**

NB\_SEGMENTS:2

TICKET SENT TO :ENOE01 PROMARK FOR ENBRIDGE,BCOE01 PROMARK FOR BELL CAN,AT10 ALLSTREAM (AT10) ,HOT1

HYDRO OTTAWA (HOT1) ,ROGOTT01 PRO-TECH FOR ROGERS

U\_CROQUIS1::2013395312.PNG

**Dig Info - Additional Dig Info:**

WM1309240841360 DRILLING BOREHOLES AT VARIOUS LOCATIONS THROUGHOUT PROPERTIES. CLEAR ENTIRE PROPERTIES OF 17, 19 AND 23 ROBINSON. FRONT TO SIDEWALKS, SIDE AND BACK TO PROPER LINES. FRONT, SIDE, BACK

**Dig Info: Utility Remarks:**

ALLSTREAM CLEAR

MATT SCHAUER - SEPT 24/13

**Locator Remark:****ALLSTREAM - INSTRUCTIONS TO APPLICANT- PLEASE READ CAREFULLY**

- Requests for a locate should be made at least 2 working days prior to digging. Call Allstream anytime at 800-837-6448.
- Allstream cannot guarantee precise location or depth of facilities. You must **HAND DIG** within one meter (3.28 feet) of markings for paired voice frequency and power cable and within 2.5 meters (8.2 feet) of markings for fiber optic cable.
- Because markings made by Allstream when locating cable may disappear, or be displaced, any delays in digging after locate require a new locate.
- This locate was completed based on information given to Allstream's locator at the time of the request or locate. **ANY CHANGES TO LOCATION OR NATURE OF WORK REQUIRE NEW LOCATE.**
- You will be liable for damages caused to Allstream facilities if you do not follow these instructions, or abide by the locate.
- NOTE FIBRE WATCH REQUIREMENTS- PLEASE CALL THE NUMBER NOTED ABOVE AT LEAST ONE WEEK IN ADVANCE OF EXCAVATION.**
- Under no circumstances shall Allstream or any of its affiliated or associated companies, or any of their employees be held liable for any losses (including down time) suffered by anyone as a result of a location error made by Allstream.
- Applicant is responsible to remove any Allstream flags or stakes at locate site once construction is complete.

(4)

USL-1 Underground Service Locators Inc.

775 Taylor Creek Drive Ottawa Ontario - K1C 1T1 - [www.usl-1.com](http://www.usl-1.com)

"Mark and Fax or Email"

Request for Utility Plant Location

Date: September 24, 2013

Fax to:

Contact: Monique Larocque

Tel: 613-226-8750

Fax: 613-226-8677

[moniquel@usl-1.com](mailto:moniquel@usl-1.com)

Water &amp; Sewer

Black &amp; MacDonald

Traffic

Client: Inspecol

Type of work: Drilling boreholes at various locations throughout properties. Clear entire properties of 17, 19 and 23 Robinson. Front to sidewalks, side and back to properlines.

Civic Address: [redacted] to 23 Robinson Ave

Cross Streets: [redacted] Mordman Rd

See attached map or plan: Yes

Area marked: Yes

Site meet: No

Depth of excavation: Unknown

Excavation start date: Standard time

Excavation taking place on property: Public &amp; Private

Comments:

Thank you

THIS WORK AREA IS FREE  
OF TRAFFIC DUCTS.

CLEARANCE N° # TF-115315

OCT 3/2013 TF



5

|                          |                           |                                                         |  |                    |                             |
|--------------------------|---------------------------|---------------------------------------------------------|--|--------------------|-----------------------------|
| Ticket # 125,481         |                           | <b>Street Light Locate</b>                              |  | Ontario 1 Ticket # | <b>Black &amp; McDonald</b> |
| Date Requested 24-Sep-13 |                           | Dispatcher: Lisa Bisaillon<br>Phone: 613 526 1226 x 174 |  |                    |                             |
| Company:                 | USL-1 Underground Service | 17-23 Robinson Ave<br>Hurdman Rd                        |  |                    |                             |
| Contact:                 | Monique Larocque          |                                                         |  |                    |                             |
| Phone:                   | 613-226-8750              |                                                         |  |                    |                             |
| Fax/E-mail:              | moniquel@usl-1.com        | See Locate for Details<br>OT 64 M31                     |  |                    |                             |
| Site Contact:            |                           |                                                         |  |                    |                             |
| Site Phone:              |                           |                                                         |  |                    |                             |

LOCATOR SKETCH

Robinson Ave

|                                     |                            |                    |
|-------------------------------------|----------------------------|--------------------|
| —SL— Underground Street Light Cable | —OH— Overhead/Aerial Wires | Source/Transformer |
| Street Light                        | Globe/Decorative Light     | Hydro Pole         |

Locator Notes/Comments:

Locate is valid for 30 days. If sketch is different from markings, location or nature of work changes, a new locate must be requested. Hand dig within 1m (3.28ft) on either side of the markings. Depth of buried plant varies.  
Cette fiche n'est pas valide 30 jours de calendrier apres le reparation. Si les marques ne concordent pas avec celles sur le croquis, un nouveau repereage est requis. Tout changement à l'emplacement ou à la nature du travail necessite un nouveau repereage.

|              |         |
|--------------|---------|
| Date Located | 26-9-13 |
| Located By   | Mike    |
| Signature    |         |
| Page 1 of    | 1       |





BOREHOLE No.: BH4(MW)

ELEVATION: 99.07 m

## BOREHOLE LOG

Page: 1 of 1

CLIENT: Robinson Park Development

PROJECT: Phase II Environmental Site Assessment

LOCATION: 17-23 Robinson Avenue, Ottawa, ON

DESCRIBED BY: J.Poisson

CHECKED BY: L.Lopers

DATE (START): October 8, 2013

DATE (FINISH): October 8, 2013

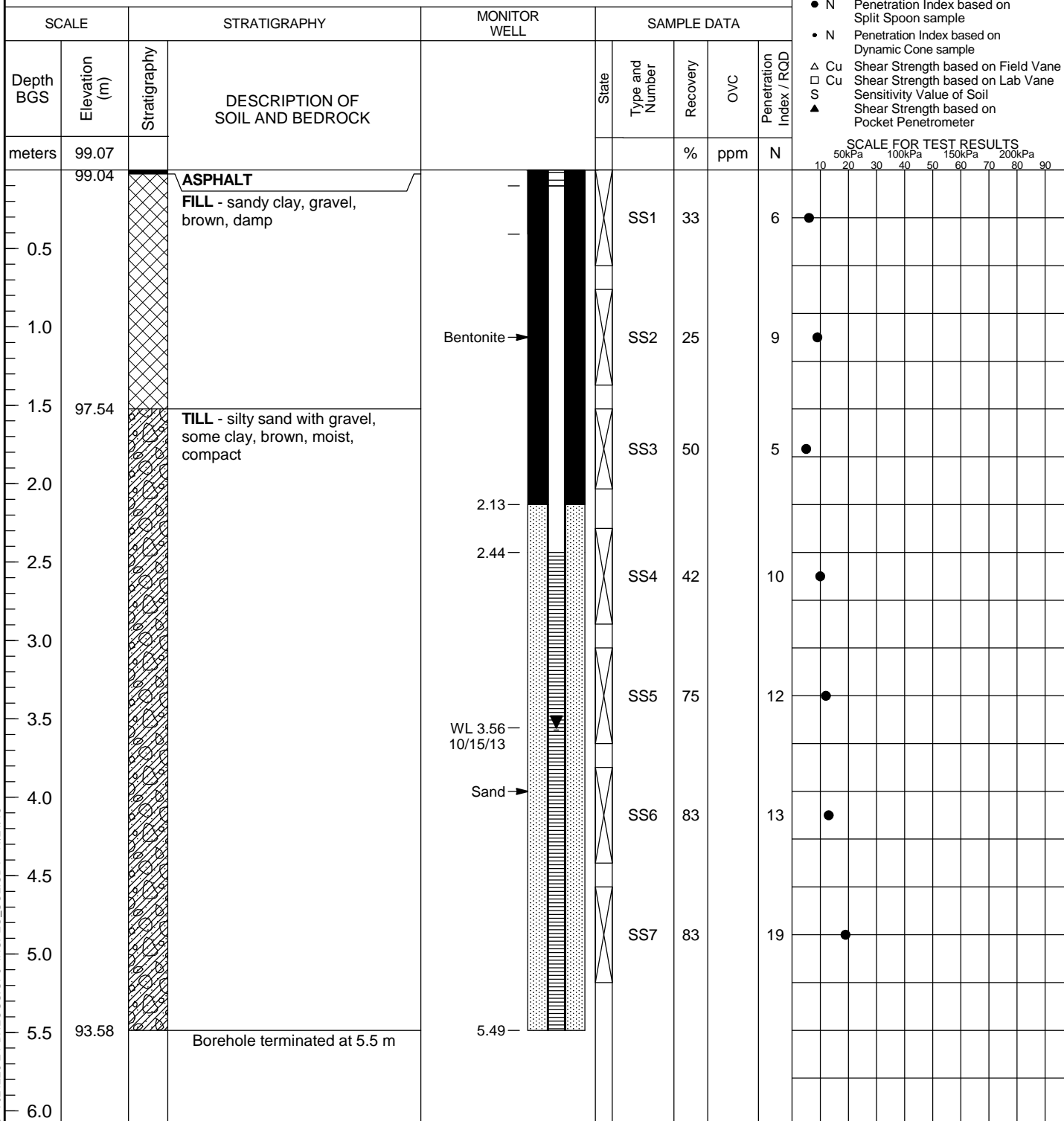
## LEGEND

- ☒ SS Split Spoon    ☐ GS Grab Sample  
☒ ST Shelby Tube    ☒ ODEX  
☒ RC Rock Core  
 Water Level  
 Water content (%)  
 Atterberg limits (%)  
 Penetration Index based on Split Spoon sample  
 Penetration Index based on Dynamic Cone sample  
 Shear Strength based on Field Vane  
 Shear Strength based on Lab Vane  
 Sensitivity Value of Soil  
 Shear Strength based on Pocket Penetrometer

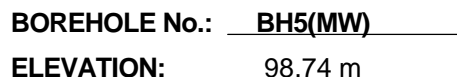
## SCALE FOR TEST RESULTS

50kPa 100kPa 150kPa 200kPa

10 20 30 40 50 60 70 80 90



NOTES:



## Page: 1 of 1

DATE (FINISH):            October 8, 2013

|  |                                                |  |                |
|--|------------------------------------------------|--|----------------|
|  | SS Split Spoon                                 |  | GS Grab Sample |
|  | ST Shelby Tube                                 |  | ODEX           |
|  | RC Rock Core                                   |  |                |
|  | Water Level                                    |  |                |
|  | Water content (%)                              |  |                |
|  | Atterberg limits (%)                           |  |                |
|  | Penetration Index based on Split Spoon sample  |  |                |
|  | Penetration Index based on Dynamic Cone sample |  |                |
|  | Shear Strength based on Field Vane             |  |                |
|  | Shear Strength based on Lab Vane               |  |                |
|  | Sensitivity Value of Soil                      |  |                |
|  | Shear Strength based on Pocket Penetrometer    |  |                |

50kPa 100kPa 150kPa 200kPa

BOREHOLE LOG T021226-E1-BHLOGS.GPJ INSPEC\_SOL.GDT 11/21/13

NOTES:



BOREHOLE No.: BH6(MW)

ELEVATION: 98.36 m

## BOREHOLE LOG

Page: 1 of 1

CLIENT: Robinson Park Development

PROJECT: Phase II Environmental Site Assessment

LOCATION: 17-23 Robinson Avenue, Ottawa, ON

DESCRIBED BY: J.Poisson

CHECKED BY: L.Lopers

DATE (START): October 8, 2013

DATE (FINISH): October 8, 2013

## LEGEND

- ☒ SS Split Spoon    ☐ GS Grab Sample  
☒ ST Shelby Tube    ☒ ODEX  
☒ RC Rock Core  
 Water Level  
 Water content (%)  
 Atterberg limits (%)  
 Penetration Index based on Split Spoon sample  
 Penetration Index based on Dynamic Cone sample  
 Shear Strength based on Field Vane  
 Shear Strength based on Lab Vane  
 Sensitivity Value of Soil  
 Shear Strength based on Pocket Penetrometer

SCALE FOR TEST RESULTS

50kPa 100kPa 150kPa 200kPa

10 20 30 40 50 60 70 80 90

| SCALE     |               | STRATIGRAPHY |                                                                      | MONITOR WELL        | SAMPLE DATA     |          |     |                         |
|-----------|---------------|--------------|----------------------------------------------------------------------|---------------------|-----------------|----------|-----|-------------------------|
| Depth BGS | Elevation (m) | Stratigraphy | DESCRIPTION OF SOIL AND BEDROCK                                      |                     | Type and Number | Recovery | OVC | Penetration Index / RQD |
| meters    | 98.36         |              |                                                                      |                     |                 | %        | ppm | N                       |
| 0.5       | 97.75         |              | FILL - clayey sand, trace roots, brown, damp                         |                     | SS1             | 25       |     | 2                       |
| 1.0       |               |              | SANDY SILT - with gravel, trace organics, light brown, damp to moist | Bentonite           | SS2             | 92       |     | 18                      |
| 1.5       | 96.84         |              | TILL - silty sand with gravel, light brown, moist, compact           | 1.22                |                 |          |     |                         |
| 2.0       |               |              |                                                                      | 1.52                | SS3             | 100      |     | 18                      |
| 2.5       |               |              |                                                                      |                     | SS4             | 83       |     | 13                      |
| 3.0       |               |              |                                                                      | Sand                | SS5             | 50       |     | 19                      |
| 3.5       |               |              |                                                                      |                     | SS6             | 50       |     | 7                       |
| 4.0       |               |              |                                                                      | WL 3.80<br>10/15/13 | SS7             | 83       |     | 3                       |
| 4.5       |               |              |                                                                      | 4.57                |                 |          |     |                         |
| 5.0       | 93.18         |              | Borehole terminated at 5.2 m                                         |                     |                 |          |     |                         |
| 5.5       |               |              |                                                                      |                     |                 |          |     |                         |
| 6.0       |               |              |                                                                      |                     |                 |          |     |                         |

NOTES:



BOREHOLE No.: BH7(MW)

ELEVATION: 99.04 m

## BOREHOLE LOG

Page: 1 of 1

CLIENT: Robinson Park Development

PROJECT: Phase II Environmental Site Assessment

LOCATION: 17-23 Robinson Avenue, Ottawa, ON

DESCRIBED BY: J.Poisson

CHECKED BY: L.Lopers

DATE (START): October 8, 2013

DATE (FINISH): October 8, 2013


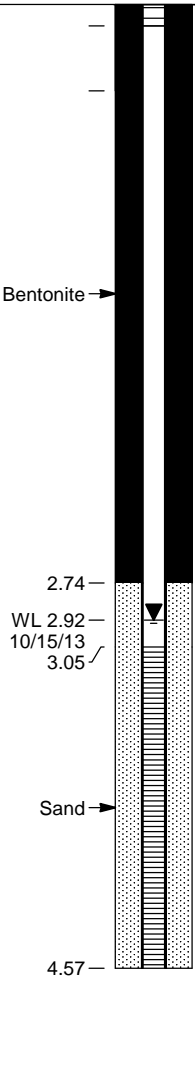
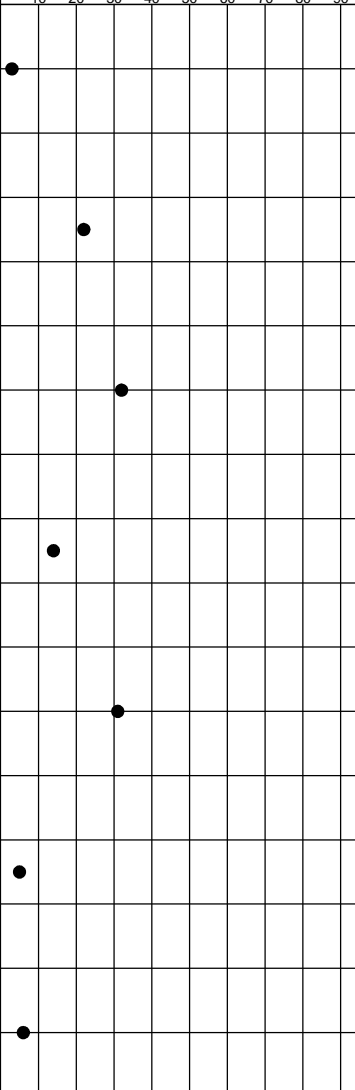

## LEGEND

- ☒ SS Split Spoon    ☐ GS Grab Sample  
☒ ST Shelby Tube    ☒ ODEX  
☒ RC Rock Core  
 Water Level  
 Water content (%)  
 Atterberg limits (%)  
 Penetration Index based on Split Spoon sample  
 Penetration Index based on Dynamic Cone sample  
 Shear Strength based on Field Vane  
 Shear Strength based on Lab Vane  
 Sensitivity Value of Soil  
 Shear Strength based on Pocket Penetrometer

SCALE FOR TEST RESULTS

50kPa 100kPa 150kPa 200kPa

10 20 30 40 50 60 70 80 90

| SCALE                                                                                                  |               | STRATIGRAPHY                                                                      |                                                                                       | MONITOR WELL                                                                       |       | SAMPLE DATA     |          |     |                         |                                                                                      |  |
|--------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------|-----------------|----------|-----|-------------------------|--------------------------------------------------------------------------------------|--|
| Depth BGS                                                                                              | Elevation (m) | Stratigraphy                                                                      | DESCRIPTION OF SOIL AND BEDROCK                                                       |                                                                                    | State | Type and Number | Recovery | OVC | Penetration Index / RQD |                                                                                      |  |
| meters                                                                                                 | 99.04         |                                                                                   |                                                                                       |                                                                                    |       |                 |          | %   | ppm                     | N                                                                                    |  |
| 0.5<br><br>1.0<br><br>1.5<br><br>2.0<br><br>2.5<br><br>3.0<br><br>3.5<br><br>4.0<br><br>4.5<br><br>5.0 | 98.48         |  | FILL - sandy gravel, grey, damp, loose                                                |  |       | SS1             | 33       |     | 3                       |  |  |
|                                                                                                        |               |  | TILL - clayey silt with sand, some gravel, trace limestone pieces, brown, damp, moist |                                                                                    |       | SS2             | 58       |     | 22                      |                                                                                      |  |
|                                                                                                        |               |                                                                                   |                                                                                       |                                                                                    |       | SS3             | 83       |     | 32                      |                                                                                      |  |
|                                                                                                        |               | Becoming grey                                                                     |                                                                                       |                                                                                    |       |                 |          |     |                         |                                                                                      |  |
|                                                                                                        |               | Becoming wet                                                                      |                                                                                       |                                                                                    |       |                 |          |     |                         |                                                                                      |  |
|                                                                                                        |               |                                                                                   |                                                                                       |                                                                                    |       |                 |          |     |                         |                                                                                      |  |
|                                                                                                        |               |                                                                                   |                                                                                       |                                                                                    |       |                 |          |     |                         |                                                                                      |  |
| 5.2                                                                                                    | 93.86         |                                                                                   | Borehole terminated at 5.2 m                                                          |                                                                                    |       | SS7             | 92       |     | 6                       |                                                                                      |  |

NOTES:

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400-179 Colonnade Rd.  
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Attention: Mr. Luke Lopers  
PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1322570  
Date Submitted: 2013-10-09  
Date Reported: 2013-10-18  
Project: T021226-E1  
COC #: 174169

Page 1 of 15

**Dear Luke Lopers:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:

APPROVAL: \_\_\_\_\_

Lorna Wilson  
Laboratory Supervisor, Inorganics

APPROVAL: \_\_\_\_\_

Charlie (Long) Qu  
Laboratory Supervisor, Organics

Exova (Ottawa) is certified and accredited for specific parameters by:

CALA, Canadian Association for Laboratory Accreditation (to ISO 17025), OMAFRA, Ontario Ministry of Agriculture, Food and Rural Affairs (for farm soils), Licensed by Ontario MOE for specific tests in drinking water.

Exova (Mississauga) is certified and accredited for specific parameters by:

SCC, Standards Council of Canada (to ISO 17025)

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only.



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Project: T021226-E1  
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| Group                  | Analyte                   | MRL  | Units | Guideline | 1064770<br>Soil<br>2013-10-08<br>BH4 SS6 | 1064771<br>Soil<br>2013-10-08<br>BH5 SS1 | 1064772<br>Soil<br>2013-10-08<br>BH5 SS6 | 1064773<br>Soil<br>2013-10-08<br>BH6 SS1 |
|------------------------|---------------------------|------|-------|-----------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| Inorganics             | Antimony                  | 1    | ug/g  | STD-7.5   | <1                                       | <1                                       |                                          |                                          |
|                        | Arsenic                   | 1    | ug/g  | STD-18    | 2                                        | 7                                        |                                          | <1                                       |
|                        | Barium                    | 1    | ug/g  | STD-390   | 96                                       | 220                                      |                                          | 2                                        |
|                        | Beryllium                 | 1    | ug/g  | STD-4     | <1                                       | <1                                       |                                          | 67                                       |
|                        | Boron (total)             | 10   | ug/g  | STD-120   | 20                                       | 20                                       |                                          | <1                                       |
|                        | Cadmium                   | 0.5  | ug/g  | STD-1.2   | <0.5                                     | 0.7                                      |                                          | 20                                       |
|                        | Chromium Total            | 1    | ug/g  | STD-160   | 18                                       | 20                                       |                                          | <0.5                                     |
|                        | Cobalt                    | 1    | ug/g  | STD-22    | 6                                        | 7                                        |                                          | 14                                       |
|                        | Copper                    | 1    | ug/g  | STD-140   | 14                                       | 27                                       |                                          | 4                                        |
|                        | Lead                      | 1    | ug/g  | STD-120   | 5                                        | 171*                                     |                                          | 18                                       |
|                        | Molybdenum                | 1    | ug/g  | STD-6.9   | 1                                        | 2                                        |                                          | 64                                       |
|                        | Nickel                    | 1    | ug/g  | STD-100   | 20                                       | 18                                       |                                          | <1                                       |
|                        | Selenium                  | 1    | ug/g  | STD-2.4   | <1                                       | <1                                       |                                          | 12                                       |
|                        | Silver                    | 0.2  | ug/g  | STD-20    | <0.2                                     | 0.2                                      |                                          | <1                                       |
|                        | Thallium                  | 1    | ug/g  | STD-1     | <1                                       | <1                                       |                                          | <0.2                                     |
|                        | Uranium                   | 0.5  | ug/g  | STD-23    | 0.9                                      | 0.6                                      |                                          | <1                                       |
|                        | Vanadium                  | 2    | ug/g  | STD-86    | 22                                       | 25                                       |                                          | <0.5                                     |
| Misc/Others            | Zinc                      | 2    | ug/g  | STD-340   | 35                                       | 215                                      |                                          | 18                                       |
|                        | pH - CaCl2                | 2.0  |       |           | 8.0                                      | 7.8                                      |                                          | 123                                      |
| Moisture               | Moisture                  | 0.1  | %     |           | 8.5                                      | 7.8                                      |                                          | 7.8                                      |
| Petroleum Hydrocarbons | Petroleum Hydrocarbons F1 | 10   | ug/g  | STD-55    | <10                                      | <10                                      |                                          | 9.8                                      |
|                        | Petroleum Hydrocarbons F2 | 10   | ug/g  | STD-98    | <10                                      | <10                                      |                                          | <10                                      |
|                        | Petroleum Hydrocarbons F3 | 20   | ug/g  | STD-300   | <20                                      | <20                                      |                                          | <20                                      |
|                        | Petroleum Hydrocarbons F4 | 20   | ug/g  | STD-2800  | <20                                      | <20                                      |                                          | <20                                      |
| Semi-Volatiles         | Acenaphthene              | 0.05 | ug/g  | STD-7.9   | <0.05                                    | <0.05                                    |                                          | <0.05                                    |
|                        | Acenaphthylene            | 0.05 | ug/g  | STD-0.15  | <0.05                                    | <0.05                                    |                                          | <0.05                                    |

**Guideline = O.Reg 153-T3-Res/Park-Coarse**

\*\* - Analysis completed in Mississauga

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Project: T021226-E1  
COC #: 174169

| Group          | Analyte                 | MRL  | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. | 1064770<br>Soil<br>2013-10-08<br>BH4 SS6 | 1064771<br>Soil<br>2013-10-08<br>BH5 SS1 | 1064772<br>Soil<br>2013-10-08<br>BH5 SS6 | 1064773<br>Soil<br>2013-10-08<br>BH6 SS1 |
|----------------|-------------------------|------|-------|-----------|--------------------------------------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
|                |                         |      |       |           |                                                                          |                                          |                                          |                                          |                                          |
| Semi-Volatiles | Anthracene              | 0.05 | ug/g  | STD-0.67  |                                                                          | <0.05                                    | 0.09                                     |                                          | <0.05                                    |
|                | Benz[a]anthracene       | 0.05 | ug/g  | STD-0.5   |                                                                          | <0.05                                    | 0.40                                     |                                          | 0.08                                     |
|                | Benzo[a]pyrene          | 0.05 | ug/g  | STD-0.3   |                                                                          | <0.05                                    | 0.35*                                    |                                          | 0.09                                     |
|                | Benzo[b]fluoranthene    | 0.05 | ug/g  | STD-0.78  |                                                                          | <0.05                                    | 0.24                                     |                                          | 0.08                                     |
|                | Benzo[ghi]perylene      | 0.05 | ug/g  | STD-6.6   |                                                                          | <0.05                                    | 0.26                                     |                                          | 0.08                                     |
|                | Benzo[k]fluoranthene    | 0.05 | ug/g  | STD-0.78  |                                                                          | <0.05                                    | 0.27                                     |                                          | 0.09                                     |
|                | Chrysene                | 0.05 | ug/g  | STD-7     |                                                                          | <0.05                                    | 0.36                                     |                                          | 0.10                                     |
|                | Dibenz[a,h]anthracene   | 0.05 | ug/g  | STD-0.1   |                                                                          | <0.05                                    | 0.05                                     |                                          | <0.05                                    |
|                | Fluoranthene            | 0.05 | ug/g  | STD-0.69  |                                                                          | <0.05                                    | 0.65                                     |                                          | 0.12                                     |
|                | Fluorene                | 0.05 | ug/g  | STD-62    |                                                                          | <0.05                                    | <0.05                                    |                                          | <0.05                                    |
|                | Indeno[1,2,3-cd]pyrene  | 0.05 | ug/g  | STD-0.38  |                                                                          | <0.05                                    | 0.33                                     |                                          | 0.10                                     |
|                | Methylnaphthalene, 1-   | 0.05 | ug/g  | STD-0.99  |                                                                          | <0.05                                    | 0.06                                     |                                          | <0.05                                    |
|                | Methylnaphthalene, 2-   | 0.05 | ug/g  | STD-0.99  |                                                                          | <0.05                                    | 0.08                                     |                                          | <0.05                                    |
|                | Naphthalene             | 0.05 | ug/g  | STD-0.6   |                                                                          | <0.05                                    | 0.08                                     |                                          | <0.05                                    |
|                | Phenanthrene            | 0.05 | ug/g  | STD-6.2   |                                                                          | <0.05                                    | 0.33                                     |                                          | <0.05                                    |
|                | Pyrene                  | 0.05 | ug/g  | STD-78    |                                                                          | <0.05                                    | 0.61                                     |                                          | 0.12                                     |
| VOCs           | Acetone                 | 0.50 | ug/g  | STD-16    |                                                                          | <0.50                                    |                                          | <0.50                                    |                                          |
|                | Benzene                 | 0.02 | ug/g  | STD-0.21  |                                                                          | <0.02                                    |                                          | <0.02                                    |                                          |
|                | Bromodichloromethane    | 0.05 | ug/g  | STD-13    |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | Bromoform               | 0.05 | ug/g  | STD-0.27  |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | c-1,3-Dichloropropylene | 0.05 | ug/g  |           |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | Carbon Tetrachloride    | 0.05 | ug/g  | STD-0.05  |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | Chlorobenzene           | 0.05 | ug/g  | STD-2.4   |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | Chloroform              | 0.05 | ug/g  | STD-0.05  |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | Dichlorobenzene, 1,2-   | 0.05 | ug/g  | STD-3.4   |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |
|                | Dichlorobenzene, 1,3-   | 0.05 | ug/g  | STD-4.8   |                                                                          | <0.05                                    |                                          | <0.05                                    |                                          |

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|-------|--------------------------------|------|-------|-----------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| VOCs  | Dichlorobenzene, 1,4-          | 0.05 | ug/g  | STD-0.083 | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichlorodifluoromethane        | 0.05 | ug/g  | STD-16    | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloroethane, 1,1-           | 0.05 | ug/g  | STD-3.5   | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloroethane, 1,2-           | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloroethylene, 1,1-         | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloroethylene, 1,2-cis-     | 0.05 | ug/g  | STD-3.4   | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloroethylene, 1,2-trans-   | 0.05 | ug/g  | STD-0.084 | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloropropane, 1,2-          | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Dichloropropene, 1,3-          | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Ethylbenzene                   | 0.05 | ug/g  | STD-2     | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Ethylene dibromide             | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Hexane (n)                     | 0.05 | ug/g  | STD-2.8   | <0.05                                    |                                          | <0.05                                    |                                          |
|       | m/p-xylene                     | 0.05 | ug/g  |           | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Methyl Ethyl Ketone            | 0.50 | ug/g  | STD-16    | <0.50                                    |                                          | <0.50                                    |                                          |
|       | Methyl Isobutyl Ketone         | 0.50 | ug/g  | STD-1.7   | <0.50                                    |                                          | <0.50                                    |                                          |
|       | Methyl tert-Butyl Ether (MTBE) | 0.05 | ug/g  | STD-0.75  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Methylene Chloride             | 0.05 | ug/g  | STD-0.1   | <0.05                                    |                                          | <0.05                                    |                                          |
|       | o-xylene                       | 0.05 | ug/g  |           | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Styrene                        | 0.05 | ug/g  | STD-0.7   | <0.05                                    |                                          | <0.05                                    |                                          |
|       | t-1,3-Dichloropropylene        | 0.05 | ug/g  |           | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Tetrachloroethane, 1,1,1,2-    | 0.05 | ug/g  | STD-0.058 | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Tetrachloroethane, 1,1,2,2-    | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Tetrachloroethylene            | 0.05 | ug/g  | STD-0.28  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Toluene                        | 0.20 | ug/g  | STD-2.3   | <0.20                                    |                                          | <0.20                                    |                                          |
|       | Trichloroethane, 1,1,1-        | 0.05 | ug/g  | STD-0.38  | <0.05                                    |                                          | <0.05                                    |                                          |
|       | Trichloroethane, 1,1,2-        | 0.05 | ug/g  | STD-0.05  | <0.05                                    |                                          | <0.05                                    |                                          |

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|---------------------------|------------------------|------|-------|-----------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| VOCs                      | Trichloroethylene      | 0.05 | ug/g  | STD-0.061 | <0.05                                    |                                          | <0.05                                    |                                          |
|                           | Trichlorofluoromethane | 0.05 | ug/g  | STD-4     | <0.05                                    |                                          | <0.05                                    |                                          |
|                           | Vinyl Chloride         | 0.02 | ug/g  | STD-0.02  | <0.02                                    |                                          | <0.02                                    |                                          |
|                           | Xylene Mixture         | 0.05 | ug/g  | STD-3.1   | <0.05                                    |                                          | <0.05                                    |                                          |
|                           | 1,2-dichloroethane-d4  | 0    | %     |           | 120                                      |                                          | 117                                      |                                          |
| VOCs Surrogates<br>(%REC) | 4-bromofluorobenzene   | 0    | %     |           | 99                                       |                                          | 97                                       |                                          |
|                           | Toluene-d8             | 0    | %     |           | 108                                      |                                          | 105                                      |                                          |
| Group                     | Analyte                | MRL  | Units | Guideline | 1064774<br>Soil<br>2013-10-08<br>BH6 SS5 | 1064775<br>Soil<br>2013-10-08<br>DUP-S1  | 1064776<br>Soil<br>2013-10-08<br>BH7-SS6 | 1064777<br>Soil<br>2013-10-08<br>DUP-S2  |
| Inorganics                | Antimony               | 1    | ug/g  | STD-7.5   |                                          |                                          | <1                                       | <1                                       |
|                           | Arsenic                | 1    | ug/g  | STD-18    |                                          |                                          | 2                                        | 2                                        |
|                           | Barium                 | 1    | ug/g  | STD-390   |                                          |                                          | 130                                      | 148                                      |
|                           | Beryllium              | 1    | ug/g  | STD-4     |                                          |                                          | <1                                       | <1                                       |
|                           | Boron (total)          | 10   | ug/g  | STD-120   |                                          |                                          | 20                                       | 20                                       |
|                           | Cadmium                | 0.5  | ug/g  | STD-1.2   |                                          |                                          | <0.5                                     | <0.5                                     |
|                           | Chromium Total         | 1    | ug/g  | STD-160   |                                          |                                          | 14                                       | 13                                       |
|                           | Cobalt                 | 1    | ug/g  | STD-22    |                                          |                                          | 6                                        | 6                                        |
|                           | Copper                 | 1    | ug/g  | STD-140   |                                          |                                          | 13                                       | 13                                       |
|                           | Lead                   | 1    | ug/g  | STD-120   |                                          |                                          | 5                                        | 5                                        |
|                           | Molybdenum             | 1    | ug/g  | STD-6.9   |                                          |                                          | 1                                        | 1                                        |
|                           | Nickel                 | 1    | ug/g  | STD-100   |                                          |                                          | 16                                       | 16                                       |

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PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1322570  
Date Submitted: 2013-10-09  
Date Reported: 2013-10-18  
Project: T021226-E1  
COC #: 174169

| Group                     | Analyte                   | MRL  | Units | Guideline | 1064774<br>Soil<br>2013-10-08<br>BH6 SS5 | 1064775<br>Soil<br>2013-10-08<br>DUP-S1 | 1064776<br>Soil<br>2013-10-08<br>BH7-SS6 | 1064777<br>Soil<br>2013-10-08<br>DUP-S2 |
|---------------------------|---------------------------|------|-------|-----------|------------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------------|
| Inorganics                | Selenium                  | 1    | ug/g  | STD-2.4   |                                          |                                         | <1                                       | <1                                      |
|                           | Silver                    | 0.2  | ug/g  | STD-20    |                                          |                                         | <0.2                                     | <0.2                                    |
|                           | Thallium                  | 1    | ug/g  | STD-1     |                                          |                                         | <1                                       | <1                                      |
|                           | Uranium                   | 0.5  | ug/g  | STD-23    |                                          |                                         | 0.9                                      | 1.4                                     |
|                           | Vanadium                  | 2    | ug/g  | STD-86    |                                          |                                         | 23                                       | 22                                      |
| Misc/Others               | Zinc                      | 2    | ug/g  | STD-340   |                                          |                                         | 26                                       | 22                                      |
|                           | pH - CaCl2                | 2.0  |       |           | 7.9                                      | 7.9                                     | 7.9                                      |                                         |
| Moisture                  | Moisture                  | 0.1  | %     |           | 12.5                                     | 12.7                                    | 8.8                                      |                                         |
| Petroleum<br>Hydrocarbons | Petroleum Hydrocarbons F1 | 10   | ug/g  | STD-55    | <10                                      | <10                                     | <10                                      |                                         |
|                           | Petroleum Hydrocarbons F2 | 10   | ug/g  | STD-98    | <10                                      | <10                                     | <10                                      |                                         |
|                           | Petroleum Hydrocarbons F3 | 20   | ug/g  | STD-300   | <20                                      | <20                                     | <20                                      |                                         |
|                           | Petroleum Hydrocarbons F4 | 20   | ug/g  | STD-2800  | <20                                      | <20                                     | <20                                      |                                         |
| Semi-Volatiles            | Acenaphthene              | 0.05 | ug/g  | STD-7.9   |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Acenaphthylene            | 0.05 | ug/g  | STD-0.15  |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Anthracene                | 0.05 | ug/g  | STD-0.67  |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Benz[a]anthracene         | 0.05 | ug/g  | STD-0.5   |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Benzo[a]pyrene            | 0.05 | ug/g  | STD-0.3   |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Benzo[b]fluoranthene      | 0.05 | ug/g  | STD-0.78  |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Benzo[ghi]perylene        | 0.05 | ug/g  | STD-6.6   |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Benzo[k]fluoranthene      | 0.05 | ug/g  | STD-0.78  |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Chrysene                  | 0.05 | ug/g  | STD-7     |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Dibenz[a,h]anthracene     | 0.05 | ug/g  | STD-0.1   |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Fluoranthene              | 0.05 | ug/g  | STD-0.69  |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Fluorene                  | 0.05 | ug/g  | STD-62    |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Indeno[1,2,3-cd]pyrene    | 0.05 | ug/g  | STD-0.38  |                                          |                                         | <0.05                                    | <0.05                                   |
|                           | Methylnaphthalene, 1-     | 0.05 | ug/g  | STD-0.99  |                                          |                                         | <0.05                                    | <0.05                                   |

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| Group          | Analyte                                                                                                                                                                                                                                  | MRL  | Units | Guideline | 1064774<br>Soil<br>2013-10-08<br>BH6 SS5 | 1064775<br>Soil<br>2013-10-08<br>DUP-S1 | 1064776<br>Soil<br>2013-10-08<br>BH7-SS6 | 1064777<br>Soil<br>2013-10-08<br>DUP-S2 |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|------------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------------|
|                |                                                                                                                                                                                                                                          |      |       |           |                                          |                                         |                                          |                                         |
| Semi-Volatiles | Methylnaphthalene, 2-Naphthalene                                                                                                                                                                                                         | 0.05 | ug/g  | STD-0.99  |                                          |                                         | <0.05                                    | <0.05                                   |
|                | Phenanthrene                                                                                                                                                                                                                             | 0.05 | ug/g  | STD-0.6   |                                          |                                         | <0.05                                    | <0.05                                   |
|                | Pyrene                                                                                                                                                                                                                                   | 0.05 | ug/g  | STD-6.2   |                                          |                                         | <0.05                                    | <0.05                                   |
|                | Acetone                                                                                                                                                                                                                                  | 0.05 | ug/g  | STD-78    |                                          |                                         | <0.05                                    | <0.05                                   |
|                | Benzene                                                                                                                                                                                                                                  | 0.50 | ug/g  | STD-16    | <0.50                                    | <0.50                                   | <0.50                                    | <0.50                                   |
|                | Bromodichloromethane                                                                                                                                                                                                                     | 0.02 | ug/g  | STD-0.21  | <0.02                                    | <0.02                                   | <0.02                                    | <0.02                                   |
|                | Bromoform                                                                                                                                                                                                                                | 0.05 | ug/g  | STD-13    | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | c-1,3-Dichloropropylene                                                                                                                                                                                                                  | 0.05 | ug/g  | STD-0.27  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | Carbon Tetrachloride                                                                                                                                                                                                                     | 0.05 | ug/g  |           | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | Chlorobenzene                                                                                                                                                                                                                            | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | Chloroform                                                                                                                                                                                                                               | 0.05 | ug/g  | STD-2.4   | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | Dichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, 1,2-cis-Dichloroethylene, 1,2-trans-Dichloropropane, 1,2-Dichloropropene, 1,3-Ethylbenzene | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | Ethylene dibromide                                                                                                                                                                                                                       | 0.05 | ug/g  | STD-3.4   | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                | Hexane (n)                                                                                                                                                                                                                               | 0.05 | ug/g  | STD-0.084 | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-2     | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-0.05  | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |
|                |                                                                                                                                                                                                                                          | 0.05 | ug/g  | STD-2.8   | <0.05                                    | <0.05                                   | <0.05                                    | <0.05                                   |

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| Group                     | Analyte                        | MRL  | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. | 1064774<br>Soil<br>2013-10-08<br>BH6 SS5 | 1064775<br>Soil<br>2013-10-08<br>DUP-S1 | 1064776<br>Soil<br>2013-10-08<br>BH7-SS6 | 1064777<br>Soil<br>2013-10-08<br>DUP-S2 |
|---------------------------|--------------------------------|------|-------|-----------|--------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------------|
|                           |                                |      |       |           |                                                                          |                                          |                                         |                                          |                                         |
| VOCs                      | m/p-xylene                     | 0.05 | ug/g  |           |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Methyl Ethyl Ketone            | 0.50 | ug/g  | STD-16    |                                                                          | <0.50                                    | <0.50                                   | <0.50                                    |                                         |
|                           | Methyl Isobutyl Ketone         | 0.50 | ug/g  | STD-1.7   |                                                                          | <0.50                                    | <0.50                                   | <0.50                                    |                                         |
|                           | Methyl tert-Butyl Ether (MTBE) | 0.05 | ug/g  | STD-0.75  |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Methylene Chloride             | 0.05 | ug/g  | STD-0.1   |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | o-xylene                       | 0.05 | ug/g  |           |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Styrene                        | 0.05 | ug/g  | STD-0.7   |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | t-1,3-Dichloropropylene        | 0.05 | ug/g  |           |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Tetrachloroethane, 1,1,1,2-    | 0.05 | ug/g  | STD-0.058 |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Tetrachloroethane, 1,1,2,2-    | 0.05 | ug/g  | STD-0.05  |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Tetrachloroethylene            | 0.05 | ug/g  | STD-0.28  |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Toluene                        | 0.20 | ug/g  | STD-2.3   |                                                                          | <0.20                                    | <0.20                                   | <0.20                                    |                                         |
|                           | Trichloroethane, 1,1,1-        | 0.05 | ug/g  | STD-0.38  |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Trichloroethane, 1,1,2-        | 0.05 | ug/g  | STD-0.05  |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Trichloroethylene              | 0.05 | ug/g  | STD-0.061 |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Trichlorofluoromethane         | 0.05 | ug/g  | STD-4     |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | Vinyl Chloride                 | 0.02 | ug/g  | STD-0.02  |                                                                          | <0.02                                    | <0.02                                   | <0.02                                    |                                         |
| VOCs Surrogates<br>(%REC) | Xylene Mixture                 | 0.05 | ug/g  | STD-3.1   |                                                                          | <0.05                                    | <0.05                                   | <0.05                                    |                                         |
|                           | 1,2-dichloroethane-d4          | 0    | %     |           |                                                                          | 115                                      | 117                                     | 118                                      |                                         |
|                           | 4-bromofluorobenzene           | 0    | %     |           |                                                                          | 99                                       | 98                                      | 98                                       |                                         |
|                           | Toluene-d8                     | 0    | %     |           |                                                                          | 104                                      | 101                                     | 91                                       |                                         |

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QC Summary

| Analyte                   | Run No | 0      | Analysis Date | 2013-10-15 | Method     | V 8260B         | Blank | QC % Rec | QC Limits |
|---------------------------|--------|--------|---------------|------------|------------|-----------------|-------|----------|-----------|
| Xylene Mixture            |        |        |               |            |            |                 |       |          |           |
|                           | Run No | 259198 | Analysis Date | 2013-10-15 | Method     | M SM3120B-3050B |       |          |           |
| Boron (total)             |        |        |               |            | <10 ug/g   |                 |       | 89       |           |
|                           | Run No | 259224 | Analysis Date | 2013-10-12 | Method     | V 8260B         |       |          |           |
| Benzene                   |        |        |               |            | <0.02 ug/g |                 |       | 96       | 80-120    |
| Ethylbenzene              |        |        |               |            | <0.05 ug/g |                 |       | 94       | 80-120    |
| m/p-xylene                |        |        |               |            | <0.05 ug/g |                 |       | 92       | 80-120    |
| o-xylene                  |        |        |               |            | <0.05 ug/g |                 |       | 94       | 80-120    |
| Toluene                   |        |        |               |            | <0.20 ug/g |                 |       | 102      | 80-120    |
| Toluene-d8                |        |        |               |            | 96 %       |                 |       | 93       |           |
|                           | Run No | 259234 | Analysis Date | 2013-10-15 | Method     | CCME            |       |          |           |
| Petroleum Hydrocarbons F1 |        |        |               |            | <10 ug/g   |                 |       | 96       | 80-120    |
|                           | Run No | 259235 | Analysis Date | 2013-10-15 | Method     | EPA 200.8       |       |          |           |
| Silver                    |        |        |               |            | <0.2 ug/g  |                 |       | 108      | 70-130    |

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| Analyte        | Blank                    | QC % Rec      | QC Limits |
|----------------|--------------------------|---------------|-----------|
| Arsenic        | <1 ug/g                  | 92            | 70-130    |
| Barium         | <1 ug/g                  | 96            | 70-130    |
| Beryllium      | <1 ug/g                  | 93            | 70-130    |
| Cadmium        | <0.5 ug/g                | 94            | 70-130    |
| Cobalt         | <1 ug/g                  | 95            | 70-130    |
| Chromium Total | <1 ug/g                  | 90            | 70-130    |
| Copper         | <1 ug/g                  | 96            | 70-130    |
| Molybdenum     | <1 ug/g                  | 97            | 70-130    |
| Nickel         | <1 ug/g                  | 98            | 70-130    |
| Lead           | <1 ug/g                  | 96            | 70-130    |
| Antimony       | <1 ug/g                  | 102           | 70-130    |
| Selenium       | <1 ug/g                  | 89            | 70-130    |
| Thallium       | <1 ug/g                  | 90            | 70-130    |
| Uranium        | <0.5 ug/g                | 97            | 70-130    |
| Vanadium       | <2 ug/g                  | 102           | 70-130    |
| Zinc           | <2 ug/g                  | 91            | 70-130    |
| Run No 259281  | Analysis Date 2013-10-16 | Method P 8270 |           |

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QC Summary

| Analyte                | Blank      | QC % Rec | QC Limits |
|------------------------|------------|----------|-----------|
| Methlynaphthalene, 1-  | <0.05 ug/g | 53       | 20-150    |
| Methlynaphthalene, 2-  | <0.05 ug/g | 52       | 20-150    |
| Acenaphthene           | <0.05 ug/g | 53       | 20-150    |
| Acenaphthylene         | <0.05 ug/g | 50       | 20-150    |
| Anthracene             | <0.05 ug/g | 50       | 20-150    |
| Benz[a]anthracene      | <0.05 ug/g | 69       | 20-150    |
| Benzo[a]pyrene         | <0.05 ug/g | 73       | 20-150    |
| Benzo[b]fluoranthene   | <0.05 ug/g | 56       | 20-150    |
| Benzo[ghi]perylene     | <0.05 ug/g | 84       | 20-150    |
| Benzo[k]fluoranthene   | <0.05 ug/g | 119      | 20-150    |
| Chrysene               | <0.05 ug/g | 66       | 20-150    |
| Dibenz[a h]anthracene  | <0.05 ug/g | 93       | 20-150    |
| Fluoranthene           | <0.05 ug/g | 56       | 20-150    |
| Fluorene               | <0.05 ug/g | 57       | 20-150    |
| Indeno[1 2 3-cd]pyrene | <0.05 ug/g | 80       | 20-150    |
| Naphthalene            | <0.05 ug/g | 46       | 20-150    |
| Phenanthrene           | <0.05 ug/g | 51       | 20-150    |

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COC #: 174169

QC Summary

| Analyte                | Blank                    | QC<br>% Rec   | QC<br>Limits |
|------------------------|--------------------------|---------------|--------------|
| Pyrene                 | <0.05 ug/g               | 58            | 20-150       |
| Run No 259283          | Analysis Date 2013-10-16 | Method P 8270 |              |
| Methlynaphthalene, 1-  | <0.05 ug/g               | 53            | 20-150       |
| Methlynaphthalene, 2-  | <0.05 ug/g               | 52            | 20-150       |
| Acenaphthene           | <0.05 ug/g               | 53            | 20-150       |
| Acenaphthylene         | <0.05 ug/g               | 50            | 20-150       |
| Anthracene             | <0.05 ug/g               | 50            | 20-150       |
| Benz[a]anthracene      | <0.05 ug/g               | 69            | 20-150       |
| Benzo[a]pyrene         | <0.05 ug/g               | 73            | 20-150       |
| Benzo[b]fluoranthene   | <0.05 ug/g               | 56            | 20-150       |
| Benzo[ghi]perylene     | <0.05 ug/g               | 84            | 20-150       |
| Benzo[k]fluoranthene   | <0.05 ug/g               | 119           | 20-150       |
| Chrysene               | <0.05 ug/g               | 66            | 20-150       |
| Dibenz[a,h]anthracene  | <0.05 ug/g               | 93            | 20-150       |
| Fluoranthene           | <0.05 ug/g               | 56            | 20-150       |
| Fluorene               | <0.05 ug/g               | 57            | 20-150       |
| Indeno[1,2,3-cd]pyrene | <0.05 ug/g               | 80            | 20-150       |

Guideline = O.Reg 153-T3-Res/Park-Coarse

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Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO  
= Interim Provincial Water Quality Objective, TDR = Typical Desired Range



Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1322570  
Date Submitted: 2013-10-09  
Date Reported: 2013-10-18  
Project: T021226-E1  
COC #: 174169

QC Summary

| Analyte                      | Blank                    | QC % Rec       | QC Limits |
|------------------------------|--------------------------|----------------|-----------|
| Naphthalene                  | <0.05 ug/g               | 46             | 20-150    |
| Phenanthrene                 | <0.05 ug/g               | 51             | 20-150    |
| Pyrene                       | <0.05 ug/g               | 58             | 20-150    |
| Run No 259377                | Analysis Date 2013-10-18 | Method CCME    |           |
| Petroleum Hydrocarbons F2    | <10 ug/g                 | 80             | 50-120    |
| Petroleum Hydrocarbons F3    | <20 ug/g                 | 80             | 50-120    |
| Petroleum Hydrocarbons F4    | <20 ug/g                 | 80             | 50-120    |
| Moisture                     | <0.1 %                   | 100            | 80-120    |
| Run No 259380                | Analysis Date 2013-10-17 | Method V 8260B |           |
| Tetrachloroethane, 1,1,1,2,- | <0.05 ug/g               | 96             | 80-120    |
| Trichloroethane, 1,1,1,-     | <0.05 ug/g               | 106            | 80-120    |
| Tetrachloroethane, 1,1,2,2,- | <0.05 ug/g               | 105            | 80-120    |
| Trichloroethane, 1,1,2,-     | <0.05 ug/g               | 111            | 80-120    |
| Dichloroethane, 1,1,-        | <0.05 ug/g               | 101            | 80-120    |
| Dichloroethylene, 1,1,-      | <0.05 ug/g               | 85             | 80-120    |
| Dichlorobenzene, 1,2,-       | <0.05 ug/g               | 101            | 80-120    |
| Dichloroethane, 1,2,-        | <0.05 ug/g               | 108            | 80-120    |

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QC Summary

| Analyte                    | Blank      | QC % Rec | QC Limits |
|----------------------------|------------|----------|-----------|
| 1,2-dichloroethane-d4      | 99 %       | 113      |           |
| Dichloropropane, 1,2-      | <0.05 ug/g | 113      | 80-120    |
| Dichlorobenzene, 1,3-      | <0.05 ug/g | 84       | 80-120    |
| Dichloropropene, 1,3-      |            |          |           |
| Dichlorobenzene, 1,4-      | <0.05 ug/g | 81       | 80-120    |
| Acetone                    | <0.50 ug/g | 103      | 70-130    |
| Bromodichloromethane       | <0.05 ug/g | 104      | 80-120    |
| Bromoform                  | <0.05 ug/g | 113      | 80-100    |
| Dichloroethylene, 1,2-cis- | <0.05 ug/g | 99       | 80-120    |
| Dichloropropene, 1,3-cis-  | <0.05 ug/g | 106      | 80-120    |
| Carbon Tetrachloride       | <0.05 ug/g | 105      | 80-120    |
| Chloroform                 | <0.05 ug/g | 106      | 80-120    |
| Dichlorodifluoromethane    | <0.05 ug/g | 103      | 70-130    |
| Methylene Chloride         | <0.05 ug/g | 95       | 70-130    |
| Ethylene dibromide         | <0.05 ug/g | 96       | 80-120    |
| Hexane (n)                 | <0.05 ug/g | 87       | 70-130    |
| Methyl Ethyl Ketone        | <0.50 ug/g | 105      | 70-130    |

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### QC Summary

| Analyte                        | Blank                           | QC<br>% Rec           | QC<br>Limits |
|--------------------------------|---------------------------------|-----------------------|--------------|
| Methyl Isobutyl Ketone         | <0.50 ug/g                      | 105                   | 70-130       |
| Methyl tert-Butyl Ether (MTBE) | <0.05 ug/g                      | 100                   | 70-130       |
| Chlorobenzene                  | <0.05 ug/g                      | 90                    | 80-120       |
| Styrene                        | <0.05 ug/g                      | 89                    | 80-120       |
| Dichloroethylene, 1,2-trans-   | <0.05 ug/g                      | 94                    | 80-120       |
| Dichloropropene, 1,3-trans-    | <0.05 ug/g                      | 117                   | 80-120       |
| Tetrachloroethylene            | <0.05 ug/g                      | 101                   | 80-120       |
| Trichloroethylene              | <0.05 ug/g                      | 106                   | 80-120       |
| Trichlorofluoromethane         | <0.05 ug/g                      | 92                    | 70-130       |
| Vinyl Chloride                 | <0.02 ug/g                      | 86                    | 80-120       |
| <b>Run No</b> 259385           | <b>Analysis Date</b> 2013-10-17 | <b>Method</b> Ag Soil |              |
| pH - CaCl2                     |                                 |                       | 90-110       |

**Guideline = O.Reg 153-T3-Res/Park-Coarse**

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Report Number: 1322830  
 Date Submitted: 2013-10-15  
 Date Reported: 2013-10-22  
 Project: T021226-E1  
 COC #: 174381

Page 1 of 15

**Dear Luke Lopers:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:

APPROVAL: \_\_\_\_\_

Diana Cameron  
 Team Leader, Inorganics

APPROVAL: \_\_\_\_\_

Charlie (Long) Qu  
 Laboratory Supervisor, Organics

Exova (Ottawa) is certified and accredited for specific parameters by:

CALA, Canadian Association for Laboratory Accreditation (to ISO 17025), OMAFRA, Ontario Ministry of Agriculture, Food and Rural Affairs (for farm soils), Licensed by Ontario MOE for specific tests in drinking water.

Exova (Mississauga) is certified and accredited for specific parameters by:

SCC, Standards Council of Canada (to ISO 17025)

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only.



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Attention: Mr. Luke Lopers  
PO#:   
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1322830  
Date Submitted: 2013-10-15  
Date Reported: 2013-10-22  
Project: T021226-E1  
COC #: 174381

| Group       | Analyte                   | MRL  | Units | Guideline   | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. | 1065417<br>Groundwater<br>2013-10-15<br>BH4 (MW) - GW1 | 1065418<br>Groundwater<br>2013-10-15<br>BH5 (MW) - GW1 | 1065419<br>Groundwater<br>2013-10-15<br>BH6 (MW) - GW1 | 1065420<br>Groundwater<br>2013-10-15<br>BH7 (MW) - GW1 |
|-------------|---------------------------|------|-------|-------------|--------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
|             |                           |      |       |             |                                                                          |                                                        |                                                        |                                                        |                                                        |
| Inorganics  | Antimony                  | 0.5  | ug/L  | STD-20000   |                                                                          | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|             | Arsenic                   | 1    | ug/L  | STD-1900    |                                                                          | <1                                                     | <1                                                     |                                                        | <1                                                     |
|             |                           | 10   | ug/L  | STD-1900    |                                                                          |                                                        |                                                        | <10                                                    |                                                        |
|             | Barium                    | 10   | ug/L  | STD-29000   |                                                                          | 120                                                    | 60                                                     | 50                                                     | 80                                                     |
|             | Beryllium                 | 0.5  | ug/L  | STD-67      |                                                                          | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|             | Boron (total)             | 10   | ug/L  | STD-45000   |                                                                          | 150                                                    | 150                                                    | 200                                                    | 50                                                     |
|             | Cadmium                   | 0.1  | ug/L  | STD-2.7     |                                                                          | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|             | Chromium Total            | 1    | ug/L  | STD-810     |                                                                          | 6                                                      | 4                                                      | 3                                                      | 1                                                      |
|             | Cobalt                    | 0.2  | ug/L  | STD-66      |                                                                          | 6.5                                                    | 4.7                                                    | 5.8                                                    | 0.9                                                    |
|             | Copper                    | 1    | ug/L  | STD-87      |                                                                          | 2                                                      | 1                                                      | 1                                                      | <1                                                     |
|             | Lead                      | 1    | ug/L  | STD-25      |                                                                          | <1                                                     | <1                                                     | <1                                                     | <1                                                     |
|             | Molybdenum                | 5    | ug/L  | STD-9200    |                                                                          | <5                                                     | <5                                                     | <5                                                     | <5                                                     |
|             | Nickel                    | 5    | ug/L  | STD-490     |                                                                          | 15                                                     | 10                                                     | 16                                                     | <5                                                     |
|             | Selenium                  | 1    | ug/L  | STD-63      |                                                                          |                                                        | <1                                                     |                                                        |                                                        |
|             |                           | 10   | ug/L  | STD-63      |                                                                          | <10                                                    |                                                        | <10                                                    | <10                                                    |
|             | Silver                    | 0.1  | ug/L  | STD-1.5     |                                                                          | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|             | Sodium                    | 2000 | ug/L  | STD-2300000 |                                                                          | 167000                                                 | 110000                                                 | 140000                                                 | 40000                                                  |
|             | Thallium                  | 0.1  | ug/L  | STD-510     |                                                                          | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|             | Uranium                   | 1    | ug/L  | STD-420     |                                                                          | 3                                                      | 3                                                      | 33                                                     | 2                                                      |
|             | Vanadium                  | 1    | ug/L  | STD-250     |                                                                          | 5                                                      | 6                                                      | 6                                                      | 3                                                      |
|             | Zinc                      | 10   | ug/L  | STD-1100    |                                                                          | <10                                                    | <10                                                    | 10                                                     | <10                                                    |
| Misc/Others | pH                        | 1.00 |       |             |                                                                          | 7.17                                                   | 7.18                                                   | 7.24                                                   | 7.46                                                   |
|             | Petroleum Hydrocarbons F1 | 100  | ug/L  | STD-750     |                                                                          | <100                                                   | <100                                                   | <100                                                   | <100                                                   |
|             | Petroleum Hydrocarbons F2 | 100  | ug/L  | STD-150     |                                                                          | <100                                                   | <100                                                   | <100                                                   | <100                                                   |
|             | Petroleum Hydrocarbons F3 | 200  | ug/L  | STD-500     |                                                                          | <200                                                   | <200                                                   | <200                                                   | <200                                                   |
|             | Petroleum Hydrocarbons F4 | 200  | ug/L  | STD-500     |                                                                          | <200                                                   | <200                                                   | <200                                                   | <200                                                   |

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Date Reported: 2013-10-22  
Project: T021226-E1  
COC #: 174381

| Group          | Analyte                 | MRL  | Units | Guideline  | 1065417<br>Groundwater<br>2013-10-15<br>BH4 (MW) - GW1 | 1065418<br>Groundwater<br>2013-10-15<br>BH5 (MW) - GW1 | 1065419<br>Groundwater<br>2013-10-15<br>BH6 (MW) - GW1 | 1065420<br>Groundwater<br>2013-10-15<br>BH7 (MW) - GW1 |
|----------------|-------------------------|------|-------|------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| Semi-Volatiles | Acenaphthene            | 0.1  | ug/L  | STD-1700   | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Acenaphthylene          | 0.1  | ug/L  | STD-1.8    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Anthracene              | 0.1  | ug/L  | STD-2.4    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Benz[a]anthracene       | 0.1  | ug/L  | STD-4.7    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Benz[a]pyrene           | 0.01 | ug/L  | STD-0.81   | <0.01                                                  | <0.01                                                  | <0.01                                                  | <0.01                                                  |
|                | Benz[b]fluoranthene     | 0.05 | ug/L  | STD-0.75   | <0.05                                                  | <0.05                                                  | <0.05                                                  | <0.05                                                  |
|                | Benz[ghi]perylene       | 0.1  | ug/L  | STD-0.2    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Benz[k]fluoranthene     | 0.05 | ug/L  | STD-0.4    | <0.05                                                  | <0.05                                                  | <0.05                                                  | <0.05                                                  |
|                | Chrysene                | 0.05 | ug/L  | STD-1      | <0.05                                                  | <0.05                                                  | <0.05                                                  | <0.05                                                  |
|                | Dibenz[a,h]anthracene   | 0.1  | ug/L  | STD-0.52   | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Fluoranthene            | 0.1  | ug/L  | STD-130    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Fluorene                | 0.1  | ug/L  | STD-400    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Indeno[1,2,3-cd]pyrene  | 0.1  | ug/L  | STD-0.2    | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Methylnaphthalene, 1-   | 0.1  | ug/L  | STD-1800   | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Methylnaphthalene, 2-   | 0.1  | ug/L  | STD-1800   | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Naphthalene             | 0.1  | ug/L  | STD-6400   | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Phenanthrene            | 0.1  | ug/L  | STD-580    | <0.1                                                   | <0.1                                                   | <0.1                                                   | 0.1                                                    |
|                | Pyrene                  | 0.1  | ug/L  | STD-68     | <0.1                                                   | <0.1                                                   | <0.1                                                   | <0.1                                                   |
|                | Acetone                 | 50   | ug/L  | STD-130000 | <50                                                    | <50                                                    | <50                                                    | <50                                                    |
|                | Benzene                 | 0.5  | ug/L  | STD-430    | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
| VOCs           | Bromodichloromethane    | 0.3  | ug/L  | STD-85000  | <0.3                                                   | <0.3                                                   | <0.3                                                   | <0.3                                                   |
|                | Bromoform               | 0.4  | ug/L  | STD-770    | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|                | Bromomethane            | 0.5  | ug/L  | STD-56     | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|                | c-1,3-Dichloropropylene | 0.2  | ug/L  |            | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |
|                | Carbon Tetrachloride    | 0.2  | ug/L  | STD-8.4    | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |
|                | Chlorobenzene           | 0.2  | ug/L  | STD-630    | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |

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Report Number: 1322830  
Date Submitted: 2013-10-15  
Date Reported: 2013-10-22  
Project: T021226-E1  
COC #: 174381

| Group | Analyte                        | MRL | Units | Guideline   | 1065417<br>Groundwater<br>2013-10-15<br>BH4 (MW) - GW1 | 1065418<br>Groundwater<br>2013-10-15<br>BH5 (MW) - GW1 | 1065419<br>Groundwater<br>2013-10-15<br>BH6 (MW) - GW1 | 1065420<br>Groundwater<br>2013-10-15<br>BH7 (MW) - GW1 |
|-------|--------------------------------|-----|-------|-------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| VOCs  | Chloroform                     | 0.5 | ug/L  | STD-22      | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Dibromochloromethane           | 0.3 | ug/L  | STD-82000   | <0.3                                                   | <0.3                                                   | <0.3                                                   | <0.3                                                   |
|       | Dichlorobenzene, 1,2-          | 0.4 | ug/L  | STD-9600    | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|       | Dichlorobenzene, 1,3-          | 0.4 | ug/L  | STD-9600    | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|       | Dichlorobenzene, 1,4-          | 0.4 | ug/L  | STD-67      | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|       | Dichlorodifluoromethane        | 0.5 | ug/L  | STD-4400    | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Dichloroethane, 1,1-           | 0.4 | ug/L  | STD-3100    | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|       | Dichloroethane, 1,2-           | 0.2 | ug/L  | STD-12      | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |
|       | Dichloroethylene, 1,1-         | 0.5 | ug/L  | STD-17      | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Dichloroethylene, 1,2-cis-     | 0.4 | ug/L  | STD-17      | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|       | Dichloroethylene, 1,2-trans-   | 0.4 | ug/L  | STD-17      | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|       | Dichloropropane, 1,2-          | 0.5 | ug/L  | STD-140     | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Ethylbenzene                   | 0.5 | ug/L  | STD-2300    | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Ethylene dibromide             | 0.2 | ug/L  | STD-0.83    | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |
|       | Hexane (n)                     | 5   | ug/L  | STD-520     | <5                                                     | <5                                                     | <5                                                     | <5                                                     |
|       | m/p-xylene                     | 0.5 | ug/L  |             | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Methyl Ethyl Ketone            | 10  | ug/L  | STD-1500000 | <10                                                    | <10                                                    | <10                                                    | <10                                                    |
|       | Methyl Isobutyl Ketone         | 10  | ug/L  | STD-580000  | <10                                                    | <10                                                    | <10                                                    | <10                                                    |
|       | Methyl tert-Butyl Ether (MTBE) | 10  | ug/L  | STD-1400    | <10                                                    | <10                                                    | <10                                                    | <10                                                    |
|       | Methylene Chloride             | 4.0 | ug/L  | STD-5500    | <4.0                                                   | <4.0                                                   | <4.0                                                   | <4.0                                                   |
|       | o-xylene                       | 0.5 | ug/L  |             | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Styrene                        | 0.5 | ug/L  | STD-9100    | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | t-1,3-Dichloropropylene        | 0.2 | ug/L  |             | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |
|       | Tetrachloroethane, 1,1,1,2-    | 0.5 | ug/L  | STD-28      | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Tetrachloroethane, 1,1,2,2-    | 0.5 | ug/L  | STD-15      | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|       | Tetrachloroethylene            | 0.3 | ug/L  | STD-17      | <0.3                                                   | 1.7                                                    | <0.3                                                   | <0.3                                                   |

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Report Number: 1322830  
Date Submitted: 2013-10-15  
Date Reported: 2013-10-22  
Project: T021226-E1  
COC #: 174381

| Group                     | Analyte                 | MRL | Units | Guideline | 1065417<br>Groundwater<br>2013-10-15<br>BH4 (MW) - GW1 | 1065418<br>Groundwater<br>2013-10-15<br>BH5 (MW) - GW1 | 1065419<br>Groundwater<br>2013-10-15<br>BH6 (MW) - GW1 | 1065420<br>Groundwater<br>2013-10-15<br>BH7 (MW) - GW1 |
|---------------------------|-------------------------|-----|-------|-----------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| VOCs                      | Toluene                 | 0.5 | ug/L  | STD-18000 | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|                           | Trichloroethane, 1,1,1- | 0.4 | ug/L  | STD-6700  | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|                           | Trichloroethane, 1,1,2- | 0.4 | ug/L  | STD-30    | <0.4                                                   | <0.4                                                   | <0.4                                                   | <0.4                                                   |
|                           | Trichloroethylene       | 0.3 | ug/L  | STD-17    | <0.3                                                   | <0.3                                                   | <0.3                                                   | <0.3                                                   |
|                           | Trichlorofluoromethane  | 0.5 | ug/L  | STD-2500  | <0.5                                                   | <0.5                                                   | <0.5                                                   | <0.5                                                   |
|                           | Vinyl Chloride          | 0.2 | ug/L  | STD-1.7   | <0.2                                                   | <0.2                                                   | <0.2                                                   | <0.2                                                   |
| VOCs Surrogates<br>(%REC) | Xylene Mixture          | 1.0 | ug/L  | STD-4200  | <1.0                                                   | <1.0                                                   | <1.0                                                   | <1.0                                                   |
|                           | 1,2-dichloroethane-d4   | 0   | %     |           | 105                                                    | 103                                                    | 104                                                    | 112                                                    |
|                           | 4-bromofluorobenzene    | 0   | %     |           | 97                                                     | 96                                                     | 97                                                     | 97                                                     |
|                           | Toluene-d8              | 0   | %     |           | 99                                                     | 99                                                     | 100                                                    | 100                                                    |

| Group      | Analyte        | MRL | Units | Guideline | 1065421<br>Groundwater<br>2013-10-15<br>DUP - GW1 |
|------------|----------------|-----|-------|-----------|---------------------------------------------------|
| Inorganics | Antimony       | 0.5 | ug/L  | STD-20000 | <0.5                                              |
|            | Arsenic        | 10  | ug/L  | STD-1900  | <10                                               |
|            | Barium         | 10  | ug/L  | STD-29000 | 50                                                |
|            | Beryllium      | 0.5 | ug/L  | STD-67    | <0.5                                              |
|            | Boron (total)  | 10  | ug/L  | STD-45000 | 190                                               |
|            | Cadmium        | 0.1 | ug/L  | STD-2.7   | <0.1                                              |
|            | Chromium Total | 1   | ug/L  | STD-810   | 3                                                 |
|            | Cobalt         | 0.2 | ug/L  | STD-66    | 6.0                                               |
|            | Copper         | 1   | ug/L  | STD-87    | 1                                                 |
|            |                |     |       |           |                                                   |

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COC #: 174381

| Group                  | Analyte                   | MRL  | Units | Guideline   | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. |
|------------------------|---------------------------|------|-------|-------------|--------------------------------------------------------------------------|
| Inorganics             | Lead                      | 1    | ug/L  | STD-25      | 1065421<br>Groundwater                                                   |
|                        | Molybdenum                | 5    | ug/L  | STD-9200    | 2013-10-15<br>DUP - GW1                                                  |
|                        | Nickel                    | 5    | ug/L  | STD-490     |                                                                          |
|                        | Selenium                  | 10   | ug/L  | STD-63      |                                                                          |
|                        | Silver                    | 0.1  | ug/L  | STD-1.5     |                                                                          |
|                        | Sodium                    | 2000 | ug/L  | STD-2300000 |                                                                          |
|                        | Thallium                  | 0.1  | ug/L  | STD-510     |                                                                          |
|                        | Uranium                   | 1    | ug/L  | STD-420     |                                                                          |
|                        | Vanadium                  | 1    | ug/L  | STD-250     |                                                                          |
|                        | Zinc                      | 10   | ug/L  | STD-1100    |                                                                          |
| Misc/Others            | pH                        | 1.00 |       |             | 7.26                                                                     |
| Petroleum Hydrocarbons | Petroleum Hydrocarbons F1 | 100  | ug/L  | STD-750     | <100                                                                     |
|                        | Petroleum Hydrocarbons F2 | 100  | ug/L  | STD-150     | <100                                                                     |
|                        | Petroleum Hydrocarbons F3 | 200  | ug/L  | STD-500     | <200                                                                     |
|                        | Petroleum Hydrocarbons F4 | 200  | ug/L  | STD-500     | <200                                                                     |
| Semi-Volatiles         | Acenaphthene              | 0.1  | ug/L  | STD-1700    | <0.1                                                                     |
|                        | Acenaphthylene            | 0.1  | ug/L  | STD-1.8     | <0.1                                                                     |
|                        | Anthracene                | 0.1  | ug/L  | STD-2.4     | <0.1                                                                     |
|                        | Benz[a]anthracene         | 0.1  | ug/L  | STD-4.7     | <0.1                                                                     |
|                        | Benzo[a]pyrene            | 0.01 | ug/L  | STD-0.81    | <0.01                                                                    |
|                        | Benzo[b]fluoranthene      | 0.05 | ug/L  | STD-0.75    | <0.05                                                                    |
|                        | Benzo[ghi]perylene        | 0.1  | ug/L  | STD-0.2     | <0.1                                                                     |
|                        | Benzo[k]fluoranthene      | 0.05 | ug/L  | STD-0.4     | <0.05                                                                    |
|                        | Chrysene                  | 0.05 | ug/L  | STD-1       | <0.05                                                                    |
|                        | Dibenz[a,h]anthracene     | 0.1  | ug/L  | STD-0.52    | <0.1                                                                     |
|                        | Fluoranthene              | 0.1  | ug/L  | STD-130     | <0.1                                                                     |

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| Group          | Analyte                      | MRL | Units | Guideline  | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. |
|----------------|------------------------------|-----|-------|------------|--------------------------------------------------------------------------|
| Semi-Volatiles | Fluorene                     | 0.1 | ug/L  | STD-400    | 1065421<br>Groundwater<br>2013-10-15<br>DUP - GW1                        |
|                | Indeno[1 2 3-cd]pyrene       | 0.1 | ug/L  | STD-0.2    |                                                                          |
|                | Methylnaphthalene, 1-        | 0.1 | ug/L  | STD-1800   |                                                                          |
|                | Methylnaphthalene, 2-        | 0.1 | ug/L  | STD-1800   |                                                                          |
|                | Naphthalene                  | 0.1 | ug/L  | STD-6400   |                                                                          |
|                | Phenanthrene                 | 0.1 | ug/L  | STD-580    |                                                                          |
|                | Pyrene                       | 0.1 | ug/L  | STD-68     |                                                                          |
|                | Acetone                      | 50  | ug/L  | STD-130000 |                                                                          |
|                | Benzene                      | 0.5 | ug/L  | STD-430    |                                                                          |
|                | Bromodichloromethane         | 0.3 | ug/L  | STD-85000  |                                                                          |
| VOCs           | Bromoform                    | 0.4 | ug/L  | STD-770    | 1065421<br>Groundwater<br>2013-10-15<br>DUP - GW1                        |
|                | Bromomethane                 | 0.5 | ug/L  | STD-56     |                                                                          |
|                | c-1,3-Dichloropropylene      | 0.2 | ug/L  |            |                                                                          |
|                | Carbon Tetrachloride         | 0.2 | ug/L  | STD-8.4    |                                                                          |
|                | Chlorobenzene                | 0.2 | ug/L  | STD-630    |                                                                          |
|                | Chloroform                   | 0.5 | ug/L  | STD-22     |                                                                          |
|                | Dibromochloromethane         | 0.3 | ug/L  | STD-82000  |                                                                          |
|                | Dichlorobenzene, 1,2-        | 0.4 | ug/L  | STD-9600   |                                                                          |
|                | Dichlorobenzene, 1,3-        | 0.4 | ug/L  | STD-9600   |                                                                          |
|                | Dichlorobenzene, 1,4-        | 0.4 | ug/L  | STD-67     |                                                                          |
|                | Dichlorodifluoromethane      | 0.5 | ug/L  | STD-4400   |                                                                          |
|                | Dichloroethane, 1,1-         | 0.4 | ug/L  | STD-3100   |                                                                          |
|                | Dichloroethane, 1,2-         | 0.2 | ug/L  | STD-12     |                                                                          |
|                | Dichloroethylene, 1,1-       | 0.5 | ug/L  | STD-17     |                                                                          |
|                | Dichloroethylene, 1,2-cis-   | 0.4 | ug/L  | STD-17     |                                                                          |
|                | Dichloroethylene, 1,2-trans- | 0.4 | ug/L  | STD-17     |                                                                          |

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| Group                  | Analyte                                                                                              | MRL | Units | Guideline   | 1065421<br>Groundwater<br>2013-10-15<br>DUP - GW1 |
|------------------------|------------------------------------------------------------------------------------------------------|-----|-------|-------------|---------------------------------------------------|
| VOCs                   | Dichloropropane, 1,2-Ethylbenzene                                                                    | 0.5 | ug/L  | STD-140     | <0.5                                              |
|                        | Ethylene dibromide                                                                                   | 0.5 | ug/L  | STD-2300    | <0.5                                              |
|                        | Hexane (n)                                                                                           | 0.2 | ug/L  | STD-0.83    | <0.2                                              |
|                        | m/p-xylene                                                                                           | 5   | ug/L  | STD-520     | <5                                                |
|                        | Methyl Ethyl Ketone                                                                                  | 0.5 | ug/L  |             | <0.5                                              |
|                        | Methyl Isobutyl Ketone                                                                               | 10  | ug/L  | STD-1500000 | <10                                               |
|                        | Methyl tert-Butyl Ether (MTBE)                                                                       | 10  | ug/L  | STD-580000  | <10                                               |
|                        | Methylene Chloride                                                                                   | 10  | ug/L  | STD-1400    | <10                                               |
|                        | o-xylene                                                                                             | 4.0 | ug/L  | STD-5500    | <4.0                                              |
|                        | Styrene                                                                                              | 0.5 | ug/L  |             | <0.5                                              |
|                        | t-1,3-Dichloropropylene                                                                              | 0.5 | ug/L  | STD-9100    | <0.5                                              |
|                        | Tetrachloroethane, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethylene | 0.2 | ug/L  | STD-28      | <0.2                                              |
|                        | Toluene                                                                                              | 0.5 | ug/L  | STD-15      | <0.5                                              |
|                        | Trichloroethane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethylene                                      | 0.3 | ug/L  | STD-17      | <0.3                                              |
|                        | Trichlorofluoromethane                                                                               | 0.5 | ug/L  | STD-18000   | <0.5                                              |
|                        | Vinyl Chloride                                                                                       | 0.4 | ug/L  | STD-6700    | <0.4                                              |
|                        | Xylene Mixture                                                                                       | 0.4 | ug/L  | STD-30      | <0.4                                              |
|                        | 1,2-dichloroethane-d4                                                                                | 0.3 | ug/L  | STD-17      | <0.3                                              |
|                        | 4-bromofluorobenzene                                                                                 | 0.5 | ug/L  | STD-2500    | <0.5                                              |
|                        | Toluene-d8                                                                                           | 0.2 | ug/L  | STD-1.7     | <0.2                                              |
| VOCs Surrogates (%REC) |                                                                                                      | 1.0 | ug/L  | STD-4200    | <1.0                                              |
|                        |                                                                                                      | 0   | %     |             | 99                                                |
|                        |                                                                                                      | 0   | %     |             | 98                                                |
|                        |                                                                                                      | 0   | %     |             | 98                                                |

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QC Summary

| Analyte        | Blank                    | QC % Rec            | QC Limits |
|----------------|--------------------------|---------------------|-----------|
| Run No 0       | Analysis Date 2013-10-21 | Method V 8260B      |           |
| Xylene Mixture |                          |                     |           |
| Run No 259340  | Analysis Date 2013-10-16 | Method C SM4500-H+B |           |
| pH             | 5.85                     | 99                  | 90-110    |
| Run No 259342  | Analysis Date 2013-10-16 | Method EPA 200.8    |           |
| Silver         | <0.1 ug/L                | 98                  | 89-111    |
| Arsenic        | <1 ug/L                  | 103                 | 81-119    |
| Boron (total)  | <10 ug/L                 | 99                  | 81-119    |
| Barium         | <10 ug/L                 | 103                 | 91-109    |
| Beryllium      | <0.5 ug/L                | 102                 | 82-118    |
| Cadmium        | <0.1 ug/L                | 95                  | 86-114    |
| Cobalt         | <0.2 ug/L                | 100                 | 88-112    |
| Chromium Total | <1 ug/L                  | 99                  | 89-111    |
| Copper         | <1 ug/L                  | 100                 | 86-114    |
| Molybdenum     | <5 ug/L                  | 104                 | 84-116    |

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QC Summary

| Analyte                   | Blank                           | QC<br>% Rec                   | QC<br>Limits |
|---------------------------|---------------------------------|-------------------------------|--------------|
| Nickel                    | <5 ug/L                         | 100                           | 92-108       |
| Lead                      | <1 ug/L                         | 99                            | 89-111       |
| Antimony                  | <0.5 ug/L                       | 102                           | 77-123       |
| Selenium                  | <10 ug/L                        | 104                           | 77-123       |
| Thallium                  | <0.1 ug/L                       | 101                           | 88-112       |
| Uranium                   | <1 ug/L                         | 98                            | 87-113       |
| Vanadium                  | <1 ug/L                         | 101                           | 88-112       |
| Zinc                      | <10 ug/L                        | 100                           | 89-111       |
| <b>Run No</b> 259388      | <b>Analysis Date</b> 2013-10-17 | <b>Method</b> M SM3120B-3500C |              |
| Sodium                    | <2000 ug/L                      | 97                            | 80-120       |
| <b>Run No</b> 259419      | <b>Analysis Date</b> 2013-10-18 | <b>Method</b> O CCME Reg 153  |              |
| Petroleum Hydrocarbons F2 | <100 ug/L                       | 61                            | 50-120       |
| Petroleum Hydrocarbons F3 | <200 ug/L                       | 61                            | 50-120       |
| Petroleum Hydrocarbons F4 | <200 ug/L                       | 61                            | 50-120       |
| <b>Run No</b> 259496      | <b>Analysis Date</b> 2013-10-21 | <b>Method</b> O CCME Reg 153  |              |
| Petroleum Hydrocarbons F1 | <100 ug/L                       | 91                            | 80-120       |
| <b>Run No</b> 259502      | <b>Analysis Date</b> 2013-10-19 | <b>Method</b> V 8260B         |              |

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QC Summary

| Analyte                     | Blank     | QC % Rec | QC Limits |
|-----------------------------|-----------|----------|-----------|
| Tetrachloroethane, 1,1,1,2- | <0.5 ug/L | 111      | 80-120    |
| Trichloroethane, 1,1,1-     | <0.4 ug/L | 111      | 80-120    |
| Tetrachloroethane, 1,1,2,2- | <0.5 ug/L | 109      | 80-120    |
| Trichloroethane, 1,1,2-     | <0.4 ug/L | 112      | 80-120    |
| Dichloroethane, 1,1-        | <0.4 ug/L | 109      | 80-120    |
| Dichloroethylene, 1,1-      | <0.5 ug/L | 113      | 80-120    |
| Dichlorobenzene, 1,2-       | <0.4 ug/L | 108      | 80-120    |
| Dichloroethane, 1,2-        | <0.2 ug/L | 102      | 80-120    |
| 1,2-dichloroethane-d4       | 112 %     | 87       | 80-120    |
| Dichloropropane, 1,2-       | <0.5 ug/L | 113      | 80-120    |
| Dichlorobenzene, 1,3-       | <0.4 ug/L | 110      | 80-120    |
| Dichlorobenzene, 1,4-       | <0.4 ug/L | 108      | 80-120    |
| Benzene                     | <0.5 ug/L | 105      | 80-120    |
| Bromodichloromethane        | <0.3 ug/L | 104      | 80-120    |
| Bromoform                   | <0.4 ug/L | 96       | 80-120    |
| Bromomethane                | <0.5 ug/L | 100      | 70-130    |
| Dichloroethylene, 1,2-cis-  | <0.4 ug/L | 106      | 80-120    |

Guideline = O.Reg 153-T3-Non-Potable GW

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Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#:   
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1322830  
Date Submitted: 2013-10-15  
Date Reported: 2013-10-22  
Project: T021226-E1  
COC #: 174381

QC Summary

| Analyte                      | Blank     | QC<br>% Rec | QC<br>Limits |
|------------------------------|-----------|-------------|--------------|
| Dichloropropene, 1,3-cis-    | <0.2 ug/L | 100         | 80-120       |
| Carbon Tetrachloride         | <0.2 ug/L | 110         | 80-120       |
| Chloroform                   | <0.5 ug/L | 103         | 80-120       |
| Dibromochloromethane         | <0.3 ug/L | 103         | 80-120       |
| Dichlorodifluoromethane      | <0.5 ug/L | 93          | 70-130       |
| Methylene Chloride           | <4.0 ug/L | 115         | 60-200       |
| Ethylbenzene                 | <0.5 ug/L | 105         | 80-120       |
| Ethylene dibromide           | <0.2 ug/L | 106         | 80-120       |
| Hexane (n)                   | <5 ug/L   | 90          | 70-130       |
| m/p-xylene                   | <0.5 ug/L | 108         | 80-120       |
| Chlorobenzene                | <0.2 ug/L | 104         | 80-120       |
| o-xylene                     | <0.5 ug/L | 108         | 80-120       |
| Styrene                      | <0.5 ug/L | 99          | 80-120       |
| Dichloroethylene, 1,2-trans- | <0.4 ug/L | 102         | 80-120       |
| Dichloropropene, 1,3-trans-  | <0.2 ug/L | 98          | 80-120       |
| Tetrachloroethylene          | <0.3 ug/L | 102         | 80-120       |
| Toluene                      | <0.5 ug/L | 105         | 80-120       |

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QC Summary

| Analyte                | Blank                    | QC % Rec      | QC Limits |
|------------------------|--------------------------|---------------|-----------|
| Toluene-d8             | 98 %                     | 100           | 80-120    |
| Trichloroethylene      | <0.3 ug/L                | 112           | 80-120    |
| Trichlorofluoromethane | <0.5 ug/L                | 113           | 80-120    |
| Vinyl Chloride         | <0.2 ug/L                | 96            | 70-130    |
| Run No 259503          | Analysis Date 2013-10-20 | Method P 8270 |           |
| Methlynaphthalene, 1-  | <0.1 ug/L                | 52            | 20-140    |
| Methlynaphthalene, 2-  | <0.1 ug/L                | 48            | 20-140    |
| Acenaphthene           | <0.1 ug/L                | 50            | 20-140    |
| Acenaphthylene         | <0.1 ug/L                | 48            | 20-140    |
| Anthracene             | <0.1 ug/L                | 64            | 20-140    |
| Benz[a]anthracene      | <0.1 ug/L                | 64            | 20-140    |
| Benzo[a]pyrene         | <0.01 ug/L               | 63            | 20-140    |
| Benzo[b]fluoranthene   | <0.05 ug/L               | 62            | 20-140    |
| Benzo[ghi]perylene     | <0.1 ug/L                | 74            | 20-140    |
| Benzo[k]fluoranthene   | <0.05 ug/L               | 101           | 20-140    |
| Chrysene               | <0.05 ug/L               | 64            | 20-140    |
| Dibenz[a,h]anthracene  | <0.1 ug/L                | 70            | 20-140    |

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COC #: 174381

### QC Summary

| Analyte                        | Blank                    | QC % Rec       | QC Limits |
|--------------------------------|--------------------------|----------------|-----------|
| Fluoranthene                   | <0.1 ug/L                | 70             | 20-140    |
| Fluorene                       | <0.1 ug/L                | 60             | 20-140    |
| Indeno[1 2 3-cd]pyrene         | <0.1 ug/L                | 72             | 20-140    |
| Naphthalene                    | <0.1 ug/L                | 42             | 20-140    |
| Phenanthrene                   | <0.1 ug/L                | 58             | 20-140    |
| Pyrene                         | <0.1 ug/L                | 70             | 20-140    |
| Run No 259552                  | Analysis Date 2013-10-21 | Method V 8260B |           |
| Acetone                        | <50 ug/L                 | 105            | 80-120    |
| Methyl Ethyl Ketone            | <10 ug/L                 | 92             | 80-120    |
| Methyl Isobutyl Ketone         | <10 ug/L                 | 100            | 80-120    |
| Methyl tert-Butyl Ether (MTBE) | <10 ug/L                 | 99             | 80-120    |

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Sample Comment Summary

|                    |                |                                                                                   |
|--------------------|----------------|-----------------------------------------------------------------------------------|
| Sample ID: 1065417 | BH4 (MW) - GW1 | Selenium MRL elevated due to matrix interference (dilution was done).             |
| Sample ID: 1065419 | BH6 (MW) - GW1 | Arsenic and Selenium MRL elevated due to matrix interference (dilution was done). |
| Sample ID: 1065421 | DUP - GW1      | Arsenic and Selenium MRL elevated due to matrix interference (dilution was done). |

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400-179 Colonnade Rd.  
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Attention: Mr. Luke Lopers  
PO#: 14114  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323988  
Date Submitted: 2013-10-29  
Date Reported: 2013-11-05  
Project: T021226-E1  
COC #: 166450

Page 1 of 7

**Dear Luke Lopers:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:

APPROVAL: \_\_\_\_\_

Lorna Wilson  
Laboratory Supervisor, Inorganics

APPROVAL: \_\_\_\_\_

Charlie (Long) Qu  
Laboratory Supervisor, Organics

Exova (Ottawa) is certified and accredited for specific parameters by:

CALA, Canadian Association for Laboratory Accreditation (to ISO 17025), OMAFRA, Ontario Ministry of Agriculture, Food and Rural Affairs (for farm soils), Licensed by Ontario MOE for specific tests in drinking water.

Exova (Mississauga) is certified and accredited for specific parameters by:

SCC, Standards Council of Canada (to ISO 17025)

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only.



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Report Number: 1323988  
Date Submitted: 2013-10-29  
Date Reported: 2013-11-05  
Project: T021226-E1  
COC #: 166450

| Group       | Analyte                      | MRL  | Units | Guideline   | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. |
|-------------|------------------------------|------|-------|-------------|--------------------------------------------------------------------------|
| Misc/Others | pH                           | 1.00 |       |             | 1069025<br>Groundwater                                                   |
| VOCs        | Acetone                      | 50   | ug/L  | STD-130000  | 2013-10-29<br>BH5-GW2                                                    |
|             | Benzene                      | 0.5  | ug/L  | STD-430     |                                                                          |
|             | Bromodichloromethane         | 0.3  | ug/L  | STD-85000   |                                                                          |
|             | Bromoform                    | 0.4  | ug/L  | STD-770     |                                                                          |
|             | Bromomethane                 | 0.5  | ug/L  | STD-56      |                                                                          |
|             | c-1,3-Dichloropropylene      | 0.2  | ug/L  |             |                                                                          |
|             | Carbon Tetrachloride         | 0.2  | ug/L  | STD-8.4     |                                                                          |
|             | Chlorobenzene                | 0.2  | ug/L  | STD-630     |                                                                          |
|             | Chloroform                   | 0.5  | ug/L  | STD-22      |                                                                          |
|             | Dibromochloromethane         | 0.3  | ug/L  | STD-82000   |                                                                          |
|             | Dichlorobenzene, 1,2-        | 0.4  | ug/L  | STD-9600    |                                                                          |
|             | Dichlorobenzene, 1,3-        | 0.4  | ug/L  | STD-9600    |                                                                          |
|             | Dichlorobenzene, 1,4-        | 0.4  | ug/L  | STD-67      |                                                                          |
|             | Dichlorodifluoromethane      | 0.5  | ug/L  | STD-4400    |                                                                          |
|             | Dichloroethane, 1,1-         | 0.4  | ug/L  | STD-3100    |                                                                          |
|             | Dichloroethane, 1,2-         | 0.2  | ug/L  | STD-12      |                                                                          |
|             | Dichloroethylene, 1,1-       | 0.5  | ug/L  | STD-17      |                                                                          |
|             | Dichloroethylene, 1,2-cis-   | 0.4  | ug/L  | STD-17      |                                                                          |
|             | Dichloroethylene, 1,2-trans- | 0.4  | ug/L  | STD-17      |                                                                          |
|             | Dichloropropane, 1,2-        | 0.5  | ug/L  | STD-140     |                                                                          |
|             | Ethylbenzene                 | 0.5  | ug/L  | STD-2300    |                                                                          |
|             | Ethylene dibromide           | 0.2  | ug/L  | STD-0.83    |                                                                          |
|             | Hexane (n)                   | 5    | ug/L  | STD-520     |                                                                          |
|             | m/p-xylene                   | 0.5  | ug/L  |             |                                                                          |
|             | Methyl Ethyl Ketone          | 10   | ug/L  | STD-1500000 |                                                                          |

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Report Number: 1323988  
Date Submitted: 2013-10-29  
Date Reported: 2013-11-05  
Project: T021226-E1  
COC #: 166450

| Group                     | Analyte                        | MRL | Units | Lab I.D.                     |           |
|---------------------------|--------------------------------|-----|-------|------------------------------|-----------|
|                           |                                |     |       | Sample Matrix<br>Sample Type | Guideline |
| VOCs                      | Methyl Isobutyl Ketone         | 10  | ug/L  | STD-580000                   | <10       |
|                           | Methyl tert-Butyl Ether (MTBE) | 10  | ug/L  | STD-1400                     | <10       |
|                           | Methylene Chloride             | 4.0 | ug/L  | STD-5500                     | <4.0      |
|                           | o-xylene                       | 0.5 | ug/L  |                              | <0.5      |
|                           | Styrene                        | 0.5 | ug/L  | STD-9100                     | <0.5      |
|                           | t-1,3-Dichloropropylene        | 0.2 | ug/L  |                              | <0.2      |
|                           | Tetrachloroethane, 1,1,1,2-    | 0.5 | ug/L  | STD-28                       | <0.5      |
|                           | Tetrachloroethane, 1,1,2,2-    | 0.5 | ug/L  | STD-15                       | <0.5      |
|                           | Tetrachloroethylene            | 0.3 | ug/L  | STD-17                       | 1.2       |
|                           | Toluene                        | 0.5 | ug/L  | STD-18000                    | <0.5      |
|                           | Trichloroethane, 1,1,1-        | 0.4 | ug/L  | STD-6700                     | <0.4      |
|                           | Trichloroethane, 1,1,2-        | 0.4 | ug/L  | STD-30                       | <0.4      |
|                           | Trichloroethylene              | 0.3 | ug/L  | STD-17                       | <0.3      |
|                           | Trichlorofluoromethane         | 0.5 | ug/L  | STD-2500                     | <0.5      |
| VOCs Surrogates<br>(%REC) | Vinyl Chloride                 | 0.2 | ug/L  | STD-1.7                      | <0.2      |
|                           | Xylene Mixture                 | 1.0 | ug/L  | STD-4200                     | <1.0      |
|                           | 1,2-dichloroethane-d4          | 0   | %     |                              | 97        |
|                           | 4-bromofluorobenzene           | 0   | %     |                              | 100       |
|                           | Toluene-d8                     | 0   | %     |                              | 101       |

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Report Number: 1323988  
Date Submitted: 2013-10-29  
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Project: T021226-E1  
COC #: 166450

QC Summary

| Analyte                     | Blank                    | QC % Rec       | QC Limits |
|-----------------------------|--------------------------|----------------|-----------|
| Run No 0                    | Analysis Date 2013-10-31 | Method V 8260B |           |
| Xylene Mixture              |                          |                |           |
| Run No 260253               | Analysis Date 2013-10-31 | Method V 8260B |           |
| Tetrachloroethane, 1,1,1,2- | <0.5 ug/L                | 112            | 80-120    |
| Trichloroethane, 1,1,1-     | <0.4 ug/L                | 95             | 80-120    |
| Tetrachloroethane, 1,1,2,2- | <0.5 ug/L                | 116            | 80-120    |
| Trichloroethane, 1,1,2-     | <0.4 ug/L                | 101            | 80-120    |
| Dichloroethane, 1,1-        | <0.4 ug/L                | 91             | 80-120    |
| Dichloroethylene, 1,1-      | <0.5 ug/L                | 113            | 80-120    |
| Dichlorobenzene, 1,2-       | <0.4 ug/L                | 101            | 80-120    |
| Dichloroethane, 1,2-        | <0.2 ug/L                | 98             | 80-120    |
| 1,2-dichloroethane-d4       | 101 %                    | 89             | 80-120    |
| Dichloropropane, 1,2-       | <0.5 ug/L                | 109            | 80-120    |
| Dichlorobenzene, 1,3-       | <0.4 ug/L                | 107            | 80-120    |
| Dichlorobenzene, 1,4-       | <0.4 ug/L                | 102            | 80-120    |

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**QC Summary**

| Analyte                    | Blank     | QC<br>% Rec | QC<br>Limits |
|----------------------------|-----------|-------------|--------------|
| Benzene                    | <0.5 ug/L | 109         | 80-120       |
| Bromodichloromethane       | <0.3 ug/L | 99          | 80-120       |
| Bromoform                  | <0.4 ug/L | 100         | 80-120       |
| Bromomethane               | <0.5 ug/L | 76          | 70-130       |
| Dichloroethylene, 1,2-cis- | <0.4 ug/L | 106         | 80-120       |
| Dichloropropene, 1,3-cis-  | <0.2 ug/L | 84          | 80-120       |
| Carbon Tetrachloride       | <0.2 ug/L | 107         | 80-120       |
| Chloroform                 | <0.5 ug/L | 103         | 80-120       |
| Dibromochloromethane       | <0.3 ug/L | 98          | 80-120       |
| Dichlorodifluoromethane    | <0.5 ug/L | 90          | 70-130       |
| Methylene Chloride         | <4.0 ug/L | 116         | 60-200       |
| Ethylbenzene               | <0.5 ug/L | 111         | 80-120       |
| Ethylene dibromide         | <0.2 ug/L | 116         | 80-120       |
| Hexane (n)                 | <5 ug/L   | 80          | 70-130       |
| m/p-xylene                 | <0.5 ug/L | 114         | 80-120       |
| Chlorobenzene              | <0.2 ug/L | 103         | 80-120       |
| o-xylene                   | <0.5 ug/L | 115         | 80-120       |

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Project: T021226-E1  
COC #: 166450

### QC Summary

| Analyte                        | Blank                           | QC % Rec                   | QC Limits |
|--------------------------------|---------------------------------|----------------------------|-----------|
| Styrene                        | <0.5 ug/L                       | 102                        | 80-120    |
| Dichloroethylene, 1,2-trans-   | <0.4 ug/L                       | 115                        | 80-120    |
| Dichloropropene, 1,3-trans-    | <0.2 ug/L                       | 80                         | 80-120    |
| Tetrachloroethylene            | <0.3 ug/L                       | 108                        | 80-120    |
| Toluene                        | <0.5 ug/L                       | 102                        | 80-120    |
| Toluene-d8                     | 99 %                            | 98                         | 80-120    |
| Trichloroethylene              | <0.3 ug/L                       | 108                        | 80-120    |
| Trichlorofluoromethane         | <0.5 ug/L                       | 115                        | 80-120    |
| Vinyl Chloride                 | <0.2 ug/L                       | 114                        | 70-130    |
| <b>Run No</b> 260254           | <b>Analysis Date</b> 2013-10-31 | <b>Method</b> V 8260B      |           |
| Acetone                        | <50 ug/L                        | 117                        | 80-120    |
| Methyl Ethyl Ketone            | <10 ug/L                        | 114                        | 80-120    |
| Methyl Isobutyl Ketone         | <10 ug/L                        | 108                        | 80-120    |
| Methyl tert-Butyl Ether (MTBE) | <10 ug/L                        | 117                        | 80-120    |
| <b>Run No</b> 260495           | <b>Analysis Date</b> 2013-11-05 | <b>Method</b> C SM4500-H+B |           |
| pH                             | 6.09                            | 100                        | 90-110    |

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MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable  
Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO  
= Interim Provincial Water Quality Objective, TDR = Typical Desired Range



Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 14114  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323988  
Date Submitted: 2013-10-29  
Date Reported: 2013-11-05  
Project: T021226-E1  
COC #: 166450

Guideline = O.Reg 153-T3-Non-Potable GW

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= Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1324828  
Date Submitted: 2013-11-08  
Date Reported: 2013-11-13  
Project: T021226-E1  
COC #: 161543

Page 1 of 7

**Dear Luke Lopers:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:

APPROVAL: \_\_\_\_\_

Lorna Wilson  
Laboratory Supervisor, Inorganics

APPROVAL: \_\_\_\_\_

Justin Deagle  
Acting Team Leader, Organics

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SCC, Standards Council of Canada (to ISO 17025)

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only.





Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1324828  
Date Submitted: 2013-11-08  
Date Reported: 2013-11-13  
Project: T021226-E1  
COC #: 161543

| Group                     | Analyte                   | MRL  | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. |
|---------------------------|---------------------------|------|-------|-----------|--------------------------------------------------------------------------|
| General Chemistry<br>VOCs | pH                        | 1.00 |       | 7.90      | 1071566<br>Groundwater                                                   |
|                           | 1,1,1,2-tetrachloroethane | 0.5  | ug/L  | STD-0.058 | 2013-11-07<br>BH5 - GW3                                                  |
|                           | 1,1,1-trichloroethane     | 0.4  | ug/L  | STD-0.38  |                                                                          |
|                           | 1,1,2,2-tetrachloroethane | 0.5  | ug/L  | STD-0.05  |                                                                          |
|                           | 1,1,2-trichloroethane     | 0.4  | ug/L  | STD-0.05  |                                                                          |
|                           | 1,1-dichloroethane        | 0.4  | ug/L  | STD-3.5   |                                                                          |
|                           | 1,1-dichloroethylene      | 0.5  | ug/L  | STD-0.05  |                                                                          |
|                           | 1,2-dichlorobenzene       | 0.4  | ug/L  | STD-3.4   |                                                                          |
|                           | 1,2-dichloroethane        | 0.2  | ug/L  | STD-0.05  |                                                                          |
|                           | 1,2-dichloroethane-d4     | 0    | %     | 115       |                                                                          |
|                           | 1,2-dichloropropane       | 0.5  | ug/L  | STD-0.05  |                                                                          |
|                           | 1,3-dichlorobenzene       | 0.4  | ug/L  | STD-4.8   |                                                                          |
|                           | 1,4-dichlorobenzene       | 0.4  | ug/L  | STD-0.083 |                                                                          |
|                           | 4-bromofluorobenzene      | 0    | %     | 117       |                                                                          |
|                           | Acetone                   | 50   | ug/L  | STD-16    |                                                                          |
|                           | Benzene                   | 0.5  | ug/L  | STD-0.21  |                                                                          |
|                           | Bromodichloromethane      | 0.3  | ug/L  | STD-13    |                                                                          |
|                           | Bromoform                 | 0.4  | ug/L  | STD-0.27  |                                                                          |
|                           | Bromomethane              | 0.5  | ug/L  | STD-0.05  |                                                                          |
|                           | c-1,2-Dichloroethylene    | 0.4  | ug/L  | STD-3.4   |                                                                          |
|                           | c-1,3-Dichloropropylene   | 0.2  | ug/L  | <0.2      |                                                                          |
|                           | Carbon Tetrachloride      | 0.2  | ug/L  | STD-0.05  |                                                                          |
|                           | Chloroform                | 0.5  | ug/L  | STD-0.05  |                                                                          |
|                           | Dibromochloromethane      | 0.3  | ug/L  | STD-9.4   |                                                                          |
|                           | Dichlorodifluoromethane   | 0.5  | ug/L  | STD-16    |                                                                          |
|                           | Dichloromethane           | 4.0  | ug/L  | STD-0.1   |                                                                          |

Guideline = O.Reg 153-T3-Res/Park-Coarse

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= Interim Provincial Water Quality Objective, TDR = Typical Desired Range



Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1324828  
Date Submitted: 2013-11-08  
Date Reported: 2013-11-13  
Project: T021226-E1  
COC #: 161543

| Group | Analyte                        | MRL | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. |
|-------|--------------------------------|-----|-------|-----------|--------------------------------------------------------------------------|
| VOCs  | Ethylbenzene                   | 0.5 | ug/L  | STD-2     | 1071566<br>Groundwater                                                   |
|       | Ethylene Dibromide             | 0.2 | ug/L  | STD-0.05  | 2013-11-07<br>BH5 - GW3                                                  |
|       | Hexane                         | 5   | ug/L  | STD-2.8   |                                                                          |
|       | m/p-xylene                     | 0.5 | ug/L  |           |                                                                          |
|       | Methyl Ethyl Ketone (MEK)      | 10  | ug/L  | STD-16    |                                                                          |
|       | Methyl Isobutyl Ketone (MIBK)  | 10  | ug/L  | STD-1.7   |                                                                          |
|       | Methyl Tert Butyl Ether (MTBE) | 10  | ug/L  | STD-0.75  |                                                                          |
|       | Monochlorobenzene              | 0.2 | ug/L  | STD-2.4   |                                                                          |
|       | o-xylene                       | 0.5 | ug/L  |           |                                                                          |
|       | Styrene                        | 0.5 | ug/L  | STD-0.7   |                                                                          |
|       | t-1,2-Dichloroethylene         | 0.4 | ug/L  | STD-0.084 |                                                                          |
|       | t-1,3-Dichloropropylene        | 0.2 | ug/L  |           |                                                                          |
|       | Tetrachloroethylene            | 0.3 | ug/L  | STD-0.28  |                                                                          |
|       | Toluene                        | 0.5 | ug/L  | STD-2.3   |                                                                          |
|       | Toluene-d8                     | 0   | %     |           | 105                                                                      |
|       | Trichloroethylene              | 0.3 | ug/L  | STD-0.061 |                                                                          |
|       | Trichlorofluoromethane         | 0.5 | ug/L  | STD-4     |                                                                          |
|       | Vinyl Chloride                 | 0.2 | ug/L  | STD-0.02  |                                                                          |
|       | Xylene, total                  | 1.0 | ug/L  | STD-3.1   |                                                                          |

Guideline = O.Reg 153-T3-Res/Park-Coarse

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400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13590  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1324828  
Date Submitted: 2013-11-08  
Date Reported: 2013-11-13  
Project: T021226-E1  
COC #: 161543

QC Summary

| Analyte                        | Blank                    | QC % Rec            | QC Limits |
|--------------------------------|--------------------------|---------------------|-----------|
| Run No 261022                  | Analysis Date 2013-11-12 | Method C SM4500-H+B |           |
| pH                             | 6.10                     | 100                 | 90-110    |
| Run No 261026                  | Analysis Date 2013-11-13 | Method V 8260B      |           |
| Acetone                        | <50 ug/L                 | 12                  | 80-120    |
| Methyl Ethyl Ketone (MEK)      | <10 ug/L                 | 111                 | 80-120    |
| Methyl Isobutyl Ketone (MIBK)  | <10 ug/L                 | 112                 | 80-120    |
| Methyl Tert Butyl Ether (MTBE) | <10 ug/L                 | 113                 | 80-120    |
| Run No 261027                  | Analysis Date 2013-11-13 | Method V 8260B      |           |
| 1,1,1,2-tetrachloroethane      | <0.5 ug/L                | 116                 | 80-120    |
| 1,1,1-trichloroethane          | <0.4 ug/L                | 116                 | 80-120    |
| 1,1,2,2-tetrachloroethane      | <0.5 ug/L                | 110                 | 80-120    |
| 1,1,2-trichloroethane          | <0.4 ug/L                | 101                 | 80-120    |
| 1,1-dichloroethane             | <0.4 ug/L                | 115                 | 80-120    |
| 1,1-dichloroethylene           | <0.5 ug/L                | 115                 | 80-120    |
| 1,2-dichlorobenzene            | <0.4 ug/L                | 119                 | 80-120    |

Guideline = O.Reg 153-T3-Res/Park-Coarse

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Report Number: 1324828  
Date Submitted: 2013-11-08  
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Project: T021226-E1  
COC #: 161543

### QC Summary

| Analyte                 | Blank     | QC % Rec | QC Limits |
|-------------------------|-----------|----------|-----------|
| 1,2-dichloroethane      | <0.2 ug/L | 118      | 80-120    |
| 1,2-dichloroethane-d4   | 94 %      | 109      | 80-120    |
| 1,2-dichloropropane     | <0.5 ug/L | 118      | 80-120    |
| 1,3-dichlorobenzene     | <0.4 ug/L | 106      | 80-120    |
| 1,4-dichlorobenzene     | <0.4 ug/L | 105      | 80-120    |
| Benzene                 | <0.5 ug/L | 119      | 80-120    |
| Bromodichloromethane    | <0.3 ug/L | 119      | 80-120    |
| Bromoform               | <0.4 ug/L | 101      | 80-120    |
| Bromomethane            | <0.5 ug/L | 101      | 70-130    |
| c-1,2-Dichloroethylene  | <0.4 ug/L | 120      | 80-120    |
| c-1,3-Dichloropropylene | <0.2 ug/L | 85       | 80-120    |
| Carbon Tetrachloride    | <0.2 ug/L | 119      | 80-120    |
| Chloroform              | <0.5 ug/L | 117      | 80-120    |
| Dibromochloromethane    | <0.3 ug/L | 102      | 80-120    |
| Dichlorodifluoromethane | <0.5 ug/L | 71       | 70-130    |
| Dichloromethane         | <4.0 ug/L | 91       | 60-200    |
| Ethylbenzene            | <0.5 ug/L | 117      | 80-120    |

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Report Number: 1324828  
Date Submitted: 2013-11-08  
Date Reported: 2013-11-13  
Project: T021226-E1  
COC #: 161543

### QC Summary

| Analyte                 | Blank                    | QC<br>% Rec    | QC<br>Limits |
|-------------------------|--------------------------|----------------|--------------|
| Ethylene Dibromide      | <0.2 ug/L                | 100            | 80-120       |
| Hexane                  | <.5 ug/L                 | 100            | 70-130       |
| m/p-xylene              | <0.5 ug/L                | 118            | 80-120       |
| Monochlorobenzene       | <0.2 ug/L                | 100            | 80-120       |
| o-xylene                | <0.5 ug/L                | 116            | 80-120       |
| Styrene                 | <0.5 ug/L                | 116            | 80-120       |
| t-1,2-Dichloroethylene  | <0.4 ug/L                | 105            | 80-120       |
| t-1,3-Dichloropropylene | <0.2 ug/L                | 102            | 80-120       |
| Tetrachloroethylene     | <0.3 ug/L                | 103            | 80-120       |
| Toluene                 | <0.5 ug/L                | 118            | 80-120       |
| Toluene-d8              | 105 %                    | 112            | 80-120       |
| Trichloroethylene       | <0.3 ug/L                | 116            | 80-120       |
| Trichlorofluoromethane  | <0.5 ug/L                | 108            | 80-120       |
| Vinyl Chloride          | <0.2 ug/L                | 84             | 70-130       |
| Run No 261035           | Analysis Date 2013-11-13 | Method V 8260B |              |
| Xylene; total           |                          |                |              |

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Report Number: 1324828  
Date Submitted: 2013-11-08  
Date Reported: 2013-11-13  
Project: T021226-E1  
COC #: 161543

**Guideline = O.Reg 153-T3-Res/Park-Coarse**  
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Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13834  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323130  
Date Submitted: 2013-10-18  
Date Reported: 2013-10-25  
Project: T021226-E1  
COC #: 174539

Page 1 of 6

**Dear Luke Lopers:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:

APPROVAL: \_\_\_\_\_

Lorna Wilson  
Laboratory Supervisor, Inorganics

APPROVAL: \_\_\_\_\_

Charlie (Long) Qu  
Laboratory Supervisor, Organics

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Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13834  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323130  
Date Submitted: 2013-10-18  
Date Reported: 2013-10-25  
Project: T021226-E1  
COC #: 174539

| Group                                      | Analyte                   | MRL    | Units | Guideline  | 1066328<br>REG 347 LCH<br>2013-10-18<br>TCLP |
|--------------------------------------------|---------------------------|--------|-------|------------|----------------------------------------------|
| Cyanide<br>Flashpoint<br>General Chemistry | Cyanide (free)            | 0.05   | mg/L  | LQC-20.0   | <0.05                                        |
|                                            | Flash Point               |        | C     | MAT-61     | >70                                          |
|                                            | F                         | 0.10   | mg/L  | LQC-150.0  | 0.16                                         |
|                                            | Moisture                  | 0.1    | %     |            | 6.5                                          |
| Mercury<br>Metals                          | NO2 + NO3 as N            | 0.10   | mg/L  | LQC-1000   | <0.10                                        |
|                                            | Hg                        | 0.0001 | mg/L  | LQC-0.1    | <0.0001                                      |
|                                            | Ag                        | 0.001  | mg/L  | LQC-5      | <0.001                                       |
|                                            | As                        | 0.01   | mg/L  | LQC-2.5    | <0.01                                        |
| VOCs                                       | B                         | 0.5    | mg/L  | LQC-500.0  | <0.5                                         |
|                                            | Ba                        | 0.1    | mg/L  | LQC-100.0  | 0.4                                          |
|                                            | Cd                        | 0.001  | mg/L  | LQC-0.5    | <0.001                                       |
|                                            | Cr                        | 0.01   | mg/L  | LQC-5.0    | <0.01                                        |
|                                            | Pb                        | 0.01   | mg/L  | LQC-5.0    | <0.01                                        |
|                                            | Se                        | 0.01   | mg/L  | LQC-1.0    | <0.01                                        |
|                                            | U                         | 0.01   | mg/L  | LQC-10.0   | <0.01                                        |
|                                            | 1,1-dichloroethylene      | 0.5    | ug/L  | LQC-1400   | <0.5                                         |
|                                            | 1,2-dichlorobenzene       | 0.4    | ug/L  | LQC-20000  | <0.4                                         |
|                                            | 1,2-dichloroethane        | 0.2    | ug/L  | LQC-500    | <0.2                                         |
|                                            | 1,2-dichloroethane-d4     | 0      | %     |            | 112                                          |
|                                            | 1,4-dichlorobenzene       | 0.4    | ug/L  | LQC-500    | <0.4                                         |
|                                            | 4-bromofluorobenzene      | 0      | %     |            | 103                                          |
|                                            | Benzene                   | 0.5    | ug/L  | LQC-500    | <0.5                                         |
|                                            | Carbon Tetrachloride      | 0.2    | ug/L  | LQC-500    | <0.2                                         |
|                                            | Chloroform                | 0.5    | ug/L  | LQC-10000  | <0.5                                         |
|                                            | Dichloromethane           | 4.0    | ug/L  | LQC-5000   | <4.0                                         |
|                                            | Methyl Ethyl Ketone (MEK) | 10     | ug/L  | LQC-200000 | <10                                          |

**Guideline = REG 558**  
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Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13834  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323130  
Date Submitted: 2013-10-18  
Date Reported: 2013-10-25  
Project: T021226-E1  
COC #: 174539

| Group | Analyte             | MRL | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. |
|-------|---------------------|-----|-------|-----------|--------------------------------------------------------------------------|
| VOCs  | Monochlorobenzene   | 0.2 | ug/L  | LQC-8000  | 1066328<br>REG 347 LCH<br><br>2013-10-18<br>TCLP                         |
|       | Tetrachloroethylene | 0.3 | ug/L  | LQC-3000  |                                                                          |
|       | Toluene-d8          | 0   | %     |           |                                                                          |
|       | Trichloroethylene   | 0.3 | ug/L  | LQC-5000  |                                                                          |
|       | Vinyl Chloride      | 0.2 | ug/L  | LQC-200   |                                                                          |

Guideline = REG 558 \* = Guideline Exceedence

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K2E 7J4  
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Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323130  
Date Submitted: 2013-10-18  
Date Reported: 2013-10-25  
Project: T021226-E1  
COC #: 174539

### QC Summary

| Analyte              | Blank                           | QC % Rec                     | QC Limits |
|----------------------|---------------------------------|------------------------------|-----------|
| <b>Run No</b> 259488 | <b>Analysis Date</b> 2013-10-25 | <b>Method</b> C SM4500-NO3-F |           |
| NO2 + NO3 as N       | <0.10 mg/L                      |                              | 80-120    |
| <b>Run No</b> 259592 | <b>Analysis Date</b> 2013-10-22 | <b>Method</b> C SM2540B      |           |
| Moisture             |                                 |                              | 80-120    |
| <b>Run No</b> 259685 | <b>Analysis Date</b> 2013-10-23 | <b>Method</b> EPA 200.8      |           |
| Ag                   | <0.001 mg/L                     | 94                           | 89-111    |
| As                   | <0.01 mg/L                      | 107                          | 81-119    |
| B                    | <0.5 mg/L                       | 94                           | 81-119    |
| Ba                   | <0.1 mg/L                       | 103                          | 91-109    |
| Cd                   | <0.001 mg/L                     | 99                           | 86-114    |
| Cr                   | <0.01 mg/L                      | 99                           | 89-111    |
| Pb                   | <0.01 mg/L                      | 99                           | 89-111    |
| Se                   | <0.01 mg/L                      | 105                          | 77-123    |
| U                    | <0.01 mg/L                      | 101                          | 87-113    |
| <b>Run No</b> 259690 | <b>Analysis Date</b> 2013-10-23 | <b>Method</b> C ASTM D56     |           |

**Guideline = REG 558**

\* = Guideline Exceedence

\*\* = Analysis completed at Mississauga, Ontario.

Results relate only to the parameters tested on the samples submitted.

Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline,  
MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable  
Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO  
= Interim Provincial Water Quality Objective, TDR = Typical Desired Range



Client: Inspec-Sol Inc. (Ottawa)  
400-179 Colonnade Rd.  
Ottawa, ON  
K2E 7J4  
Attention: Mr. Luke Lopers  
PO#: 13834  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323130  
Date Submitted: 2013-10-18  
Date Reported: 2013-10-25  
Project: T021226-E1  
COC #: 174539

### QC Summary

| Analyte                   | Blank                    | QC % Rec               | QC Limits |
|---------------------------|--------------------------|------------------------|-----------|
| Flash Point               |                          |                        |           |
| Run No 259720             | Analysis Date 2013-10-23 | Method M SM3112B-3500B |           |
| Hg                        | <0.0001 mg/L             | 94                     | 70-130    |
| Run No 259724             | Analysis Date 2013-10-23 | Method C SM4500-FC     |           |
| F                         | <0.10 mg/L               | 99                     | 90-110    |
| Run No 259728             | Analysis Date 2013-10-24 | Method V 8260B         |           |
| Methyl Ethyl Ketone (MEK) | <10 ug/L                 | 116                    | 80-120    |
| Run No 259732             | Analysis Date 2013-10-23 | Method V 8260B         |           |
| 1,1-dichloroethylene      | <0.5 ug/L                | 88                     | 80-120    |
| 1,2-dichlorobenzene       | <0.4 ug/L                | 106                    | 80-120    |
| 1,2-dichloroethane        | <0.2 ug/L                | 109                    | 80-120    |
| 1,2-dichloroethane-d4     | 83 %                     | 108                    | 80-120    |
| 1,4-dichlorobenzene       | <0.4 ug/L                | 96                     | 80-120    |
| Benzene                   | <0.5 ug/L                | 101                    | 80-120    |
| Carbon Tetrachloride      | <0.2 ug/L                | 100                    | 80-120    |
| Chloroform                | <0.5 ug/L                | 98                     | 80-120    |
| Dichloromethane           | <4.0 ug/L                | 114                    | 60-200    |

**Guideline = REG 558** \* = Guideline Exceedence

\*\* = Analysis completed at Mississauga, Ontario.  
Results relate only to the parameters tested on the samples submitted.  
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline,  
MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable  
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= Interim Provincial Water Quality Objective, TDR = Typical Desired Range



Client: Inspec-Sol Inc. (Ottawa)  
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PO#: 13834  
Invoice to: Inspec-Sol Inc. (Ottawa)

Report Number: 1323130  
Date Submitted: 2013-10-18  
Date Reported: 2013-10-25  
Project: T021226-E1  
COC #: 174539

QC Summary

| Analyte             | Blank                    | QC % Rec            | QC Limits |
|---------------------|--------------------------|---------------------|-----------|
| Monochlorobenzene   | <0.2 ug/L                | 94                  | 80-120    |
| Tetrachloroethylene | <0.3 ug/L                | 90                  | 80-120    |
| Toluene-d8          | 100 %                    | 101                 | 80-120    |
| Trichloroethylene   | <0.3 ug/L                | 94                  | 80-120    |
| Vinyl Chloride      | <0.2 ug/L                | 114                 | 70-130    |
| Run No 259766       | Analysis Date 2013-10-24 | Method C SM4500-CNC |           |
| Cyanide (free)      | <0.005 mg/L              | 88                  | 75-125    |

Guideline = REG 558 \* = Guideline Exceedence

\*\* = Analysis completed at Mississauga, Ontario.  
Results relate only to the parameters tested on the samples submitted.  
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline,  
MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable  
Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO  
= Interim Provincial Water Quality Objective, TDR = Typical Desired Range



**LOSS BY WASHING PASS 0.075MM SIEVE  
(LS-601)**

|                       |                                  |                      |            |
|-----------------------|----------------------------------|----------------------|------------|
| <b>CLIENT:</b>        | Robinson Park Development        | <b>LAB No.:</b>      | G-13-029   |
| <b>PROJECT/SITE:</b>  | 17, 19, 23 Robinson Ave., Ottawa | <b>PROJECT No.:</b>  | T021226-E1 |
| <b>Material Type:</b> | Soil                             | <b>Date Sampled:</b> | 8-Oct-13   |
| <b>Source:</b>        | N/A                              | <b>Sampled By:</b>   | J. Poisson |

| Sample No. | Initial Mass<br>Before Wash (g) | Mass After<br>Wash (g) | Amount Loss<br>By Wash (g) | Percent Loss<br>By Washing (%) |
|------------|---------------------------------|------------------------|----------------------------|--------------------------------|
| BH4        | 340.4                           | 186.8                  | 153.6                      | 45.1                           |
| BH5        | 504.5                           | 283.7                  | 220.8                      | 43.8                           |
| BH6        | 501.9                           | 332.5                  | 169.4                      | 33.8                           |
| BH7        | 566.1                           | 349.9                  | 216.2                      | 38.2                           |
|            |                                 |                        |                            |                                |
|            |                                 |                        |                            |                                |
|            |                                 |                        |                            |                                |
|            |                                 |                        |                            |                                |

| Sample Size<br>(based on Nomial Size) |        |
|---------------------------------------|--------|
| 2.36 mm                               | 100 g  |
| 4.75 mm                               | 500 g  |
| 9.50mm                                | 1000 g |
| 19.00 mm                              | 2500 g |
| 26.50 mm                              | 5000 g |

**Note:**

Nominal size defined in LS Manual LS-602 as the largest sieve in the applicable specification upon which any material is permitted to be retained

**Control Range**

0.40 - 0.90% Loss  
Average - 0.70

**REMARKS:**
**PERFORMED BY:**

G. Valeyev

**DATE:**

14-Nov-13

**VERIFIED BY:**
**DATE:**

14-Nov-13

## Appendix B

### Chain of Title



## READ Abstracts Limited

---

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4

Email: [search@readsearch.com](mailto:search@readsearch.com)

Tel.: 613-236-0664

Fax: 613-236-3677

### ENVIRONMENTAL SEARCH

GHD

Attn: Scott

#### BRIEF DESCRIPTION OF LAND:

19 Robinson Ave., Ottawa

Lot 43 and 45 and Part of Lot 47, and Part Lane, Plan 190, North Robinson

PIN: 04207-0357

LAST REGISTERED OWNER: 954194 ONTARIO INC.

#### CHAIN OF TITLE:

Plan 190 registered Se4p 14, 1899

By T. W. McDermott and R. P. Robinson

#### **Lot 43**

Deed OE927 registered October 6, 1903

From R. P. Robinson to Mary McNiel

Deed 87649 registered Dec 9, 1908

From Mary McNiel to William Joynt

Deed 99607 registered October 6, 1910

From William Joynt to Robert Scarff

Deed 106685 registered Sep 7, 1911

From Robert Scarff to George Mahon

Deed 236750 registered Nov 21, 1941

From George Mahon to George and Mary Mahon

Deed N358447 registered October 2, 1986

From estate of Mary Mahon to Iberica Development Corp.

**Lot 45**

Deed OE929 registered Oct 17, 1903  
From T. W. McDermott to Onesime Nault

Deed 145284 registered Apr 8, 1919  
From Onesime Nault to Frederick Mahon

Deed 225298 registered Jul 30, 1938  
From Frederick Mahon to George and Mary Mahon

Deed N297852 registered Jul 31, 1985  
From estate of Mary Mahon to Enrique Iglesias

Deed N426497 registered Feb 5, 1988  
From Enrique Iglesias to Iberica Development Corp.

**Lot 47**

Deed OE707 registered Sep 14, 1900  
From T. W. McDermott and R. P. Robinson to John Ogilvie

Deed OE1412 registered Mar 17, 1908  
From John Ogilvie to Benjamin Bigford

Deed 176326 registered Aug 29, 1924  
From estate of Benjamin Bigford to Ida Bigford

Deed 369400 registered Mar 6, 1958  
From Ida Thompson (Bigford) to Richard Goodwin

Deed NS99446 register Oct 2, 1980  
From Richard Goodwin to James and Nancy Hogan

Deed N345387 registered Jul 15, 1986  
From James and Nancy Hogan to Iberica Development Corp.

**Part Lane to rear of Lots 43, 45, 47**

Iberica Development Corp. owner as of Dec 4, 1989, by Certificate of 1<sup>st</sup> registration in Land Titles.

Note there are no deeds recorded for this part of the lane.

**All**

Deed OC286272 registered Dec 29, 2003  
From Iberica Development Corp. to 954194 Ontario Inc. and Iglesias Investments Ltd.

Deed OC1857060 registered Dec 23, 2016  
From Iglesias Investments Ltd. to 954194 Ontario Inc.

# Appendix C

## Ecolog ERIS Site Database Search



# DATABASE REPORT

**Project Property:** 11180676-E1  
17&19 Robinson Avenue  
Ottawa ON K1N 8N8

**Project No:** 11180676

**Report Type:** Standard Report

**Order No:** 20180727213

**Requested by:** GHD Ltd.

**Date Completed:** August 1, 2018

**Environmental Risk  
Information Services**  
A division of Glacier Media Inc.  
P: 1.866.517.5204  
E: [info@erisinfo.com](mailto:info@erisinfo.com)

**[www.erisinfo.com](http://www.erisinfo.com)**



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## **Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY**

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# Executive Summary

## **Property Information:**

**Project Property:** 11180676-E1  
17&19 Robinson Avenue Ottawa ON K1N 8N8

**Project No:** 11180676

## **Coordinates:**

**Latitude:** 45.41819  
**Longitude:** -75.667501  
**UTM Northing:** 5,029,624.38  
**UTM Easting:** 447,774.82  
**UTM Zone:** UTM Zone 18T

**Elevation:** 202 FT  
61.66 M

## **Order Information:**

**Order No:** 20180727213  
**Date Requested:** July 27, 2018  
**Requested by:** GHD Ltd.  
**Report Type:** Standard Report

## **Historical/Products:**

## Executive Summary: Report Summary

| <b>Database</b> | <b>Name</b>                                              | <b>Searched</b> | <b>Project Property</b> | <b>Within 0.25 km</b> | <b>Total</b> |
|-----------------|----------------------------------------------------------|-----------------|-------------------------|-----------------------|--------------|
| AAGR            | Abandoned Aggregate Inventory                            | Y               | 0                       | 0                     | 0            |
| AGR             | Aggregate Inventory                                      | Y               | 0                       | 0                     | 0            |
| AMIS            | Abandoned Mine Information System                        | Y               | 0                       | 0                     | 0            |
| ANDR            | Anderson's Waste Disposal Sites                          | Y               | 0                       | 0                     | 0            |
| AUWR            | Automobile Wrecking & Supplies                           | Y               | 0                       | 0                     | 0            |
| BORE            | Borehole                                                 | Y               | 0                       | 18                    | 18           |
| CA              | Certificates of Approval                                 | Y               | 0                       | 9                     | 9            |
| CFOT            | Commercial Fuel Oil Tanks                                | Y               | 0                       | 0                     | 0            |
| CHEM            | Chemical Register                                        | Y               | 0                       | 0                     | 0            |
| CNG             | Compressed Natural Gas Stations                          | Y               | 0                       | 0                     | 0            |
| COAL            | Inventory of Coal Gasification Plants and Coal Tar Sites | Y               | 0                       | 0                     | 0            |
| CONV            | Compliance and Convictions                               | Y               | 0                       | 0                     | 0            |
| CPU             | Certificates of Property Use                             | Y               | 0                       | 0                     | 0            |
| DRL             | Drill Hole Database                                      | Y               | 0                       | 0                     | 0            |
| DRYCLEANERS     | Dry Cleaning Facilities                                  | Y               | 0                       | 0                     | 0            |
| EASR            | Environmental Activity and Sector Registry               | Y               | 0                       | 0                     | 0            |
| EBR             | Environmental Registry                                   | Y               | 0                       | 1                     | 1            |
| ECA             | Environmental Compliance Approval                        | Y               | 0                       | 4                     | 4            |
| EEM             | Environmental Effects Monitoring                         | Y               | 0                       | 0                     | 0            |
| EHS             | ERIS Historical Searches                                 | Y               | 0                       | 6                     | 6            |
| EIIS            | Environmental Issues Inventory System                    | Y               | 0                       | 0                     | 0            |
| EMHE            | Emergency Management Historical Event                    | Y               | 0                       | 0                     | 0            |
| EXP             | List of TSSA Expired Facilities                          | Y               | 0                       | 0                     | 0            |
| FCON            | Federal Convictions                                      | Y               | 0                       | 0                     | 0            |
| FCS             | Contaminated Sites on Federal Land                       | Y               | 0                       | 0                     | 0            |
| FOFT            | Fisheries & Oceans Fuel Tanks                            | Y               | 0                       | 0                     | 0            |
| FST             | Fuel Storage Tank                                        | Y               | 0                       | 0                     | 0            |
| FSTH            | Fuel Storage Tank - Historic                             | Y               | 0                       | 0                     | 0            |
| GEN             | Ontario Regulation 347 Waste Generators Summary          | Y               | 0                       | 12                    | 12           |
| GHG             | Greenhouse Gas Emissions from Large Facilities           | Y               | 0                       | 0                     | 0            |
| HINC            | TSSA Historic Incidents                                  | Y               | 0                       | 1                     | 1            |
| IAFT            | Indian & Northern Affairs Fuel Tanks                     | Y               | 0                       | 0                     | 0            |
| INC             | TSSA Incidents                                           | Y               | 0                       | 1                     | 1            |
| LIMO            | Landfill Inventory Management Ontario                    | Y               | 0                       | 0                     | 0            |
| MINE            | Canadian Mine Locations                                  | Y               | 0                       | 0                     | 0            |
| MISA PENALTY    | Environmental Penalty Annual Report                      | Y               | 0                       | 0                     | 0            |

| <b>Database</b> | <b>Name</b>                                                   | <b>Searched</b> | <b>Project<br/>Property</b> | <b>Within 0.25 km</b> | <b>Total</b> |
|-----------------|---------------------------------------------------------------|-----------------|-----------------------------|-----------------------|--------------|
| MNR             | Mineral Occurrences                                           | Y               | 0                           | 0                     | 0            |
| NATE            | National Analysis of Trends in Emergencies System (NATES)     | Y               | 0                           | 0                     | 0            |
| NCPL            | Non-Compliance Reports                                        | Y               | 0                           | 0                     | 0            |
| NDFT            | National Defense & Canadian Forces Fuel Tanks                 | Y               | 0                           | 0                     | 0            |
| NDSP            | National Defense & Canadian Forces Spills                     | Y               | 0                           | 0                     | 0            |
| NDWD            | National Defence & Canadian Forces Waste Disposal Sites       | Y               | 0                           | 0                     | 0            |
| NEBI            | National Energy Board Pipeline Incidents                      | Y               | 0                           | 0                     | 0            |
| NEBW            | National Energy Board Wells                                   | Y               | 0                           | 0                     | 0            |
| NEES            | National Environmental Emergencies System (NEES)              | Y               | 0                           | 0                     | 0            |
| NPCB            | National PCB Inventory                                        | Y               | 0                           | 0                     | 0            |
| NPRI            | National Pollutant Release Inventory                          | Y               | 0                           | 0                     | 0            |
| OGW             | Oil and Gas Wells                                             | Y               | 0                           | 0                     | 0            |
| OOGW            | Ontario Oil and Gas Wells                                     | Y               | 0                           | 0                     | 0            |
| OPCB            | Inventory of PCB Storage Sites                                | Y               | 0                           | 0                     | 0            |
| ORD             | Orders                                                        | Y               | 0                           | 0                     | 0            |
| PAP             | Canadian Pulp and Paper                                       | Y               | 0                           | 0                     | 0            |
| PCFT            | Parks Canada Fuel Storage Tanks                               | Y               | 0                           | 0                     | 0            |
| PES             | Pesticide Register                                            | Y               | 0                           | 1                     | 1            |
| PINC            | TSSA Pipeline Incidents                                       | Y               | 0                           | 0                     | 0            |
| PRT             | Private and Retail Fuel Storage Tanks                         | Y               | 0                           | 0                     | 0            |
| PTTW            | Permit to Take Water                                          | Y               | 0                           | 0                     | 0            |
| REC             | Ontario Regulation 347 Waste Receivers Summary                | Y               | 0                           | 0                     | 0            |
| RSC             | Record of Site Condition                                      | Y               | 0                           | 0                     | 0            |
| RST             | Retail Fuel Storage Tanks                                     | Y               | 0                           | 1                     | 1            |
| SCT             | Scott's Manufacturing Directory                               | Y               | 0                           | 0                     | 0            |
| SPL             | Ontario Spills                                                | Y               | 0                           | 5                     | 5            |
| SRDS            | Wastewater Discharger Registration Database                   | Y               | 0                           | 0                     | 0            |
| TANK            | Anderson's Storage Tanks                                      | Y               | 0                           | 0                     | 0            |
| TCFT            | Transport Canada Fuel Storage Tanks                           | Y               | 0                           | 0                     | 0            |
| VAR             | TSSA Variances for Abandonment of Underground Storage Tanks   | Y               | 0                           | 0                     | 0            |
| WDS             | Waste Disposal Sites - MOE CA Inventory                       | Y               | 0                           | 0                     | 0            |
| WDSH            | Waste Disposal Sites - MOE 1991 Historical Approval Inventory | Y               | 0                           | 0                     | 0            |
| WWIS            | Water Well Information System                                 | Y               | 0                           | 37                    | 37           |
| <b>Total:</b>   |                                                               |                 | 0                           | 96                    | 96           |

# Executive Summary: Site Report Summary - Project Property

| <i>Map<br/>Key</i> | <i>DB</i> | <i>Company/Site Name</i> | <i>Address</i> | <i>Dir/Dist (m)</i> | <i>Elev diff<br/>(m)</i> | <i>Page<br/>Number</i> |
|--------------------|-----------|--------------------------|----------------|---------------------|--------------------------|------------------------|
|--------------------|-----------|--------------------------|----------------|---------------------|--------------------------|------------------------|

No records found in the selected databases for the project property.

## Executive Summary: Site Report Summary - Surrounding Properties

| Map Key            | DB   | Company/Site Name                               | Address                                                                                                   | Dir/Dist (m) | Elev Diff (m) | Page Number        |
|--------------------|------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------|---------------|--------------------|
| <a href="#">1</a>  | HINC |                                                 | 13 ROBINSON AVENUE<br>OTTAWA ON K1N 8N8                                                                   | SW/22.7      | 0.92          | <a href="#">21</a> |
| <a href="#">2</a>  | WWIS |                                                 | ON                                                                                                        | NNE/25.3     | -0.67         | <a href="#">21</a> |
| <a href="#">3</a>  | PES  | ERIC WILLIAM BARCLAY O/A<br>PEST CAUTION        | 301-20 ROBINSON AVE<br>OTTAWA ON K1N8N9                                                                   | SE/49.4      | -0.78         | <a href="#">22</a> |
| <a href="#">4</a>  | WWIS |                                                 | OTTAWA ON                                                                                                 | N/55.0       | -1.17         | <a href="#">22</a> |
| <a href="#">5</a>  | CA   |                                                 | 9 Robinson Ave.<br>Ottawa ON K1N 8N8                                                                      | SW/68.6      | 2.27          | <a href="#">25</a> |
| <a href="#">5</a>  | ECA  | Pegasus Development<br>Corporation              | 9 Robinson Ave.<br>Ottawa ON K2G 1E8                                                                      | SW/68.6      | 2.27          | <a href="#">25</a> |
| <a href="#">6</a>  | SPL  | PRIVATE OWNER                                   | 5-9 HURDMAN STREET MOTOR<br>VEHICLE (OPERATING FLUID)<br>OTTAWA CITY ON K1N 8N6                           | WSW/72.5     | 2.27          | <a href="#">25</a> |
| <a href="#">7</a>  | SPL  | UNKNOWN                                         | PRIVATE HOUSE MR. BERNARD<br>SEQUIN 28 ROBINSON AVE 613-235-<br>4130(741-81210)<br>OTTAWA CITY ON K1N 8N9 | E/73.7       | -0.75         | <a href="#">26</a> |
| <a href="#">8</a>  | CA   | DANBAR HOLDINGS (OTTAWA)<br>LIMITED             | ROBINSON AVE/HURDMAN RD.<br>OTTAWA CITY ON                                                                | SW/83.2      | 2.28          | <a href="#">26</a> |
| <a href="#">9</a>  | CA   | Kelly's Auto Body (1984) Limited                | 23 Hurdman Road<br>Ottawa ON K1N 8N7                                                                      | SE/84.7      | 0.31          | <a href="#">27</a> |
| <a href="#">9</a>  | SPL  | Hydro Ottawa Limited                            | 23 HURDMAN<UNOFFICIAL><br>Ottawa ON K1N 8N7                                                               | SE/84.7      | 0.31          | <a href="#">27</a> |
| <a href="#">10</a> | EBR  | Kelly's Auto Body (1984) Limited                | 23 Hurdman Road Ottawa Ontario K1N<br>8N7 Ottawa<br>ON                                                    | SSE/87.5     | 0.31          | <a href="#">27</a> |
| <a href="#">10</a> | ECA  | Kelly's Auto Body (1984) Limited                | 23 Hurdman Road<br>Ottawa ON K1N 8N7                                                                      | SSE/87.5     | 0.31          | <a href="#">28</a> |
| <a href="#">11</a> | WWIS |                                                 | Ottawa ON                                                                                                 | NW/103.5     | 1.84          | <a href="#">28</a> |
| <a href="#">12</a> | CA   | OTTAWA CITY-LEES AVE.                           | LEES AVE./HURDMAN RD./ROBINSON<br>OTTAWA CITY ON                                                          | SSE/111.9    | 0.22          | <a href="#">31</a> |
| <a href="#">13</a> | WWIS |                                                 | Ottawa ON                                                                                                 | WSW/113.7    | 3.53          | <a href="#">31</a> |
| <a href="#">14</a> | EHS  |                                                 | 3 Hurdman Rd<br>Ottawa ON K1N8N6                                                                          | NNW/117.8    | 0.49          | <a href="#">34</a> |
| <a href="#">15</a> | EHS  |                                                 | 36 Robinson Ave<br>Ottawa ON K1N 8N9                                                                      | E/123.7      | -0.75         | <a href="#">34</a> |
| <a href="#">16</a> | ECA  | The Regional Municipality of<br>Ottawa-Carleton | Lees Avenue<br>Ottawa ON                                                                                  | ESE/126.5    | -0.78         | <a href="#">34</a> |
| <a href="#">17</a> | BORE |                                                 | ON                                                                                                        | WSW/136.9    | 3.42          | <a href="#">35</a> |
| <a href="#">18</a> | BORE |                                                 | ON                                                                                                        | ESE/142.6    | 0.31          | <a href="#">35</a> |
| <a href="#">19</a> | WWIS |                                                 | OTTAWA ON                                                                                                 | N/143.3      | -1.78         | <a href="#">36</a> |



| <b>Map Key</b>     | <b>DB</b> | <b>Company/Site Name</b>                    | <b>Address</b>                                 | <b>Dir/Dist (m)</b> | <b>Elev Diff (m)</b> | <b>Page Number</b> |
|--------------------|-----------|---------------------------------------------|------------------------------------------------|---------------------|----------------------|--------------------|
| <a href="#">20</a> | BORE      |                                             | ON                                             | W/144.0             | 4.37                 | <a href="#">39</a> |
| <a href="#">21</a> | WWIS      |                                             | Ottawa ON                                      | NNW/144.4           | 1.89                 | <a href="#">39</a> |
| <a href="#">22</a> | WWIS      |                                             | OTTAWA ON                                      | NNE/147.1           | -3.54                | <a href="#">42</a> |
| <a href="#">23</a> | CA        | DANBAR HOLDINGS (OTTAWA) LIMITED            | ROBINSON AVE/LEES AVE.<br>OTTAWA CITY ON       | WSW/147.6           | 3.19                 | <a href="#">45</a> |
| <a href="#">23</a> | CA        | DANBAR HOLDINGS (OTTAWA) LIMITED            | LEES AVE./ROBINSON AVE., CSO<br>OTTAWA CITY ON | WSW/147.6           | 3.19                 | <a href="#">45</a> |
| <a href="#">24</a> | BORE      |                                             | ON                                             | SW/149.2            | 3.19                 | <a href="#">45</a> |
| <a href="#">25</a> | BORE      |                                             | ON                                             | WSW/151.7           | 4.17                 | <a href="#">46</a> |
| <a href="#">26</a> | BORE      |                                             | ON                                             | SW/153.2            | 3.19                 | <a href="#">46</a> |
| <a href="#">27</a> | BORE      |                                             | ON                                             | ESE/157.3           | 0.22                 | <a href="#">47</a> |
| <a href="#">28</a> | BORE      |                                             | ON                                             | SW/159.9            | 3.19                 | <a href="#">48</a> |
| <a href="#">29</a> | BORE      |                                             | ON                                             | ESE/161.8           | -0.78                | <a href="#">48</a> |
| <a href="#">30</a> | BORE      |                                             | ON                                             | SW/164.9            | 3.31                 | <a href="#">49</a> |
| <a href="#">31</a> | BORE      |                                             | ON                                             | ESE/171.0           | 0.31                 | <a href="#">49</a> |
| <a href="#">32</a> | BORE      |                                             | ON                                             | SW/175.9            | 3.31                 | <a href="#">50</a> |
| <a href="#">33</a> | EHS       |                                             | 310 Wiggins Pvt<br>Ottawa ON K1N1B1            | NW/176.3            | 4.58                 | <a href="#">50</a> |
| <a href="#">34</a> | CA        | REGIONAL MUNICIPALITY OF<br>OTTAWA CARLETON | 195 LEES AVE.<br>OTTAWA CITY ON                | SSW/184.3           | 2.25                 | <a href="#">5</a>  |
| <a href="#">34</a> | CA        | City of Ottawa                              | 195 Lees Avenue<br>Ottawa ON                   | SSW/184.3           | 2.25                 | <a href="#">51</a> |
| <a href="#">34</a> | ECA       | City of Ottawa                              | 195 Lees Avenue<br>Ottawa ON K1P 1J1           | SSW/184.3           | 2.25                 | <a href="#">51</a> |
| <a href="#">35</a> | BORE      |                                             | ON                                             | SW/185.0            | 3.22                 | <a href="#">52</a> |
| <a href="#">36</a> | GEN       | Ottawa Housing Corporation                  | 310 Wiggins<br>ottawa ON K1N 1B1               | NW/185.0            | 4.58                 | <a href="#">52</a> |
| <a href="#">37</a> | BORE      |                                             | ON                                             | ESE/185.9           | -0.78                | <a href="#">52</a> |
| <a href="#">38</a> | WWIS      |                                             | Ottawa ON                                      | WNW/187.5           | 6.08                 | <a href="#">53</a> |
| <a href="#">39</a> | BORE      |                                             | ON                                             | SW/192.4            | 2.37                 | <a href="#">55</a> |
| <a href="#">40</a> | WWIS      |                                             | Ottawa ON                                      | SSW/194.1           | 2.25                 | <a href="#">56</a> |
| <a href="#">41</a> | WWIS      |                                             | Ottawa ON                                      | WSW/194.3           | 5.31                 | <a href="#">59</a> |
| <a href="#">42</a> | WWIS      |                                             | Ottawa ON                                      | SSE/197.4           | 0.22                 | <a href="#">61</a> |

| Map Key            | DB   | Company/Site Name                        | Address                                | Dir/Dist (m) | Elev Diff (m) | Page Number        |
|--------------------|------|------------------------------------------|----------------------------------------|--------------|---------------|--------------------|
| <a href="#">43</a> | WWIS | ALGONQUIN COLLEGE OF APPLIED ARTS & TECH | ON                                     | SW/199.5     | 2.91          | <a href="#">63</a> |
| <a href="#">44</a> | BORE |                                          | ON                                     | SW/203.5     | 2.91          | <a href="#">64</a> |
| <a href="#">45</a> | CA   |                                          | LEES AVE/HIGHWAY 417<br>OTTAWA CITY ON | SW/209.3     | 2.36          | <a href="#">64</a> |
| <a href="#">45</a> | EHS  |                                          | 200 Lees Ave<br>Ottawa ON K1N 6N5      | SW/209.3     | 2.36          | <a href="#">64</a> |
| <a href="#">46</a> | WWIS |                                          | ON                                     | SSW/211.2    | 1.42          | <a href="#">65</a> |
| <a href="#">47</a> | WWIS | CANADIAN TIRE PIT STOP                   | Ottawa ON                              | ESE/211.5    | -0.63         | <a href="#">65</a> |
| <a href="#">48</a> | WWIS |                                          | Ottawa ON                              | WSW/211.9    | 4.68          | <a href="#">68</a> |
| <a href="#">49</a> | WWIS |                                          | Ottawa ON                              | W/216.4      | 5.22          | <a href="#">71</a> |
| <a href="#">50</a> | WWIS |                                          | ON                                     | W/219.4      | 5.22          | <a href="#">73</a> |
| <a href="#">51</a> | WWIS |                                          | Ottawa ON                              | ESE/219.6    | -0.53         | <a href="#">75</a> |
| <a href="#">52</a> | WWIS |                                          | Ottawa ON                              | ESE/220.0    | -0.53         | <a href="#">78</a> |
| <a href="#">53</a> | WWIS |                                          | OTTAWA ON                              | WSW/220.8    | 4.28          | <a href="#">81</a> |
| <a href="#">54</a> | RST  |                                          | 85 ROBINSON AVE<br>OTTAWA ON K1N 8N8   | E/221.9      | -1.19         | <a href="#">83</a> |
| <a href="#">55</a> | WWIS |                                          | Ottawa ON                              | SSW/224.1    | 1.22          | <a href="#">83</a> |
| <a href="#">56</a> | WWIS |                                          | Ottawa ON                              | ESE/225.9    | -0.53         | <a href="#">86</a> |
| <a href="#">56</a> | WWIS | OTTAWA, CITY OF                          | Ottawa ON                              | ESE/225.9    | -0.53         | <a href="#">89</a> |
| <a href="#">57</a> | EHS  |                                          | 29 Hurdman Road<br>Ottawa ON           | E/228.1      | -1.78         | <a href="#">92</a> |
| <a href="#">57</a> | EHS  |                                          | 29 Hurdman Rd<br>Ottawa ON K1N8N7      | E/228.1      | -1.78         | <a href="#">92</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">92</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">92</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">93</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">93</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">94</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">94</a> |
| <a href="#">57</a> | GEN  |                                          | 29 HURDMAN ROAD<br>OTTAWA ON           | E/228.1      | -1.78         | <a href="#">94</a> |
| <a href="#">57</a> | GEN  | OTTAWA, CORPORATION OF THE CITY OF       | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5   | E/228.1      | -1.78         | <a href="#">95</a> |

| <b>Map Key</b>     | <b>DB</b> | <b>Company/Site Name</b>           | <b>Address</b>                         | <b>Dir/Dist (m)</b> | <b>Elev Diff (m)</b> | <b>Page Number</b>  |
|--------------------|-----------|------------------------------------|----------------------------------------|---------------------|----------------------|---------------------|
| <a href="#">57</a> | GEN       | OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5   | E/228.1             | -1.78                | <a href="#">95</a>  |
| <a href="#">57</a> | GEN       | OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5   | E/228.1             | -1.78                | <a href="#">95</a>  |
| <a href="#">57</a> | GEN       | OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5   | E/228.1             | -1.78                | <a href="#">96</a>  |
| <a href="#">57</a> | INC       |                                    | 29 Hurdman Road, Ottawa ON             | E/228.1             | -1.78                | <a href="#">96</a>  |
| <a href="#">57</a> | SPL       | City of Ottawa                     | 29 Hurdman Road<br>Ottawa ON           | E/228.1             | -1.78                | <a href="#">97</a>  |
| <a href="#">57</a> | SPL       | City of Ottawa                     | 29 Hurdman Avenue<br>Ottawa ON K1N 8N7 | E/228.1             | -1.78                | <a href="#">98</a>  |
| <a href="#">58</a> | BORE      |                                    | ON                                     | SW/230.2            | 3.25                 | <a href="#">98</a>  |
| <a href="#">59</a> | WWIS      |                                    | Ottawa ON                              | SW/230.7            | 3.25                 | <a href="#">99</a>  |
| <a href="#">60</a> | WWIS      |                                    | Ottawa ON                              | W/232.4             | 5.22                 | <a href="#">101</a> |
| <a href="#">61</a> | WWIS      |                                    | Ottawa ON                              | W/232.5             | 5.22                 | <a href="#">103</a> |
| <a href="#">61</a> | WWIS      |                                    | Ottawa ON                              | W/232.5             | 5.22                 | <a href="#">105</a> |
| <a href="#">62</a> | WWIS      |                                    | Ottawa ON                              | SSE/233.1           | 0.22                 | <a href="#">107</a> |
| <a href="#">63</a> | WWIS      |                                    | OTTAWA ON                              | SSW/237.2           | 1.25                 | <a href="#">109</a> |
| <a href="#">64</a> | BORE      |                                    | ON                                     | SW/239.2            | 3.25                 | <a href="#">111</a> |
| <a href="#">65</a> | WWIS      |                                    | Ottawa ON                              | WSW/242.1           | 4.92                 | <a href="#">111</a> |
| <a href="#">66</a> | WWIS      |                                    | Ottawa ON                              | WSW/246.0           | 4.27                 | <a href="#">114</a> |
| <a href="#">67</a> | WWIS      |                                    | Ottawa ON                              | SSE/247.0           | 0.22                 | <a href="#">117</a> |
| <a href="#">67</a> | WWIS      |                                    | Ottawa ON                              | SSE/247.0           | 0.22                 | <a href="#">119</a> |
| <a href="#">67</a> | WWIS      |                                    | Ottawa ON                              | SSE/247.0           | 0.22                 | <a href="#">121</a> |
| <a href="#">68</a> | WWIS      |                                    | Ottawa ON                              | SSW/248.5           | 0.10                 | <a href="#">123</a> |
| <a href="#">69</a> | WWIS      |                                    | Ottawa ON                              | SW/248.6            | 2.53                 | <a href="#">126</a> |
| <a href="#">70</a> | WWIS      |                                    | ON                                     | WSW/249.1           | 4.92                 | <a href="#">129</a> |

# Executive Summary: Summary By Data Source

## **BORE - Borehole**

A search of the BORE database, dated 1875-Jul 2014 has found that there are 18 BORE site(s) within approximately 0.25 kilometers of the project property.

| <b><u>Equal/Higher Elevation</u></b> | <b><u>Address</u></b> | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b>     |
|--------------------------------------|-----------------------|-------------------------|----------------------------|---------------------------|
|                                      | ON                    | WSW                     | 136.94                     | <a href="#"><u>17</u></a> |
|                                      | ON                    | ESE                     | 142.57                     | <a href="#"><u>18</u></a> |
|                                      | ON                    | W                       | 144.01                     | <a href="#"><u>20</u></a> |
|                                      | ON                    | SW                      | 149.19                     | <a href="#"><u>24</u></a> |
|                                      | ON                    | WSW                     | 151.65                     | <a href="#"><u>25</u></a> |
|                                      | ON                    | SW                      | 153.16                     | <a href="#"><u>26</u></a> |
|                                      | ON                    | ESE                     | 157.27                     | <a href="#"><u>27</u></a> |
|                                      | ON                    | SW                      | 159.87                     | <a href="#"><u>28</u></a> |
|                                      | ON                    | SW                      | 164.91                     | <a href="#"><u>30</u></a> |
|                                      | ON                    | ESE                     | 170.99                     | <a href="#"><u>31</u></a> |
|                                      | ON                    | SW                      | 175.94                     | <a href="#"><u>32</u></a> |
|                                      | ON                    | SW                      | 184.98                     | <a href="#"><u>35</u></a> |
|                                      | ON                    | SW                      | 192.38                     | <a href="#"><u>39</u></a> |
|                                      | ON                    | SW                      | 203.49                     | <a href="#"><u>44</u></a> |
|                                      | ON                    | SW                      | 230.25                     | <a href="#"><u>58</u></a> |
|                                      | ON                    | SW                      | 239.22                     | <a href="#"><u>64</u></a> |

| <b><u>Lower Elevation</u></b> | <b><u>Address</u></b> | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b>     |
|-------------------------------|-----------------------|-------------------------|----------------------------|---------------------------|
|                               | ON                    | ESE                     | 161.76                     | <a href="#"><u>29</u></a> |

## CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011\* has found that there are 9 CA site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u>            | <u>Address</u>                                   | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|------------------------------------------|--------------------------------------------------|------------------|---------------------|--------------------|
|                                          | 9 Robinson Ave.<br>Ottawa ON K1N 8N8             | SW               | 68.61               | <a href="#">5</a>  |
| DANBAR HOLDINGS (OTTAWA) LIMITED         | ROBINSON AVE/HURDMAN RD.<br>OTTAWA CITY ON       | SW               | 83.24               | <a href="#">8</a>  |
| Kelly's Auto Body (1984) Limited         | 23 Hurdman Road<br>Ottawa ON K1N 8N7             | SE               | 84.66               | <a href="#">9</a>  |
| OTTAWA CITY-LEES AVE.                    | LEES AVE./HURDMAN RD./ROBINSON<br>OTTAWA CITY ON | SSE              | 111.87              | <a href="#">12</a> |
| DANBAR HOLDINGS (OTTAWA) LIMITED         | LEES AVE./ROBINSON AVE., CSO<br>OTTAWA CITY ON   | WSW              | 147.60              | <a href="#">23</a> |
| DANBAR HOLDINGS (OTTAWA) LIMITED         | ROBINSON AVE/LEES AVE.<br>OTTAWA CITY ON         | WSW              | 147.60              | <a href="#">23</a> |
| REGIONAL MUNICIPALITY OF OTTAWA CARLETON | 195 LEES AVE.<br>OTTAWA CITY ON                  | SSW              | 184.28              | <a href="#">34</a> |
| City of Ottawa                           | 195 Lees Avenue<br>Ottawa ON                     | SSW              | 184.28              | <a href="#">34</a> |
| ALGONQUIN COLLEGE OF APPLIED ARTS & TECH | LEES AVE/HIGHWAY 417<br>OTTAWA CITY ON           | SW               | 209.34              | <a href="#">45</a> |

## EBR - Environmental Registry

A search of the EBR database, dated 1994-Apr 30, 2018 has found that there are 1 EBR site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u>    | <u>Address</u>                                      | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|----------------------------------|-----------------------------------------------------|------------------|---------------------|--------------------|
| Kelly's Auto Body (1984) Limited | 23 Hurdman Road Ottawa Ontario K1N 8N7<br>Ottawa ON | SSE              | 87.53               | <a href="#">10</a> |

## ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011-Jun 30, 2018 has found that there are 4 ECA site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u>    | <u>Address</u>                       | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|----------------------------------|--------------------------------------|------------------|---------------------|--------------------|
| Pegasus Development Corporation  | 9 Robinson Ave.<br>Ottawa ON K2G 1E8 | SW               | 68.61               | <a href="#">5</a>  |
| Kelly's Auto Body (1984) Limited | 23 Hurdman Road<br>Ottawa ON K1N 8N7 | SSE              | 87.53               | <a href="#">10</a> |
| City of Ottawa                   | 195 Lees Avenue<br>Ottawa ON K1P 1J1 | SSW              | 184.28              | <a href="#">34</a> |

| <u>Lower Elevation</u>                       | <u>Address</u>           | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|----------------------------------------------|--------------------------|------------------|---------------------|--------------------|
| The Regional Municipality of Ottawa-Carleton | Lees Avenue<br>Ottawa ON | ESE              | 126.55              | <a href="#">16</a> |

## **EHS - ERIS Historical Searches**

A search of the EHS database, dated 1999-Feb 28, 2018 has found that there are 6 EHS site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u> | <u>Address</u>                      | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|-------------------------------|-------------------------------------|------------------|---------------------|--------------------|
|                               | 3 Hurdman Rd<br>Ottawa ON K1N8N6    | NNW              | 117.81              | <a href="#">14</a> |
|                               | 310 Wiggins Pvt<br>Ottawa ON K1N1B1 | NW               | 176.29              | <a href="#">33</a> |
|                               | 200 Lees Ave<br>Ottawa ON K1N 6N5   | SW               | 209.34              | <a href="#">45</a> |

| <u>Lower Elevation</u> | <u>Address</u>                       | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|------------------------|--------------------------------------|------------------|---------------------|--------------------|
|                        | 36 Robinson Ave<br>Ottawa ON K1N 8N9 | E                | 123.66              | <a href="#">15</a> |
|                        | 29 Hurdman Road<br>Ottawa ON         | E                | 228.09              | <a href="#">57</a> |
|                        | 29 Hurdman Rd<br>Ottawa ON K1N8N7    | E                | 228.09              | <a href="#">57</a> |

## **GEN - Ontario Regulation 347 Waste Generators Summary**

A search of the GEN database, dated 1986-December 31, 2017 has found that there are 12 GEN site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u> | <u>Address</u>                   | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|-------------------------------|----------------------------------|------------------|---------------------|--------------------|
| Ottawa Housing Corporation    | 310 Wiggins<br>ottawa ON K1N 1B1 | NW               | 185.02              | <a href="#">36</a> |

| <u>Lower Elevation</u>             | <u>Address</u>                       | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|------------------------------------|--------------------------------------|------------------|---------------------|--------------------|
| OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON         | E                | 228.09              | <a href="#">57</a> |
| OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | E                | 228.09              | <a href="#">57</a> |
| OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | E                | 228.09              | <a href="#">57</a> |
| OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | E                | 228.09              | <a href="#">57</a> |
| OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | E                | 228.09              | <a href="#">57</a> |
| OTTAWA, CORPORATION OF THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON         | E                | 228.09              | <a href="#">57</a> |



|                                       |                              |   |        |                    |
|---------------------------------------|------------------------------|---|--------|--------------------|
| OTTAWA, CORPORATION OF<br>THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON | E | 228.09 | <a href="#">57</a> |
| OTTAWA, CORPORATION OF<br>THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON | E | 228.09 | <a href="#">57</a> |
| OTTAWA, CORPORATION OF<br>THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON | E | 228.09 | <a href="#">57</a> |
| OTTAWA, CITY OF                       | 29 HURDMAN ROAD<br>OTTAWA ON | E | 228.09 | <a href="#">57</a> |
| OTTAWA, CORPORATION OF<br>THE CITY OF | 29 HURDMAN ROAD<br>OTTAWA ON | E | 228.09 | <a href="#">57</a> |

### **HINC - TSSA Historic Incidents**

A search of the HINC database, dated 2006-June 2009\* has found that there are 1 HINC site(s) within approximately 0.25 kilometers of the project property.

| <b><u>Equal/Higher Elevation</u></b> | <b><u>Address</u></b>                   | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b> |
|--------------------------------------|-----------------------------------------|-------------------------|----------------------------|-----------------------|
|                                      | 13 ROBINSON AVENUE<br>OTTAWA ON K1N 8N8 | SW                      | 22.73                      | <a href="#">1</a>     |

### **INC - TSSA Incidents**

A search of the INC database, dated Feb 28, 2017 has found that there are 1 INC site(s) within approximately 0.25 kilometers of the project property.

| <b><u>Lower Elevation</u></b> | <b><u>Address</u></b>         | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b> |
|-------------------------------|-------------------------------|-------------------------|----------------------------|-----------------------|
|                               | 29 Hurdman Road, Ottawa<br>ON | E                       | 228.09                     | <a href="#">57</a>    |

### **PES - Pesticide Register**

A search of the PES database, dated 1988-Mar 2018 has found that there are 1 PES site(s) within approximately 0.25 kilometers of the project property.

| <b><u>Lower Elevation</u></b>            | <b><u>Address</u></b>                   | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b> |
|------------------------------------------|-----------------------------------------|-------------------------|----------------------------|-----------------------|
| ERIC WILLIAM BARCLAY O/A<br>PEST CAUTION | 301-20 ROBINSON AVE<br>OTTAWA ON K1N8N9 | SE                      | 49.41                      | <a href="#">3</a>     |

### **RST - Retail Fuel Storage Tanks**

A search of the RST database, dated 1999-Jan 31, 2018 has found that there are 1 RST site(s) within approximately 0.25 kilometers of the project property.

| <b><u>Lower Elevation</u></b> | <b><u>Address</u></b>                | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b> |
|-------------------------------|--------------------------------------|-------------------------|----------------------------|-----------------------|
| CANADIAN TIRE PIT STOP        | 85 ROBINSON AVE<br>OTTAWA ON K1N 8N8 | E                       | 221.86                     | <a href="#">54</a>    |

### **SPL - Ontario Spills**

A search of the SPL database, dated 1988-Feb 2018 has found that there are 5 SPL site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u> | <u>Address</u>                                                               | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>    |
|-------------------------------|------------------------------------------------------------------------------|------------------|---------------------|-------------------|
| PRIVATE OWNER                 | 5-9 HURDMAN STREET MOTOR VEHICLE (OPERATING FLUID)<br>OTTAWA CITY ON K1N 8N6 | WSW              | 72.54               | <a href="#">6</a> |
| Hydro Ottawa Limited          | 23 HURDMAN<UNOFFICIAL><br>Ottawa ON K1N 8N7                                  | SE               | 84.66               | <a href="#">9</a> |

| <u>Lower Elevation</u> | <u>Address</u>                                                                                     | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|------------------------|----------------------------------------------------------------------------------------------------|------------------|---------------------|--------------------|
| UNKNOWN                | PRIVATE HOUSE MR. BERNARD SEQUIN 28 ROBINSON AVE 613-235-4130(741-81210)<br>OTTAWA CITY ON K1N 8N9 | E                | 73.69               | <a href="#">7</a>  |
| City of Ottawa         | 29 Hurdman Avenue<br>Ottawa ON K1N 8N7                                                             | E                | 228.09              | <a href="#">57</a> |
| City of Ottawa         | 29 Hurdman Road<br>Ottawa ON                                                                       | E                | 228.09              | <a href="#">57</a> |

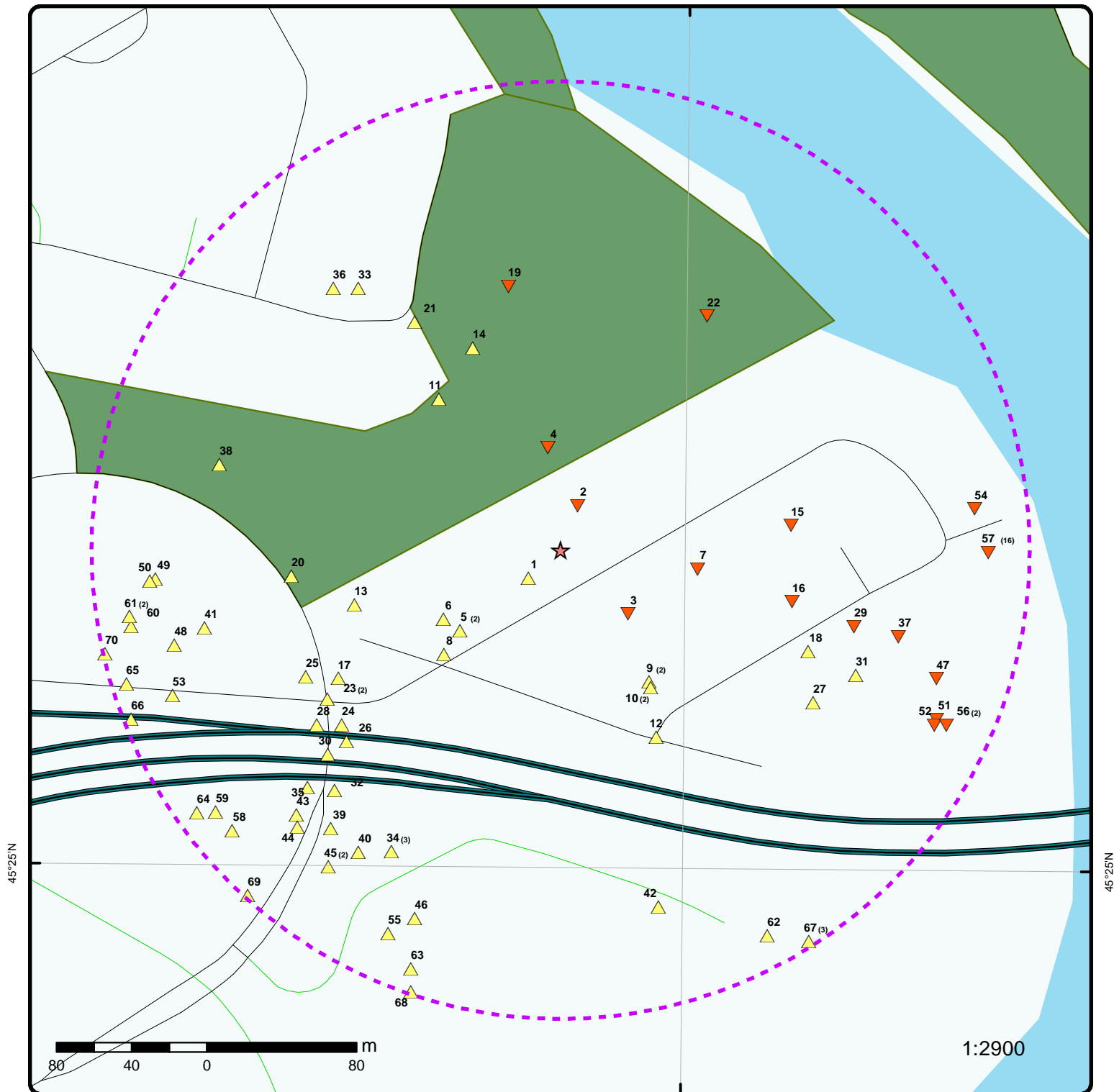
### **WWIS - Water Well Information System**

A search of the WWIS database, dated Dec 31, 2017 has found that there are 37 WWIS site(s) within approximately 0.25 kilometers of the project property.

| <u>Equal/Higher Elevation</u> | <u>Address</u> | <u>Direction</u> | <u>Distance (m)</u> | <u>Map Key</u>     |
|-------------------------------|----------------|------------------|---------------------|--------------------|
|                               | Ottawa ON      | NW               | 103.45              | <a href="#">11</a> |
|                               | Ottawa ON      | WSW              | 113.68              | <a href="#">13</a> |
|                               | Ottawa ON      | NNW              | 144.39              | <a href="#">21</a> |
|                               | Ottawa ON      | WNW              | 187.46              | <a href="#">38</a> |
|                               | Ottawa ON      | SSW              | 194.08              | <a href="#">40</a> |
|                               | Ottawa ON      | WSW              | 194.28              | <a href="#">41</a> |
|                               | Ottawa ON      | SSE              | 197.40              | <a href="#">42</a> |
|                               | ON             | SW               | 199.54              | <a href="#">43</a> |
|                               | ON             | SSW              | 211.23              | <a href="#">46</a> |
|                               | Ottawa ON      | WSW              | 211.90              | <a href="#">48</a> |
|                               | Ottawa ON      | W                | 216.37              | <a href="#">49</a> |
|                               | ON             | W                | 219.43              | <a href="#">50</a> |
|                               | OTTAWA ON      | WSW              | 220.82              | <a href="#">53</a> |

| <b><u>Equal/Higher Elevation</u></b> | <b><u>Address</u></b> | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b>     |
|--------------------------------------|-----------------------|-------------------------|----------------------------|---------------------------|
|                                      |                       | SSW                     | 224.05                     | <a href="#"><u>55</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SW                      | 230.68                     | <a href="#"><u>59</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | W                       | 232.36                     | <a href="#"><u>60</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | W                       | 232.53                     | <a href="#"><u>61</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | W                       | 232.53                     | <a href="#"><u>61</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SSE                     | 233.06                     | <a href="#"><u>62</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SSW                     | 237.21                     | <a href="#"><u>63</u></a> |
|                                      | OTTAWA ON             |                         |                            |                           |
|                                      |                       | WSW                     | 242.15                     | <a href="#"><u>65</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | WSW                     | 246.02                     | <a href="#"><u>66</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SSE                     | 247.04                     | <a href="#"><u>67</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SSE                     | 247.04                     | <a href="#"><u>67</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SSE                     | 247.04                     | <a href="#"><u>67</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SSW                     | 248.54                     | <a href="#"><u>68</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | SW                      | 248.64                     | <a href="#"><u>69</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | WSW                     | 249.05                     | <a href="#"><u>70</u></a> |
|                                      | ON                    |                         |                            |                           |
|                                      |                       |                         |                            |                           |
| <b><u>Lower Elevation</u></b>        | <b><u>Address</u></b> | <b><u>Direction</u></b> | <b><u>Distance (m)</u></b> | <b><u>Map Key</u></b>     |
|                                      |                       | NNE                     | 25.35                      | <a href="#"><u>2</u></a>  |
|                                      | ON                    |                         |                            |                           |
|                                      |                       | N                       | 55.05                      | <a href="#"><u>4</u></a>  |
|                                      | OTTAWA ON             |                         |                            |                           |
|                                      |                       | N                       | 143.35                     | <a href="#"><u>19</u></a> |
|                                      | OTTAWA ON             |                         |                            |                           |
|                                      |                       | NNE                     | 147.12                     | <a href="#"><u>22</u></a> |
|                                      | OTTAWA ON             |                         |                            |                           |
|                                      |                       | ESE                     | 211.54                     | <a href="#"><u>47</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | ESE                     | 219.64                     | <a href="#"><u>51</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |
|                                      |                       | ESE                     | 219.98                     | <a href="#"><u>52</u></a> |
|                                      | Ottawa ON             |                         |                            |                           |

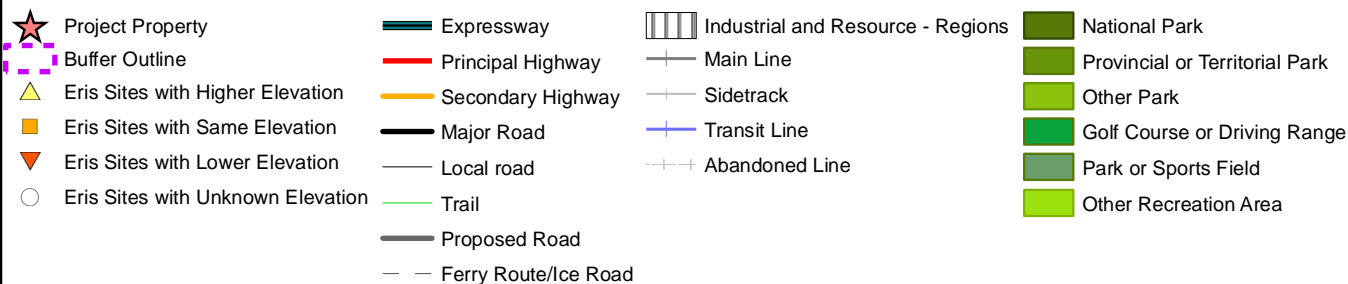
|           |     |        |                           |
|-----------|-----|--------|---------------------------|
| Ottawa ON | ESE | 225.88 | <a href="#"><u>56</u></a> |
| Ottawa ON | ESE | 225.88 | <a href="#"><u>56</u></a> |



## Map : 0.25 Kilometer Radius

Order No: 20180727213

Address: 17&19 Robinson Avenue, Ottawa, ON, K1N 8N8

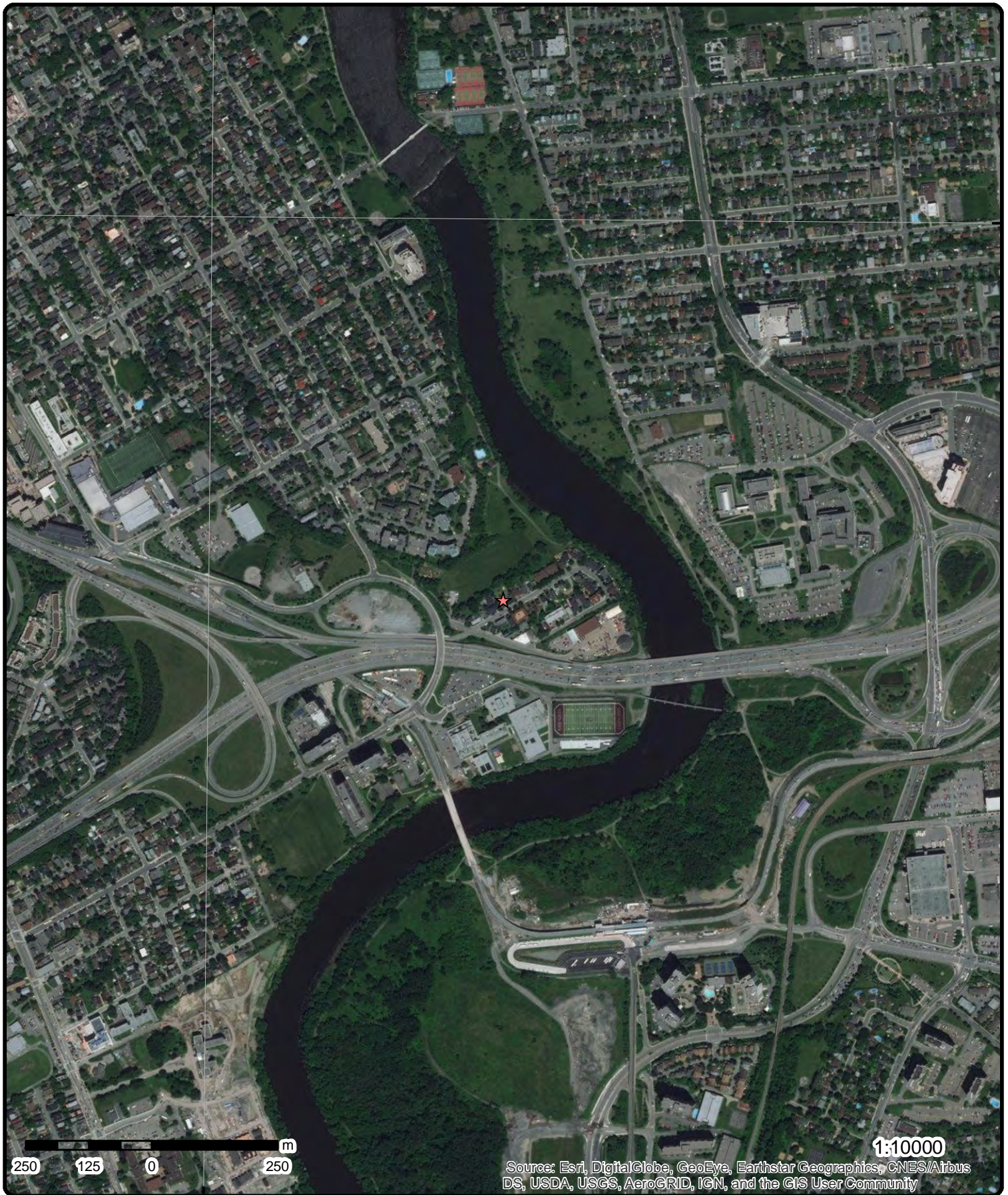




75°40'30"W

45°25'30"N

45°25'30"N



**Aerial (2017)**

**Address: 17&19 Robinson Avenue, Ottawa, ON, K1N 8N8**

**Source:** ESRI World Imagery

Order No: 20180727213

**ERIS**  
ENVIRONMENTAL RISK INFORMATION SERVICES



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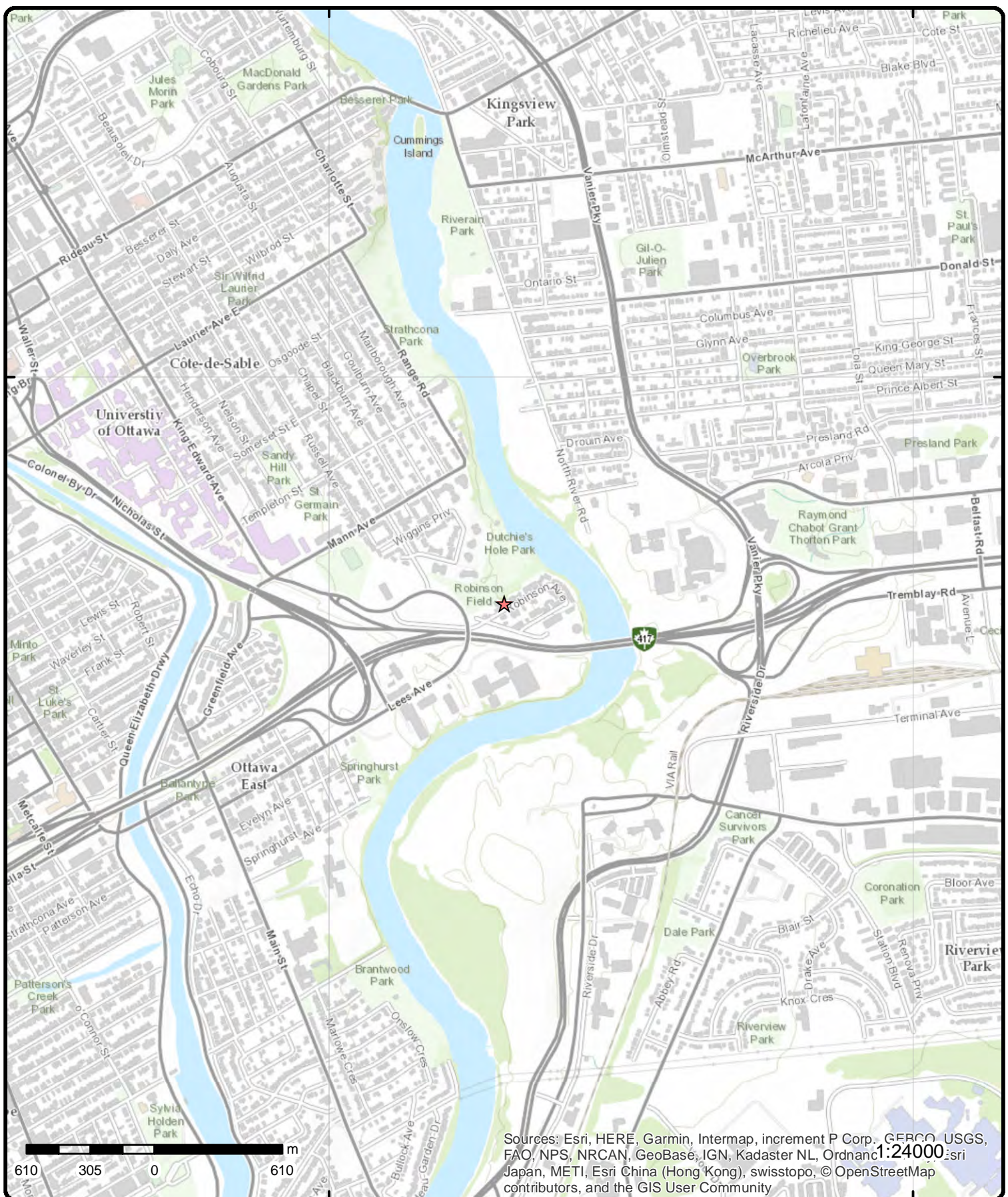


75°40'30"W

75°39'W

45°25'30"N

45°25'30"N



# Topographic Map

Address: 17&19 Robinson Avenue, Ottawa, ON, K1N 8N8

Source: ESRI World Topographic Map

Order No: 20180727213



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# Detail Report

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                    | DB   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|-----------------------------------------|------|
| <a href="#">1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 of 1            | SW/22.7                    | 62.6 / 0.92      | 13 ROBINSON AVENUE<br>OTTAWA ON K1N 8N8 | HINC |
| <div> <div> <b>External File Num:</b><br/> <b>Date of Occurrence:</b><br/> <b>Fuel Occurrence Type:</b><br/> <b>Fuel Type Involved:</b><br/> <b>Status Desc::</b><br/> <b>Job Type Desc::</b><br/> <b>Oper. Type Involved::</b><br/> <b>Service Interruptions::</b><br/> <b>Property Damage::</b><br/> <b>Fuel Life Cycle Stage::</b><br/> <b>Root Cause::</b><br/> <b>Reported Details::</b><br/> <b>Fuel Category::</b><br/> <b>Occurrence Type::</b><br/> <b>Affiliation::</b><br/> <b>County Name::</b><br/> <b>Approx. Quant. Rel::</b><br/> <b>Nearby body of water::</b><br/> <b>Enter Drainage Syst::</b><br/> <b>Approx. Quant. Unit::</b><br/> <b>Environmental Impact::</b> </div> <div>           FS INC 0810-06586<br/><br/>           Completed - No Action Required<br/>           Incident/Near-Miss Occurrence (FS)<br/><br/>           Non-mandated. Regional Supervisor Stu Seaton advises that the source of the CO is not related to ny<br/>           Unknown<br/>           Incident<br/>           Emergency Services (Fire, Police,etc)<br/>           Ottawa         </div> </div>                                                                                                                                                                                                                                                                                           |                   |                            |                  |                                         |      |
| <a href="#">2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 of 1            | NNE/25.3                   | 61.0 / -0.67     | ON                                      | WWIS |
| <div> <div> <b>Well ID:</b><br/> <b>Construction Date:</b><br/> <b>Primary Water Use:</b><br/> <b>Sec. Water Use:</b><br/> <b>Final Well Status:</b><br/> <b>Water Type:</b><br/> <b>Casing Material:</b><br/> <b>Audit No:</b><br/> <b>Tag:</b><br/> <b>Construction Method:</b><br/> <b>Elevation (m):</b><br/> <b>Elevation Reliability:</b><br/> <b>Depth to Bedrock:</b><br/> <b>Well Depth:</b><br/> <b>Overburden/Bedrock:</b><br/> <b>Pump Rate:</b><br/> <b>Static Water Level:</b><br/> <b>Flowing (Y/N):</b><br/> <b>Flow Rate:</b><br/> <b>Clear/Cloudy:</b> </div> <div>           7233242<br/><br/><br/><br/><br/><br/>           C22614<br/><br/>           60.32         </div> <div> <b>Data Entry Status:</b><br/> <b>Data Src:</b><br/> <b>Date Received:</b><br/> <b>Selected Flag:</b><br/> <b>Abandonment Rec:</b><br/> <b>Contractor:</b><br/> <b>Form Version:</b><br/> <b>Owner:</b><br/> <b>Street Name:</b><br/> <b>County:</b><br/> <b>Municipality:</b><br/> <b>Site Info:</b><br/> <b>Lot:</b><br/> <b>Concession:</b><br/> <b>Concession Name:</b><br/> <b>Easting NAD83:</b><br/> <b>Northing NAD83:</b><br/> <b>Zone:</b><br/> <b>UTM Reliability:</b> </div> <div>           Yes<br/><br/>           12/9/2014<br/>           Yes<br/><br/>           1844<br/>           8<br/><br/>           OTTAWA-CARLETON<br/>           NEPEAN TOWNSHIP         </div> </div> |                   |                            |                  |                                         |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |                            |                  |                                         |      |
| <div> <div> <b>Bore Hole ID:</b><br/> <b>DP2BR:</b> </div> <div>           1005253386         </div> <div> <b>Elevation:</b><br/> <b>Elevrc:</b> </div> <div>           60.32         </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |                            |                  |                                         |      |



| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                             | DB   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|------------------|----------------------------------------------------------------------------------|------|
| <div> <div> <b>Spatial Status:</b><br/> <b>Code OB:</b><br/> <b>Code OB Desc:</b><br/> <b>Open Hole:</b><br/> <b>Cluster Kind:</b><br/> <b>Date Completed:</b> 09-DEC-14<br/> <b>Remarks:</b><br/> <b>Elevrc Desc:</b><br/> <b>Location Source Date:</b><br/> <b>Improvement Location Source:</b><br/> <b>Improvement Location Method:</b><br/> <b>Source Revision Comment:</b><br/> <b>Supplier Comment:</b> </div> <div> <b>Zone:</b> 18<br/> <b>East83:</b> 447784<br/> <b>Org CS:</b> UTM83<br/> <b>North83:</b> 5029648<br/> <b>UTMRC:</b> 4<br/> <b>UTMRC Desc:</b> margin of error : 30 m - 100 m<br/> <b>Location Method:</b> wwr </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                            |                  |                                                                                  |      |
| <a href="#">3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 of 1               | SE/49.4                    | 60.9 / -0.78     | ERIC WILLIAM BARCLAY O/A PEST CAUTION<br>301-20 ROBINSON AVE<br>OTTAWA ON K1N8N9 | PES  |
| <div> <div> <b>Licence No:</b> 09701<br/> <b>Detail Licence No:</b><br/> <b>Licence Type Code:</b> 02<br/> <b>Licence Type:</b> Active Operator Licence<br/> <b>Licence Class:</b> 01<br/> <b>Licence Control:</b><br/> <b>Trade Name:</b><br/> <b>Post Office Box:</b><br/> <b>Lot:</b><br/> <b>Concession:</b><br/> <b>Region:</b><br/> <b>District:</b><br/> <b>County:</b> </div> <div> <b>Operator Box:</b><br/> <b>Operator Class:</b><br/> <b>Operator No:</b><br/> <b>Operator Type:</b><br/> <b>Operator Lot:</b><br/> <b>Oper Concession:</b><br/> <b>Operator Region:</b><br/> <b>Operator District:</b><br/> <b>Operator County:</b><br/> <b>Oper Phone Area Cd:</b> 613<br/> <b>Ext:</b><br/> <b>Oper Phone No:</b> 2629761<br/> <b>Proponent Ext:</b> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |                            |                  |                                                                                  |      |
| <a href="#">4</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 of 1               | N/55.0                     | 60.5 / -1.17     | OTTAWA ON                                                                        | WWIS |
| <div> <div> <b>Well ID:</b> 7292938<br/> <b>Construction Date:</b><br/> <b>Primary Water Use:</b> Test Hole<br/> <b>Sec. Water Use:</b> Monitoring<br/> <b>Final Well Status:</b> Monitoring and Test Hole<br/> <b>Water Type:</b><br/> <b>Casing Material:</b><br/> <b>Audit No:</b> Z258446<br/> <b>Tag:</b> A182468<br/> <b>Construction Method:</b><br/> <b>Elevation (m):</b><br/> <b>Elevation Reliability:</b><br/> <b>Depth to Bedrock:</b><br/> <b>Well Depth:</b><br/> <b>Overburden/Bedrock:</b><br/> <b>Pump Rate:</b><br/> <b>Static Water Level:</b><br/> <b>Flowing (Y/N):</b><br/> <b>Flow Rate:</b><br/> <b>Clear/Cloudy:</b> </div> <div> <b>Data Entry Status:</b><br/> <b>Data Src:</b><br/> <b>Date Received:</b> 8/18/2017<br/> <b>Selected Flag:</b> Yes<br/> <b>Abandonment Rec:</b><br/> <b>Contractor:</b> 7241<br/> <b>Form Version:</b> 7<br/> <b>Owner:</b><br/> <b>Street Name:</b> 3 HARDEN ROAD<br/> <b>County:</b> OTTAWA-CARLETON<br/> <b>Municipality:</b> OTTAWA CITY<br/> <b>Site Info:</b><br/> <b>Lot:</b><br/> <b>Concession:</b><br/> <b>Concession Name:</b><br/> <b>Easting NAD83:</b><br/> <b>Northing NAD83:</b><br/> <b>Zone:</b><br/> <b>UTM Reliability:</b> </div> </div> |                      |                            |                  |                                                                                  |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                            |                  |                                                                                  |      |
| <div> <div> <b>Bore Hole ID:</b> 1006711162<br/> <b>DP2BR:</b><br/> <b>Spatial Status:</b><br/> <b>Code OB:</b> </div> <div> <b>Elevation:</b> 60.14<br/> <b>Elevrc:</b><br/> <b>Zone:</b> 18<br/> <b>East83:</b> 447768 </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                      |                            |                  |                                                                                  |      |

| Map Key                              | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site             | DB                             |
|--------------------------------------|----------------------|----------------------------|------------------|------------------|--------------------------------|
| Code OB Desc:                        |                      |                            |                  | Org CS:          | UTM83                          |
| Open Hole:                           |                      |                            |                  | North83:         | 5029679                        |
| Cluster Kind:                        |                      |                            |                  | UTMRC:           | 4                              |
| Date Completed:                      |                      | 19-JUL-17                  |                  | UTMRC Desc:      | margin of error : 30 m - 100 m |
| Remarks:                             |                      |                            |                  | Location Method: | wwr                            |
| Elevrc Desc:                         |                      |                            |                  |                  |                                |
| Location Source Date:                |                      |                            |                  |                  |                                |
| Improvement Location Source:         |                      |                            |                  |                  |                                |
| Improvement Location Method:         |                      |                            |                  |                  |                                |
| Source Revision Comment:             |                      |                            |                  |                  |                                |
| Supplier Comment:                    |                      |                            |                  |                  |                                |
| <b><u>Overburden and Bedrock</u></b> |                      |                            |                  |                  |                                |
| <b><u>Materials Interval</u></b>     |                      |                            |                  |                  |                                |
| Formation ID:                        |                      | 1006843487                 |                  |                  |                                |
| Layer:                               |                      | 3                          |                  |                  |                                |
| Color:                               |                      | 6                          |                  |                  |                                |
| General Color:                       |                      | BROWN                      |                  |                  |                                |
| Mat1:                                |                      | 06                         |                  |                  |                                |
| Most Common Material:                |                      | SILT                       |                  |                  |                                |
| Mat2:                                |                      | 28                         |                  |                  |                                |
| Other Materials:                     |                      | SAND                       |                  |                  |                                |
| Mat3:                                |                      | 05                         |                  |                  |                                |
| Other Materials:                     |                      | CLAY                       |                  |                  |                                |
| Formation Top Depth:                 |                      | 3.1                        |                  |                  |                                |
| Formation End Depth:                 |                      | 4.57                       |                  |                  |                                |
| Formation End Depth UOM:             |                      | m                          |                  |                  |                                |
| Formation ID:                        |                      | 1006843488                 |                  |                  |                                |
| Layer:                               |                      | 4                          |                  |                  |                                |
| Color:                               |                      | 2                          |                  |                  |                                |
| General Color:                       |                      | GREY                       |                  |                  |                                |
| Mat1:                                |                      | 06                         |                  |                  |                                |
| Most Common Material:                |                      | SILT                       |                  |                  |                                |
| Mat2:                                |                      | 28                         |                  |                  |                                |
| Other Materials:                     |                      | SAND                       |                  |                  |                                |
| Mat3:                                |                      |                            |                  |                  |                                |
| Other Materials:                     |                      |                            |                  |                  |                                |
| Formation Top Depth:                 |                      | 4.57                       |                  |                  |                                |
| Formation End Depth:                 |                      | 6.1                        |                  |                  |                                |
| Formation End Depth UOM:             |                      | m                          |                  |                  |                                |
| Formation ID:                        |                      | 1006843486                 |                  |                  |                                |
| Layer:                               |                      | 2                          |                  |                  |                                |
| Color:                               |                      | 6                          |                  |                  |                                |
| General Color:                       |                      | BROWN                      |                  |                  |                                |
| Mat1:                                |                      | 01                         |                  |                  |                                |
| Most Common Material:                |                      | FILL                       |                  |                  |                                |
| Mat2:                                |                      | 28                         |                  |                  |                                |
| Other Materials:                     |                      | SAND                       |                  |                  |                                |
| Mat3:                                |                      | 11                         |                  |                  |                                |
| Other Materials:                     |                      | GRAVEL                     |                  |                  |                                |
| Formation Top Depth:                 |                      | .31                        |                  |                  |                                |
| Formation End Depth:                 |                      | 3.1                        |                  |                  |                                |
| Formation End Depth UOM:             |                      | m                          |                  |                  |                                |
| Formation ID:                        |                      | 1006843485                 |                  |                  |                                |
| Layer:                               |                      | 1                          |                  |                  |                                |
| Color:                               |                      | 8                          |                  |                  |                                |
| General Color:                       |                      | BLACK                      |                  |                  |                                |
| Mat1:                                |                      | 02                         |                  |                  |                                |
| Most Common Material:                |                      | TOPSOIL                    |                  |                  |                                |
| Mat2:                                |                      |                            |                  |                  |                                |
| Other Materials:                     |                      |                            |                  |                  |                                |

| Map Key                                         | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|-------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b>Mat3:</b>                                    |                      |                            |                  |      |    |
| <b>Other Materials:</b>                         |                      |                            |                  |      |    |
| <b>Formation Top Depth:</b>                     |                      | 0                          |                  |      |    |
| <b>Formation End Depth:</b>                     |                      | .31                        |                  |      |    |
| <b>Formation End Depth UOM:</b>                 |                      | m                          |                  |      |    |
| <b><u>Annular Space/Abandonment</u></b>         |                      |                            |                  |      |    |
| <b><u>Sealing Record</u></b>                    |                      |                            |                  |      |    |
| <b>Plug ID:</b>                                 |                      | 1006843497                 |                  |      |    |
| <b>Layer:</b>                                   |                      | 2                          |                  |      |    |
| <b>Plug From:</b>                               |                      | .31                        |                  |      |    |
| <b>Plug To:</b>                                 |                      | 2.74                       |                  |      |    |
| <b>Plug Depth UOM:</b>                          |                      | m                          |                  |      |    |
| <b>Plug ID:</b>                                 |                      | 1006843498                 |                  |      |    |
| <b>Layer:</b>                                   |                      | 3                          |                  |      |    |
| <b>Plug From:</b>                               |                      | 2.74                       |                  |      |    |
| <b>Plug To:</b>                                 |                      | 6.1                        |                  |      |    |
| <b>Plug Depth UOM:</b>                          |                      | m                          |                  |      |    |
| <b>Plug ID:</b>                                 |                      | 1006843496                 |                  |      |    |
| <b>Layer:</b>                                   |                      | 1                          |                  |      |    |
| <b>Plug From:</b>                               |                      | 0                          |                  |      |    |
| <b>Plug To:</b>                                 |                      | .31                        |                  |      |    |
| <b>Plug Depth UOM:</b>                          |                      | m                          |                  |      |    |
| <b><u>Method of Construction &amp; Well</u></b> |                      |                            |                  |      |    |
| <b><u>Use</u></b>                               |                      |                            |                  |      |    |
| <b>Method Construction ID:</b>                  |                      | 1006843495                 |                  |      |    |
| <b>Method Construction Code:</b>                |                      | B                          |                  |      |    |
| <b>Method Construction:</b>                     |                      | Other Method               |                  |      |    |
| <b>Other Method Construction:</b>               |                      | DIRECT PUSH                |                  |      |    |
| <b><u>Pipe Information</u></b>                  |                      |                            |                  |      |    |
| <b>Pipe ID:</b>                                 |                      | 1006843484                 |                  |      |    |
| <b>Casing No:</b>                               |                      | 0                          |                  |      |    |
| <b>Comment:</b>                                 |                      |                            |                  |      |    |
| <b>Alt Name:</b>                                |                      |                            |                  |      |    |
| <b><u>Construction Record - Casing</u></b>      |                      |                            |                  |      |    |
| <b>Casing ID:</b>                               |                      | 1006843491                 |                  |      |    |
| <b>Layer:</b>                                   |                      | 1                          |                  |      |    |
| <b>Material:</b>                                |                      | 5                          |                  |      |    |
| <b>Open Hole or Material:</b>                   |                      | PLASTIC                    |                  |      |    |
| <b>Depth From:</b>                              |                      | 0                          |                  |      |    |
| <b>Depth To:</b>                                |                      | 3.1                        |                  |      |    |
| <b>Casing Diameter:</b>                         |                      | 5.2                        |                  |      |    |
| <b>Casing Diameter UOM:</b>                     |                      | cm                         |                  |      |    |
| <b>Casing Depth UOM:</b>                        |                      | m                          |                  |      |    |
| <b><u>Construction Record - Screen</u></b>      |                      |                            |                  |      |    |
| <b>Screen ID:</b>                               |                      | 1006843492                 |                  |      |    |
| <b>Layer:</b>                                   |                      | 1                          |                  |      |    |
| <b>Slot:</b>                                    |                      | 10                         |                  |      |    |
| <b>Screen Top Depth:</b>                        |                      | 3.1                        |                  |      |    |
| <b>Screen End Depth:</b>                        |                      | 6.1                        |                  |      |    |
| <b>Screen Material:</b>                         |                      | 5                          |                  |      |    |

| Map Key                     | Number of Records | Direction/<br>Distance (m)                                                 | Elev/Diff<br>(m) | Site                                                                                             | DB            |
|-----------------------------|-------------------|----------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------|---------------|
| Screen Depth UOM:           |                   | m                                                                          |                  |                                                                                                  |               |
| Screen Diameter UOM:        |                   | cm                                                                         |                  |                                                                                                  |               |
| Screen Diameter:            |                   | 6.03                                                                       |                  |                                                                                                  |               |
| <b><u>Water Details</u></b> |                   |                                                                            |                  |                                                                                                  |               |
| Water ID:                   |                   | 1006843490                                                                 |                  |                                                                                                  |               |
| Layer:                      |                   |                                                                            |                  |                                                                                                  |               |
| Kind Code:                  |                   |                                                                            |                  |                                                                                                  |               |
| Kind:                       |                   |                                                                            |                  |                                                                                                  |               |
| Water Found Depth:          |                   |                                                                            |                  |                                                                                                  |               |
| Water Found Depth UOM:      |                   | m                                                                          |                  |                                                                                                  |               |
| <b><u>Hole Diameter</u></b> |                   |                                                                            |                  |                                                                                                  |               |
| Hole ID:                    |                   | 1006843489                                                                 |                  |                                                                                                  |               |
| Diameter:                   |                   | 11.4                                                                       |                  |                                                                                                  |               |
| Depth From:                 |                   | 0                                                                          |                  |                                                                                                  |               |
| Depth To:                   |                   | 6.1                                                                        |                  |                                                                                                  |               |
| Hole Depth UOM:             |                   | m                                                                          |                  |                                                                                                  |               |
| Hole Diameter UOM:          |                   | cm                                                                         |                  |                                                                                                  |               |
| <a href="#"><u>5</u></a>    | 1 of 2            | SW/68.6                                                                    | 63.9 / 2.27      | 9 Robinson Ave.<br>Ottawa ON K1N 8N8                                                             | CA            |
| Certificate #:              |                   | 7132-4N2QFS                                                                |                  |                                                                                                  |               |
| Application Year:           |                   | 00                                                                         |                  |                                                                                                  |               |
| Issue Date:                 |                   | 8/11/00                                                                    |                  |                                                                                                  |               |
| Approval Type:              |                   | Municipal & Private sewage                                                 |                  |                                                                                                  |               |
| Status:                     |                   | Approved                                                                   |                  |                                                                                                  |               |
| Application Type:           |                   | New Certificate of Approval                                                |                  |                                                                                                  |               |
| Client Name::               |                   | Pegasus Development Corporation                                            |                  |                                                                                                  |               |
| Client Address::            |                   | 1914 Merivale Rd.                                                          |                  |                                                                                                  |               |
| Client City::               |                   | Nepean                                                                     |                  |                                                                                                  |               |
| Client Postal Code::        |                   | K2G 1E8                                                                    |                  |                                                                                                  |               |
| Project Description::       |                   | Storm & Sanitary Sewers                                                    |                  |                                                                                                  |               |
| Contaminants::              |                   |                                                                            |                  |                                                                                                  |               |
| Emission Control::          |                   |                                                                            |                  |                                                                                                  |               |
| <a href="#"><u>5</u></a>    | 2 of 2            | SW/68.6                                                                    | 63.9 / 2.27      | Pegasus Development Corporation<br>9 Robinson Ave.<br>Ottawa ON K2G 1E8                          | ECA           |
| Approval No:                |                   | 7132-4N2QFS                                                                |                  | SWP Area Name:                                                                                   | Rideau Valley |
| Approval Date:              |                   | 2000-08-11                                                                 |                  | MOE District:                                                                                    | Ottawa        |
| Status:                     |                   | Approved                                                                   |                  | City:                                                                                            | Ottawa        |
| Record Type:                |                   | ECA                                                                        |                  | Longitude:                                                                                       | -75.67134     |
| Link Source:                |                   | IDS                                                                        |                  | Latitude:                                                                                        | 45.417545     |
| Approval Type:              |                   | ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS                                     |                  |                                                                                                  |               |
| Project Type:               |                   | MUNICIPAL AND PRIVATE SEWAGE WORKS                                         |                  |                                                                                                  |               |
| Address:                    |                   | 9 Robinson Ave.                                                            |                  |                                                                                                  |               |
| Full Address:               |                   |                                                                            |                  |                                                                                                  |               |
| Full PDF Link:              |                   | https://www.accessenvironment.ene.gov.on.ca/instruments/4482-4MBPU4-14.pdf |                  |                                                                                                  |               |
| <a href="#"><u>6</u></a>    | 1 of 1            | WSW/72.5                                                                   | 63.9 / 2.27      | PRIVATE OWNER<br>5-9 HURDMAN STREET MOTOR VEHICLE<br>(OPERATING FLUID)<br>OTTAWA CITY ON K1N 8N6 | SPL           |
| Ref No:                     |                   | 74304                                                                      |                  | Discharger Report:                                                                               |               |



| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                                                                                         | DB  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <div> <div> <b>Site No:</b><br/> <b>Incident Dt:</b> 8/6/1992<br/> <b>Year:</b><br/> <b>Incident Cause:</b> OTHER CONTAINER LEAK<br/> <b>Incident Event:</b><br/> <b>Contaminant Code:</b><br/> <b>Contaminant Name:</b><br/> <b>Contaminant Limit 1:</b><br/> <b>Contam Limit Freq 1:</b><br/> <b>Contaminant UN No 1:</b><br/> <b>Contaminant Qty:</b><br/> <b>Environment Impact:</b> NOT ANTICIPATED<br/> <b>Nature of Impact:</b><br/> <b>Receiving Medium:</b> LAND<br/> <b>Receiving Env:</b><br/> <b>Health/Env Conseq:</b><br/> <b>MOE Response:</b><br/> <b>Dt MOE Arvl on Scn:</b><br/> <b>MOE Reported Dt:</b> 8/6/1992<br/> <b>Dt Document Closed:</b><br/> <b>SAC Action Class:</b><br/> <b>Incident Reason:</b> INTENTIONAL/PLANNED<br/> <b>Incident Summary:</b> PRIVATE VEHICLE: 10 L MOTOR OIL DUMPED ON ROAD/CATCHBASIN </div> <div> <b>Material Group:</b><br/> <b>Client Type:</b><br/> <b>Sector Type:</b><br/> <b>Source Type:</b><br/> <b>Nearest Watercourse:</b><br/> <b>Site Name:</b><br/> <b>Site Address:</b><br/> <b>Site District Office:</b><br/> <b>Site County/District:</b><br/> <b>Site Postal Code:</b><br/> <b>Site Region:</b><br/> <b>Site Municipality:</b> 20101<br/> <b>Site Lot:</b><br/> <b>Site Conc:</b><br/> <b>Northing:</b><br/> <b>Easting:</b> CITY OF OTTAWA<br/> <b>Site Geo Ref Accu:</b><br/> <b>Site Geo Ref Meth:</b><br/> <b>Site Map Datum:</b> </div> </div>                                                |                   |                            |                  |                                                                                                                                              |     |
| <u>7</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 of 1            | E/73.7                     | 60.9 / -0.75     | <b>UNKNOWN</b><br><b>PRIVATE HOUSE MR. BERNARD SEQUIN 28</b><br><b>ROBINSON AVE 613-235-4130(741-81210)</b><br><b>OTTAWA CITY ON K1N 8N9</b> | SPL |
| <div> <div> <b>Ref No:</b> 1788<br/> <b>Site No:</b><br/> <b>Incident Dt:</b> 3/26/1988<br/> <b>Year:</b><br/> <b>Incident Cause:</b> ABOVE-GROUND TANK LEAK<br/> <b>Incident Event:</b><br/> <b>Contaminant Code:</b><br/> <b>Contaminant Name:</b><br/> <b>Contaminant Limit 1:</b><br/> <b>Contam Limit Freq 1:</b><br/> <b>Contaminant UN No 1:</b><br/> <b>Contaminant Qty:</b><br/> <b>Environment Impact:</b> POSSIBLE<br/> <b>Nature of Impact:</b> SOIL CONTAMINATION<br/> <b>Receiving Medium:</b> LAND<br/> <b>Receiving Env:</b><br/> <b>Health/Env Conseq:</b><br/> <b>MOE Response:</b><br/> <b>Dt MOE Arvl on Scn:</b><br/> <b>MOE Reported Dt:</b> 3/29/1988<br/> <b>Dt Document Closed:</b><br/> <b>SAC Action Class:</b><br/> <b>Incident Reason:</b> CORROSION<br/> <b>Incident Summary:</b> PRIVATE HOUSE- NOTICED FURNACE OIL ENTERING THE BASEMENT. </div> <div> <b>Discharger Report:</b><br/> <b>Material Group:</b><br/> <b>Client Type:</b><br/> <b>Sector Type:</b><br/> <b>Source Type:</b><br/> <b>Nearest Watercourse:</b><br/> <b>Site Name:</b><br/> <b>Site Address:</b><br/> <b>Site District Office:</b><br/> <b>Site County/District:</b><br/> <b>Site Postal Code:</b><br/> <b>Site Region:</b><br/> <b>Site Municipality:</b> 20101<br/> <b>Site Lot:</b><br/> <b>Site Conc:</b><br/> <b>Northing:</b><br/> <b>Easting:</b><br/> <b>Site Geo Ref Accu:</b><br/> <b>Site Geo Ref Meth:</b><br/> <b>Site Map Datum:</b> </div> </div> |                   |                            |                  |                                                                                                                                              |     |
| <u>8</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 of 1            | SW/83.2                    | 63.9 / 2.28      | <b>DANBAR HOLDINGS (OTTAWA) LIMITED</b><br><b>ROBINSON AVE/HURDMAN RD.</b><br><b>OTTAWA CITY ON</b>                                          | CA  |
| <div> <div> <b>Certificate #:</b> 7-1132-97-<br/> <b>Application Year:</b> 97<br/> <b>Issue Date:</b> 10/17/1997<br/> <b>Approval Type:</b> Municipal water </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   |                            |                  |                                                                                                                                              |     |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Number of Records | Direction/<br>Distance (m)                                                                                                                                                 | Elev/Diff<br>(m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Site                                                                                 | DB  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----|
| <b>Status:</b><br><b>Application Type:</b><br><b>Client Name::</b><br><b>Client Address::</b><br><b>Client City::</b><br><b>Client Postal Code::</b><br><b>Project Description::</b><br><b>Contaminants::</b><br><b>Emission Control::</b>                                                                                                                                                                                                                                                                                                                                                                                                                 |                   | Approved                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                      |     |
| <a href="#">9</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 of 2            | SE/84.7                                                                                                                                                                    | 62.0 / 0.31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Kelly's Auto Body (1984) Limited<br>23 Hurdman Road<br>Ottawa ON K1N 8N7             | CA  |
| <b>Certificate #:</b><br><b>Application Year:</b><br><b>Issue Date:</b><br><b>Approval Type:</b><br><b>Status:</b><br><b>Application Type:</b><br><b>Client Name::</b><br><b>Client Address::</b><br><b>Client City::</b><br><b>Client Postal Code::</b><br><b>Project Description::</b><br><b>Contaminants::</b><br><b>Emission Control::</b>                                                                                                                                                                                                                                                                                                             |                   | 2062-5JRU49<br>2003<br>3/4/2003<br>Air<br>Approved                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                      |     |
| <a href="#">9</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2 of 2            | SE/84.7                                                                                                                                                                    | 62.0 / 0.31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Hydro Ottawa Limited<br>23 HURDMAN<UNOFFICIAL><br>Ottawa ON K1N 8N7                  | SPL |
| <b>Ref No:</b><br><b>Site No:</b><br><b>Incident Dt:</b><br><b>Year:</b><br><b>Incident Cause:</b><br><b>Incident Event:</b><br><b>Contaminant Code:</b><br><b>Contaminant Name:</b><br><b>Contaminant Limit 1:</b><br><b>Contam Limit Freq 1:</b><br><b>Contaminant UN No 1:</b><br><b>Contaminant Qty:</b><br><b>Environment Impact:</b><br><b>Nature of Impact:</b><br><b>Receiving Medium:</b><br><b>Receiving Env:</b><br><b>Health/Env Conseq:</b><br><b>MOE Response:</b><br><b>Dt MOE Arvl on Scn:</b><br><b>MOE Reported Dt:</b><br><b>Dt Document Closed:</b><br><b>SAC Action Class:</b><br><b>Incident Reason:</b><br><b>Incident Summary:</b> |                   | 8445-62AMYP<br>6/25/2004<br>15<br>TRANSFORMER OIL (N.O.S.)<br>115 L<br>Not Anticipated<br>Land<br>6/25/2004<br>Spill to Land<br>Hydro-Ottawa, 110-115L non-PCB transf. oil | <b>Discharger Report:</b><br><b>Material Group:</b><br><b>Client Type:</b><br><b>Sector Type:</b><br><b>Source Type:</b><br><b>Nearest Watercourse:</b><br><b>Site Name:</b><br><b>Site Address:</b><br><b>Site District Office:</b><br><b>Site County/District:</b><br><b>Site Postal Code:</b><br><b>Site Region:</b><br><b>Site Municipality:</b><br><b>Site Lot:</b><br><b>Site Conc:</b><br><b>Northing:</b><br><b>Easting:</b><br><b>Site Geo Ref Accu:</b><br><b>Site Geo Ref Meth:</b><br><b>Site Map Datum:</b> | Oil<br>Other Plant<br>23 HURDMAN<UNOFFICIAL><br>Ottawa<br>Eastern<br>Ottawa          |     |
| <a href="#">10</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1 of 2            | SSE/87.5                                                                                                                                                                   | 62.0 / 0.31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Kelly's Auto Body (1984) Limited<br>23 Hurdman Road Ottawa Ontario K1N 8N7<br>Ottawa | EBR |

| Map Key                                       | Number of<br>Records | Direction/<br>Distance (m)                                                                   | Elev/Diff<br>(m) | Site                                                                     | DB   |
|-----------------------------------------------|----------------------|----------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------|------|
| ON                                            |                      |                                                                                              |                  |                                                                          |      |
| Company Name:                                 |                      | Kelly's Auto Body (1984) Limited                                                             |                  |                                                                          |      |
| EBR Registry No.:                             |                      | IA02E1108                                                                                    |                  |                                                                          |      |
| Ministry Ref. No.:                            |                      | 8345-5DX2QH                                                                                  |                  |                                                                          |      |
| Notice Type:                                  |                      | Instrument Decision                                                                          |                  |                                                                          |      |
| Notice Date:                                  |                      | March 10, 2003                                                                               |                  |                                                                          |      |
| Proposal Date:                                |                      | September 18, 2002                                                                           |                  |                                                                          |      |
| Year:                                         |                      | 2002                                                                                         |                  |                                                                          |      |
| Proponent Address:                            |                      | 23 Hurdman Road, Ottawa Ontario, K1N 8N7                                                     |                  |                                                                          |      |
| Instrument Type:                              |                      | (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air) |                  |                                                                          |      |
| Location Other:                               |                      |                                                                                              |                  |                                                                          |      |
| Location:                                     |                      |                                                                                              |                  |                                                                          |      |
| 23 Hurdman Road Ottawa Ontario K1N 8N7 Ottawa |                      |                                                                                              |                  |                                                                          |      |
| 10                                            | 2 of 2               | SSE/87.5                                                                                     | 62.0 / 0.31      | Kelly's Auto Body (1984) Limited<br>23 Hurdman Road<br>Ottawa ON K1N 8N7 | ECA  |
| Approval No:                                  |                      | 2062-5JRU49                                                                                  |                  | SWP Area Name: Rideau Valley                                             |      |
| Approval Date:                                |                      | 2003-03-04                                                                                   |                  | MOE District: Ottawa                                                     |      |
| Status:                                       |                      | Approved                                                                                     |                  | City: Ottawa                                                             |      |
| Record Type:                                  |                      | ECA                                                                                          |                  | Longitude: -75.6669539999999                                             |      |
| Link Source:                                  |                      | IDS                                                                                          |                  | Latitude: 45.41755                                                       |      |
| Approval Type:                                |                      | ECA-AIR                                                                                      |                  |                                                                          |      |
| Project Type:                                 |                      | AIR                                                                                          |                  |                                                                          |      |
| Address:                                      |                      | 23 Hurdman Road                                                                              |                  |                                                                          |      |
| Full Address:                                 |                      |                                                                                              |                  |                                                                          |      |
| Full PDF Link:                                |                      | https://www.accessenvironment.ene.gov.on.ca/instruments/8345-5DX2QH-14.pdf                   |                  |                                                                          |      |
| 11                                            | 1 of 1               | NW/103.5                                                                                     | 63.5 / 1.84      | Ottawa ON                                                                | WWIS |
| Well ID:                                      |                      | 7293328                                                                                      |                  | Data Entry Status:                                                       |      |
| Construction Date:                            |                      |                                                                                              |                  | Data Src:                                                                |      |
| Primary Water Use:                            |                      | Test Hole                                                                                    |                  | Date Received: 8/18/2017                                                 |      |
| Sec. Water Use:                               |                      | Monitoring                                                                                   |                  | Selected Flag: Yes                                                       |      |
| Final Well Status:                            |                      | Monitoring and Test Hole                                                                     |                  | Abandonment Rec:                                                         |      |
| Water Type:                                   |                      |                                                                                              |                  | Contractor: 7241                                                         |      |
| Casing Material:                              |                      |                                                                                              |                  | Form Version: 7                                                          |      |
| Audit No:                                     |                      | Z258445                                                                                      |                  | Owner:                                                                   |      |
| Tag:                                          |                      | A182469                                                                                      |                  | Street Name: 3 HURDMAN ROAD                                              |      |
| Construction Method:                          |                      |                                                                                              |                  | County: OTTAWA-CARLETON                                                  |      |
| Elevation (m):                                |                      |                                                                                              |                  | Municipality: OTTAWA CITY                                                |      |
| Elevation Reliability:                        |                      |                                                                                              |                  | Site Info:                                                               |      |
| Depth to Bedrock:                             |                      |                                                                                              |                  | Lot:                                                                     |      |
| Well Depth:                                   |                      |                                                                                              |                  | Concession:                                                              |      |
| Overburden/Bedrock:                           |                      |                                                                                              |                  | Concession Name:                                                         |      |
| Pump Rate:                                    |                      |                                                                                              |                  | Easting NAD83:                                                           |      |
| Static Water Level:                           |                      |                                                                                              |                  | Northing NAD83:                                                          |      |
| Flowing (Y/N):                                |                      |                                                                                              |                  | Zone:                                                                    |      |
| Flow Rate:                                    |                      |                                                                                              |                  | UTM Reliability:                                                         |      |
| Clear/Cloudy:                                 |                      |                                                                                              |                  |                                                                          |      |
| Bore Hole Information                         |                      |                                                                                              |                  |                                                                          |      |
| Bore Hole ID:                                 |                      | 1006710697                                                                                   |                  | Elevation: 61.84                                                         |      |
| DP2BR:                                        |                      |                                                                                              |                  | Elevrc:                                                                  |      |

| Map Key                                 | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                    | DB                             |
|-----------------------------------------|----------------------|----------------------------|------------------|-------------------------|--------------------------------|
| <b>Spatial Status:</b>                  |                      |                            |                  | <b>Zone:</b>            | 18                             |
| <b>Code OB:</b>                         |                      |                            |                  | <b>East83:</b>          | 447710                         |
| <b>Code OB Desc:</b>                    |                      |                            |                  | <b>Org CS:</b>          | UTM83                          |
| <b>Open Hole:</b>                       |                      |                            |                  | <b>North83:</b>         | 5029705                        |
| <b>Cluster Kind:</b>                    |                      |                            |                  | <b>UTMRC:</b>           | 4                              |
| <b>Date Completed:</b>                  | 19-JUL-17            |                            |                  | <b>UTMRC Desc:</b>      | margin of error : 30 m - 100 m |
| <b>Remarks:</b>                         |                      |                            |                  | <b>Location Method:</b> | wwr                            |
| <b>Elevrc Desc:</b>                     |                      |                            |                  |                         |                                |
| <b>Location Source Date:</b>            |                      |                            |                  |                         |                                |
| <b>Improvement Location Source:</b>     |                      |                            |                  |                         |                                |
| <b>Improvement Location Method:</b>     |                      |                            |                  |                         |                                |
| <b>Source Revision Comment:</b>         |                      |                            |                  |                         |                                |
| <b>Supplier Comment:</b>                |                      |                            |                  |                         |                                |
| <b><u>Overburden and Bedrock</u></b>    |                      |                            |                  |                         |                                |
| <b><u>Materials Interval</u></b>        |                      |                            |                  |                         |                                |
| <b>Formation ID:</b>                    |                      | 1006830508                 |                  |                         |                                |
| <b>Layer:</b>                           |                      | 1                          |                  |                         |                                |
| <b>Color:</b>                           |                      | 8                          |                  |                         |                                |
| <b>General Color:</b>                   |                      | BLACK                      |                  |                         |                                |
| <b>Mat1:</b>                            |                      | 02                         |                  |                         |                                |
| <b>Most Common Material:</b>            |                      | TOPSOIL                    |                  |                         |                                |
| <b>Mat2:</b>                            |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>                 |                      |                            |                  |                         |                                |
| <b>Mat3:</b>                            |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>                 |                      |                            |                  |                         |                                |
| <b>Formation Top Depth:</b>             |                      | 0                          |                  |                         |                                |
| <b>Formation End Depth:</b>             |                      | .31                        |                  |                         |                                |
| <b>Formation End Depth UOM:</b>         |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                    |                      | 1006830509                 |                  |                         |                                |
| <b>Layer:</b>                           |                      | 2                          |                  |                         |                                |
| <b>Color:</b>                           |                      | 6                          |                  |                         |                                |
| <b>General Color:</b>                   |                      | BROWN                      |                  |                         |                                |
| <b>Mat1:</b>                            |                      | 05                         |                  |                         |                                |
| <b>Most Common Material:</b>            |                      | CLAY                       |                  |                         |                                |
| <b>Mat2:</b>                            |                      | 06                         |                  |                         |                                |
| <b>Other Materials:</b>                 |                      | SILT                       |                  |                         |                                |
| <b>Mat3:</b>                            |                      | 81                         |                  |                         |                                |
| <b>Other Materials:</b>                 |                      | SANDY                      |                  |                         |                                |
| <b>Formation Top Depth:</b>             |                      | .31                        |                  |                         |                                |
| <b>Formation End Depth:</b>             |                      | 2.74                       |                  |                         |                                |
| <b>Formation End Depth UOM:</b>         |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                    |                      | 1006830510                 |                  |                         |                                |
| <b>Layer:</b>                           |                      | 3                          |                  |                         |                                |
| <b>Color:</b>                           |                      | 2                          |                  |                         |                                |
| <b>General Color:</b>                   |                      | GREY                       |                  |                         |                                |
| <b>Mat1:</b>                            |                      | 06                         |                  |                         |                                |
| <b>Most Common Material:</b>            |                      | SILT                       |                  |                         |                                |
| <b>Mat2:</b>                            |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>                 |                      |                            |                  |                         |                                |
| <b>Mat3:</b>                            |                      | 81                         |                  |                         |                                |
| <b>Other Materials:</b>                 |                      | SANDY                      |                  |                         |                                |
| <b>Formation Top Depth:</b>             |                      | 2.74                       |                  |                         |                                |
| <b>Formation End Depth:</b>             |                      | 4.57                       |                  |                         |                                |
| <b>Formation End Depth UOM:</b>         |                      | m                          |                  |                         |                                |
| <b><u>Annular Space/Abandonment</u></b> |                      |                            |                  |                         |                                |
| <b><u>Sealing Record</u></b>            |                      |                            |                  |                         |                                |
| <b>Plug ID:</b>                         |                      | 1006830520                 |                  |                         |                                |
| <b>Layer:</b>                           |                      | 3                          |                  |                         |                                |

| <b>Map Key</b>                                          | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|---------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug From:</b>                                       |                              | 1.22                               |                          |             |           |
| <b>Plug To:</b>                                         |                              | 4.57                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                  |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                         |                              | 1006830518                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                       |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                         |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                  |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                         |                              | 1006830519                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                       |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                         |                              | 1.22                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                  |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                          |                              | 1006830517                         |                          |             |           |
| <b>Method Construction Code:</b>                        |                              | D                                  |                          |             |           |
| <b>Method Construction:</b>                             |                              | Direct Push                        |                          |             |           |
| <b>Other Method Construction:</b>                       |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                          |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                         |                              | 1006830507                         |                          |             |           |
| <b>Casing No:</b>                                       |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                         |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                        |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>              |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                       |                              | 1006830513                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                        |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                           |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                      |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                        |                              | 1.5                                |                          |             |           |
| <b>Casing Diameter:</b>                                 |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                             |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>              |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                       |                              | 1006830514                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                            |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                |                              | 1.5                                |                          |             |           |
| <b>Screen End Depth:</b>                                |                              | 4.57                               |                          |             |           |
| <b>Screen Material:</b>                                 |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                             |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                                 |                              | 6.03                               |                          |             |           |
| <b><u>Water Details</u></b>                             |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                        |                              | 1006830512                         |                          |             |           |
| <b>Layer:</b>                                           |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind:</b>                                            |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                               |                              |                                    |                          |             |           |

| Map Key                      | Number of Records        | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                      | DB              |
|------------------------------|--------------------------|----------------------------|------------------|---------------------------------------------------------------------------|-----------------|
| Water Found Depth UOM:       |                          | m                          |                  |                                                                           |                 |
| <u>Hole Diameter</u>         |                          |                            |                  |                                                                           |                 |
| Hole ID:                     |                          | 1006830511                 |                  |                                                                           |                 |
| Diameter:                    |                          | 11.4                       |                  |                                                                           |                 |
| Depth From:                  |                          | 0                          |                  |                                                                           |                 |
| Depth To:                    |                          | 4.57                       |                  |                                                                           |                 |
| Hole Depth UOM:              |                          | m                          |                  |                                                                           |                 |
| Hole Diameter UOM:           |                          | cm                         |                  |                                                                           |                 |
| <a href="#">12</a>           | 1 of 1                   | SSE/111.9                  | 61.9 / 0.22      | OTTAWA CITY-LEES AVE.<br>LEES AVE./HURDMAN RD./ROBINSON<br>OTTAWA CITY ON | CA              |
| Certificate #:               |                          | 3-0584-90-                 |                  |                                                                           |                 |
| Application Year:            |                          | 90                         |                  |                                                                           |                 |
| Issue Date:                  |                          | 4/18/1990                  |                  |                                                                           |                 |
| Approval Type:               |                          | Municipal sewage           |                  |                                                                           |                 |
| Status:                      |                          | Approved                   |                  |                                                                           |                 |
| Application Type:            |                          |                            |                  |                                                                           |                 |
| Client Name::                |                          |                            |                  |                                                                           |                 |
| Client Address::             |                          |                            |                  |                                                                           |                 |
| Client City::                |                          |                            |                  |                                                                           |                 |
| Client Postal Code::         |                          |                            |                  |                                                                           |                 |
| Project Description::        |                          |                            |                  |                                                                           |                 |
| Contaminants::               |                          |                            |                  |                                                                           |                 |
| Emission Control::           |                          |                            |                  |                                                                           |                 |
| <a href="#">13</a>           | 1 of 1                   | WSW/113.7                  | 65.2 / 3.53      | Ottawa ON                                                                 | WWIS            |
| Well ID:                     | 7293327                  |                            |                  | Data Entry Status:                                                        |                 |
| Construction Date:           |                          |                            |                  | Data Src:                                                                 |                 |
| Primary Water Use:           | Test Hole                |                            |                  | Date Received:                                                            | 8/18/2017       |
| Sec. Water Use:              | Monitoring               |                            |                  | Selected Flag:                                                            | Yes             |
| Final Well Status:           | Monitoring and Test Hole |                            |                  | Abandonment Rec:                                                          |                 |
| Water Type:                  |                          |                            |                  | Contractor:                                                               | 7241            |
| Casing Material:             |                          |                            |                  | Form Version:                                                             | 7               |
| Audit No:                    | Z206426                  |                            |                  | Owner:                                                                    |                 |
| Tag:                         | A182472                  |                            |                  | Street Name:                                                              | 3 HURDMAN ROAD  |
| Construction Method:         |                          |                            |                  | County:                                                                   | OTTAWA-CARLETON |
| Elevation (m):               |                          |                            |                  | Municipality:                                                             | OTTAWA CITY     |
| Elevation Reliability:       |                          |                            |                  | Site Info:                                                                |                 |
| Depth to Bedrock:            |                          |                            |                  | Lot:                                                                      |                 |
| Well Depth:                  |                          |                            |                  | Concession:                                                               |                 |
| Overburden/Bedrock:          |                          |                            |                  | Concession Name:                                                          |                 |
| Pump Rate:                   |                          |                            |                  | Easting NAD83:                                                            |                 |
| Static Water Level:          |                          |                            |                  | Northing NAD83:                                                           |                 |
| Flowing (Y/N):               |                          |                            |                  | Zone:                                                                     |                 |
| Flow Rate:                   |                          |                            |                  | UTM Reliability:                                                          |                 |
| Clear/Cloudy:                |                          |                            |                  |                                                                           |                 |
| <u>Bore Hole Information</u> |                          |                            |                  |                                                                           |                 |
| Bore Hole ID:                | 1006710691               |                            |                  | Elevation:                                                                | 65.14           |
| DP2BR:                       |                          |                            |                  | Elevrc:                                                                   |                 |
| Spatial Status:              |                          |                            |                  | Zone:                                                                     | 18              |
| Code OB:                     |                          |                            |                  | East83:                                                                   | 447665          |
| Code OB Desc:                |                          |                            |                  | Org CS:                                                                   | UTM83           |
| Open Hole:                   |                          |                            |                  | North83:                                                                  | 5029595         |
| Cluster Kind:                |                          |                            |                  | UTMRC:                                                                    | 4               |



| Map Key                       | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site             | DB                             |
|-------------------------------|----------------------|----------------------------|------------------|------------------|--------------------------------|
| Date Completed:               |                      | 19-JUL-17                  |                  | UTMRC Desc:      | margin of error : 30 m - 100 m |
| Remarks:                      |                      |                            |                  | Location Method: | wwr                            |
| Elevrc Desc:                  |                      |                            |                  |                  |                                |
| Location Source Date:         |                      |                            |                  |                  |                                |
| Improvement Location Source:  |                      |                            |                  |                  |                                |
| Improvement Location Method:  |                      |                            |                  |                  |                                |
| Source Revision Comment:      |                      |                            |                  |                  |                                |
| Supplier Comment:             |                      |                            |                  |                  |                                |
|                               |                      |                            |                  |                  |                                |
| <u>Overburden and Bedrock</u> |                      |                            |                  |                  |                                |
| <u>Materials Interval</u>     |                      |                            |                  |                  |                                |
|                               |                      |                            |                  |                  |                                |
| Formation ID:                 | 1006830478           |                            |                  |                  |                                |
| Layer:                        | 3                    |                            |                  |                  |                                |
| Color:                        | 6                    |                            |                  |                  |                                |
| General Color:                | BROWN                |                            |                  |                  |                                |
| Mat1:                         | 11                   |                            |                  |                  |                                |
| Most Common Material:         | GRAVEL               |                            |                  |                  |                                |
| Mat2:                         | 06                   |                            |                  |                  |                                |
| Other Materials:              | SILT                 |                            |                  |                  |                                |
| Mat3:                         | 81                   |                            |                  |                  |                                |
| Other Materials:              | SANDY                |                            |                  |                  |                                |
| Formation Top Depth:          | 1.83                 |                            |                  |                  |                                |
| Formation End Depth:          | 3.1                  |                            |                  |                  |                                |
| Formation End Depth UOM:      | m                    |                            |                  |                  |                                |
|                               |                      |                            |                  |                  |                                |
| Formation ID:                 | 1006830477           |                            |                  |                  |                                |
| Layer:                        | 2                    |                            |                  |                  |                                |
| Color:                        | 6                    |                            |                  |                  |                                |
| General Color:                | BROWN                |                            |                  |                  |                                |
| Mat1:                         | 01                   |                            |                  |                  |                                |
| Most Common Material:         | FILL                 |                            |                  |                  |                                |
| Mat2:                         |                      |                            |                  |                  |                                |
| Other Materials:              |                      |                            |                  |                  |                                |
| Mat3:                         |                      |                            |                  |                  |                                |
| Other Materials:              |                      |                            |                  |                  |                                |
| Formation Top Depth:          | .61                  |                            |                  |                  |                                |
| Formation End Depth:          | 1.83                 |                            |                  |                  |                                |
| Formation End Depth UOM:      | m                    |                            |                  |                  |                                |
|                               |                      |                            |                  |                  |                                |
| Formation ID:                 | 1006830479           |                            |                  |                  |                                |
| Layer:                        | 4                    |                            |                  |                  |                                |
| Color:                        | 2                    |                            |                  |                  |                                |
| General Color:                | GREY                 |                            |                  |                  |                                |
| Mat1:                         | 28                   |                            |                  |                  |                                |
| Most Common Material:         | SAND                 |                            |                  |                  |                                |
| Mat2:                         | 06                   |                            |                  |                  |                                |
| Other Materials:              | SILT                 |                            |                  |                  |                                |
| Mat3:                         | 11                   |                            |                  |                  |                                |
| Other Materials:              | GRAVEL               |                            |                  |                  |                                |
| Formation Top Depth:          | 3.1                  |                            |                  |                  |                                |
| Formation End Depth:          | 4.57                 |                            |                  |                  |                                |
| Formation End Depth UOM:      | m                    |                            |                  |                  |                                |
|                               |                      |                            |                  |                  |                                |
| Formation ID:                 | 1006830476           |                            |                  |                  |                                |
| Layer:                        | 1                    |                            |                  |                  |                                |
| Color:                        | 2                    |                            |                  |                  |                                |
| General Color:                | GREY                 |                            |                  |                  |                                |
| Mat1:                         | 11                   |                            |                  |                  |                                |
| Most Common Material:         | GRAVEL               |                            |                  |                  |                                |
| Mat2:                         |                      |                            |                  |                  |                                |
| Other Materials:              |                      |                            |                  |                  |                                |
| Mat3:                         |                      |                            |                  |                  |                                |
| Other Materials:              |                      |                            |                  |                  |                                |
| Formation Top Depth:          | 0                    |                            |                  |                  |                                |

| <b>Map Key</b>                                                 | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|----------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <hr/>                                                          |                              |                                    |                          |             |           |
| <b>Formation End Depth:</b>                                    |                              | .61                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <br><b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1006830487                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                                |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1006830488                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                                |                              | 1.22                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1006830489                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | 1.22                               |                          |             |           |
| <b>Plug To:</b>                                                |                              | 4.57                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <br><b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                                 |                              | 1006830486                         |                          |             |           |
| <b>Method Construction Code:</b>                               |                              | D                                  |                          |             |           |
| <b>Method Construction:</b>                                    |                              | Direct Push                        |                          |             |           |
| <b>Other Method Construction:</b>                              |                              |                                    |                          |             |           |
| <br><b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                                |                              | 1006830475                         |                          |             |           |
| <b>Casing No:</b>                                              |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                                |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                               |                              |                                    |                          |             |           |
| <br><b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                              |                              | 1006830482                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                               |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                                  |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                             |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                               |                              | 1.5                                |                          |             |           |
| <b>Casing Diameter:</b>                                        |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                                    |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                       |                              | m                                  |                          |             |           |
| <br><b><u>Construction Record - Screen</u></b>                 |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                              |                              | 1006830483                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                                   |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                       |                              | 1.5                                |                          |             |           |
| <b>Screen End Depth:</b>                                       |                              | 4.57                               |                          |             |           |
| <b>Screen Material:</b>                                        |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                       |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                                    |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                                        |                              | 6.03                               |                          |             |           |

| Map Key                     | Number of Records                                | Direction/<br>Distance (m) | Elev/Diff<br>(m)    | Site                                                                              | DB            |
|-----------------------------|--------------------------------------------------|----------------------------|---------------------|-----------------------------------------------------------------------------------|---------------|
| <b><u>Water Details</u></b> |                                                  |                            |                     |                                                                                   |               |
| Water ID:                   | 1006830481                                       |                            |                     |                                                                                   |               |
| Layer:                      |                                                  |                            |                     |                                                                                   |               |
| Kind Code:                  |                                                  |                            |                     |                                                                                   |               |
| Kind:                       |                                                  |                            |                     |                                                                                   |               |
| Water Found Depth:          |                                                  |                            |                     |                                                                                   |               |
| Water Found Depth UOM:      | m                                                |                            |                     |                                                                                   |               |
| <b><u>Hole Diameter</u></b> |                                                  |                            |                     |                                                                                   |               |
| Hole ID:                    | 1006830480                                       |                            |                     |                                                                                   |               |
| Diameter:                   | 11.4                                             |                            |                     |                                                                                   |               |
| Depth From:                 | 0                                                |                            |                     |                                                                                   |               |
| Depth To:                   | 4.57                                             |                            |                     |                                                                                   |               |
| Hole Depth UOM:             | m                                                |                            |                     |                                                                                   |               |
| Hole Diameter UOM:          | cm                                               |                            |                     |                                                                                   |               |
| <b><u>14</u></b>            | <b>1 of 1</b>                                    | <b>NNW/117.8</b>           | <b>62.1 / 0.49</b>  | <b>3 Hurdman Rd<br/>Ottawa ON K1N8N6</b>                                          | <b>EHS</b>    |
| Order ID:                   | 494987                                           |                            |                     | Date Received:                                                                    | 11-JAN-17     |
| Order No:                   | 20170111079                                      |                            |                     | Lot/Building Size:                                                                |               |
| Customer ID:                | 136693                                           |                            |                     | Municipality:                                                                     | Ottawa        |
| Company ID:                 | 333                                              |                            |                     | Client Prov/State:                                                                | ON            |
| Status:                     | C                                                |                            |                     | Search Radius (km):                                                               | .25           |
| Report Code:                | 4CAN                                             |                            |                     | Large Radius:                                                                     | .3            |
| Report Type:                | Custom Report                                    |                            |                     | X:                                                                                | -75.668112    |
| Report Date:                | 08-FEB-17                                        |                            |                     | Y:                                                                                | 45.419159     |
| Report Requested by:        | AMEC Foster Wheeler Environment & Infrastructure |                            |                     |                                                                                   |               |
| Nearest Intersection:       |                                                  |                            |                     |                                                                                   |               |
| Previous Site Name:         |                                                  |                            |                     |                                                                                   |               |
| Additional Info Ordered:    | City Directory                                   |                            |                     |                                                                                   |               |
| <b><u>15</u></b>            | <b>1 of 1</b>                                    | <b>E/123.7</b>             | <b>60.9 / -0.75</b> | <b>36 Robinson Ave<br/>Ottawa ON K1N 8N9</b>                                      | <b>EHS</b>    |
| Order ID:                   | 223169                                           |                            |                     | Date Received:                                                                    | 10-OCT-12     |
| Order No:                   | 20121010007                                      |                            |                     | Lot/Building Size:                                                                | 0.18 hectare  |
| Customer ID:                | 78267                                            |                            |                     | Municipality:                                                                     | Ottawa        |
| Company ID:                 | 49465                                            |                            |                     | Client Prov/State:                                                                | ON            |
| Status:                     | C                                                |                            |                     | Search Radius (km):                                                               | .25           |
| Report Code:                | 3CAN                                             |                            |                     | Large Radius:                                                                     | 2             |
| Report Type:                | Standard Report                                  |                            |                     | X:                                                                                | -75.665931    |
| Report Date:                | 18-OCT-12                                        |                            |                     | Y:                                                                                | 45.418317     |
| Report Requested by:        | Kollaard Associates Inc.                         |                            |                     |                                                                                   |               |
| Nearest Intersection:       |                                                  |                            |                     |                                                                                   |               |
| Previous Site Name:         |                                                  |                            |                     |                                                                                   |               |
| Additional Info Ordered:    |                                                  |                            |                     |                                                                                   |               |
| <b><u>16</u></b>            | <b>1 of 1</b>                                    | <b>ESE/126.5</b>           | <b>60.9 / -0.78</b> | <b>The Regional Municipality of Ottawa-Carleton<br/>Lees Avenue<br/>Ottawa ON</b> | <b>ECA</b>    |
| Approval No:                | 8377-4MUJUZ                                      |                            |                     | SWP Area Name:                                                                    | Rideau Valley |
| Approval Date:              | 2000-08-08                                       |                            |                     | MOE District:                                                                     | Ottawa        |
| Status:                     | Approved                                         |                            |                     | City:                                                                             |               |
| Record Type:                | ECA                                              |                            |                     | Longitude:                                                                        | -75.66592     |
| Link Source:                | IDS                                              |                            |                     | Latitude:                                                                         | 45.41795      |

| Map Key                                                                                                                                                                                                                                                                   | Number of<br>Records | Direction/<br>Distance (m)                                                                                               | Elev/Diff<br>(m) | Site                                                                                                                                                                                                                                                                      | DB   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>Approval Type:</b><br><b>Project Type:</b><br><b>Address:</b><br><b>Full Address:</b><br><b>Full PDF Link:</b>                                                                                                                                                         |                      | ECA-Municipal and Private Water Works<br>Municipal and Private Water Works<br>Lees Avenue                                |                  |                                                                                                                                                                                                                                                                           |      |
| <a href="#">17</a>                                                                                                                                                                                                                                                        | 1 of 1               | WSW/136.9                                                                                                                | 65.1 / 3.42      | ON                                                                                                                                                                                                                                                                        | BORE |
| <b>Borehole ID:</b><br><b>Use:</b><br><b>Drill Method::</b><br><b>Easting::</b><br><b>Location Accuracy::</b><br><b>Elev. Reliability Note::</b><br><b>Total Depth m::</b><br><b>Township::</b><br><b>Lot::</b><br><b>Completion Date::</b><br><b>Primary Water Use::</b> |                      | 847627<br>Geotechnical/Geological Investigation<br>Diamond Drill<br>447656<br><br>13.9<br>NEPEAN<br>LOT G<br>20-FEB-1964 |                  | <b>Type:</b><br><b>Status::</b><br><b>UTM Zone::</b><br><b>Northing::</b><br><b>Orig. Ground Elev m::</b><br><b>DEM Ground Elev m::</b><br><b>Primary Name::</b><br><b>Concession::</b><br><b>Municipality:</b><br><b>Static Water Level::</b><br><b>Sec. Water Use::</b> |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | Borehole<br>Decommissioned<br>18<br>5029556<br>60.8<br>63.7<br>BROKEN FRONT D                                                                                                                                                                                             |      |
| <b>--Details--</b>                                                                                                                                                                                                                                                        |                      |                                                                                                                          |                  |                                                                                                                                                                                                                                                                           |      |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             |                      | 6558290<br>0.7                                                                                                           |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | 0.0<br>LOOSE TO COMPACT BROWN SAND WITH GRAVEL AND CINDERS FILL                                                                                                                                                                                                           |      |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             |                      | 6558291<br>3.2                                                                                                           |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | 0.7<br>COMPACT BROWN TO GREY BROWN SANDY SILT TO SILTY SAND WITH GRAVEL TRACE OF CLAY WEATHERED UPPER TILL                                                                                                                                                                |      |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             |                      | 6558292<br>7.6                                                                                                           |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | 3.2<br>COMPACT TO DENSE DARK GREY FINE SAND TO SAND WITH GRAVEL TRACE TO SOME SILT                                                                                                                                                                                        |      |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             |                      | 6558293<br>8.8                                                                                                           |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | 7.6<br>VERY DENSE GREY FINE SAND OCCASIONAL GRAVEL                                                                                                                                                                                                                        |      |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             |                      | 6558294<br>11.5                                                                                                          |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | 8.8<br>VERY DENSE DARK GREY SANDY SILT TO SILTY SAND WITH GRAVEL COBBLES AND BOULDERS TRACE OF CLAY LOWER TILL                                                                                                                                                            |      |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             |                      | 6558295<br>13.9                                                                                                          |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | 11.5<br>FAIRLY SOUND TO SOUND DARK GREY TO BLACK SHALE BEDROCK                                                                                                                                                                                                            |      |
| <a href="#">18</a>                                                                                                                                                                                                                                                        | 1 of 1               | ESE/142.6                                                                                                                | 62.0 / 0.31      | ON                                                                                                                                                                                                                                                                        | BORE |
| <b>Borehole ID:</b><br><b>Use:</b><br><b>Drill Method::</b><br><b>Easting::</b><br><b>Location Accuracy::</b><br><b>Elev. Reliability Note::</b><br><b>Total Depth m::</b><br><b>Township::</b><br><b>Lot::</b><br><b>Completion Date::</b>                               |                      | 802678<br>Geotechnical/Geological Investigation<br>Hollow stem auger<br>447906.7<br><br>6.7<br><br>11-FEB-1982           |                  | <b>Type:</b><br><b>Status::</b><br><b>UTM Zone::</b><br><b>Northing::</b><br><b>Orig. Ground Elev m::</b><br><b>DEM Ground Elev m::</b><br><b>Primary Name::</b><br><b>Concession::</b><br><b>Municipality:</b><br><b>Static Water Level::</b>                            |      |
|                                                                                                                                                                                                                                                                           |                      |                                                                                                                          |                  | Borehole<br><br>18<br>5029570.15<br>61.2<br>59.5<br>BH 2                                                                                                                                                                                                                  |      |

| Map Key             | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site             | DB                                                                                        |
|---------------------|----------------------|----------------------------|------------------|------------------|-------------------------------------------------------------------------------------------|
| Primary Water Use:: |                      |                            |                  | Sec. Water Use:: |                                                                                           |
| --Details--         |                      |                            |                  |                  |                                                                                           |
| Stratum ID:         | 218573092            |                            |                  | Top Depth(m):    | 0.0                                                                                       |
| Bottom Depth(m):    | 0.3                  |                            |                  | Stratum Desc:    | Dark Grey Fill-Misc sand silt With: Gr W Brk Frag                                         |
| Stratum ID:         | 218573093            |                            |                  | Top Depth(m):    | 0.3                                                                                       |
| Bottom Depth(m):    | 0.5                  |                            |                  | Stratum Desc:    | Concrete                                                                                  |
| Stratum ID:         | 218573094            |                            |                  | Top Depth(m):    | 0.5                                                                                       |
| Bottom Depth(m):    | 1.2                  |                            |                  | Stratum Desc:    | Dark Brown Fill-Misc sand silt With: Gr W Brk Frag                                        |
| Stratum ID:         | 218573095            |                            |                  | Top Depth(m):    | 1.2                                                                                       |
| Bottom Depth(m):    | 1.4                  |                            |                  | Stratum Desc:    | Brown sand silt With: Org M                                                               |
| Stratum ID:         | 218573096            |                            |                  | Top Depth(m):    | 1.4                                                                                       |
| Bottom Depth(m):    | 6.7                  |                            |                  | Stratum Desc:    | Dark Brown to Grey Compact to Loose Till sand silt With: Cl W Gr Occasional: Cob Occ Blds |

|                                     |                          |         |              |                    |                                |
|-------------------------------------|--------------------------|---------|--------------|--------------------|--------------------------------|
| <u>19</u>                           | 1 of 1                   | N/143.3 | 59.9 / -1.78 | OTTAWA ON          | WWIS                           |
| Well ID:                            | 7292937                  |         |              | Data Entry Status: |                                |
| Construction Date:                  |                          |         |              | Data Src:          |                                |
| Primary Water Use:                  | Test Hole                |         |              | Date Received:     | 8/18/2017                      |
| Sec. Water Use:                     | Monitoring               |         |              | Selected Flag:     | Yes                            |
| Final Well Status:                  | Monitoring and Test Hole |         |              | Abandonment Rec:   |                                |
| Water Type:                         |                          |         |              | Contractor:        | 7241                           |
| Casing Material:                    |                          |         |              | Form Version:      | 7                              |
| Audit No:                           | Z258444                  |         |              | Owner:             |                                |
| Tag:                                | A182466                  |         |              | Street Name:       | 3 HARDMAN ROAD                 |
| Construction Method:                |                          |         |              | County:            | OTTAWA-CARLETON                |
| Elevation (m):                      |                          |         |              | Municipality:      | OTTAWA CITY                    |
| Elevation Reliability:              |                          |         |              | Site Info:         |                                |
| Depth to Bedrock:                   |                          |         |              | Lot:               |                                |
| Well Depth:                         |                          |         |              | Concession:        |                                |
| Overburden/Bedrock:                 |                          |         |              | Concession Name:   |                                |
| Pump Rate:                          |                          |         |              | Easting NAD83:     |                                |
| Static Water Level:                 |                          |         |              | Northing NAD83:    |                                |
| Flowing (Y/N):                      |                          |         |              | Zone:              |                                |
| Flow Rate:                          |                          |         |              | UTM Reliability:   |                                |
| Clear/Cloudy:                       |                          |         |              |                    |                                |
| <b><u>Bore Hole Information</u></b> |                          |         |              |                    |                                |
| Bore Hole ID:                       | 1006711159               |         |              | Elevation:         | 59.7                           |
| DP2BR:                              |                          |         |              | Elevrc:            |                                |
| Spatial Status:                     |                          |         |              | Zone:              | 18                             |
| Code OB:                            |                          |         |              | East83:            | 447747                         |
| Code OB Desc:                       |                          |         |              | Org CS:            | UTM83                          |
| Open Hole:                          |                          |         |              | North83:           | 5029765                        |
| Cluster Kind:                       |                          |         |              | UTMRC:             | 4                              |
| Date Completed:                     | 19-JUL-17                |         |              | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                            |                          |         |              | Location Method:   | wwr                            |
| Elevrc Desc:                        |                          |         |              |                    |                                |
| Location Source Date:               |                          |         |              |                    |                                |
| Improvement Location Source:        |                          |         |              |                    |                                |
| Improvement Location Method:        |                          |         |              |                    |                                |
| Source Revision Comment:            |                          |         |              |                    |                                |

| Map Key                                                     | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|-------------------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b>Supplier Comment:</b>                                    |                      |                            |                  |      |    |
| <b><u>Overburden and Bedrock<br/>Materials Interval</u></b> |                      |                            |                  |      |    |
| Formation ID:                                               |                      | 1006843472                 |                  |      |    |
| Layer:                                                      |                      | 2                          |                  |      |    |
| Color:                                                      |                      | 6                          |                  |      |    |
| General Color:                                              |                      | BROWN                      |                  |      |    |
| Mat1:                                                       |                      | 28                         |                  |      |    |
| Most Common Material:                                       |                      | SAND                       |                  |      |    |
| Mat2:                                                       |                      | 06                         |                  |      |    |
| Other Materials:                                            |                      | SILT                       |                  |      |    |
| Mat3:                                                       |                      | 05                         |                  |      |    |
| Other Materials:                                            |                      | CLAY                       |                  |      |    |
| Formation Top Depth:                                        |                      | .31                        |                  |      |    |
| Formation End Depth:                                        |                      | 3.1                        |                  |      |    |
| Formation End Depth UOM:                                    |                      | ft                         |                  |      |    |
| Formation ID:                                               |                      | 1006843473                 |                  |      |    |
| Layer:                                                      |                      | 3                          |                  |      |    |
| Color:                                                      |                      | 2                          |                  |      |    |
| General Color:                                              |                      | GREY                       |                  |      |    |
| Mat1:                                                       |                      | 28                         |                  |      |    |
| Most Common Material:                                       |                      | SAND                       |                  |      |    |
| Mat2:                                                       |                      | 06                         |                  |      |    |
| Other Materials:                                            |                      | SILT                       |                  |      |    |
| Mat3:                                                       |                      |                            |                  |      |    |
| Other Materials:                                            |                      |                            |                  |      |    |
| Formation Top Depth:                                        |                      | 3.1                        |                  |      |    |
| Formation End Depth:                                        |                      | 4.57                       |                  |      |    |
| Formation End Depth UOM:                                    |                      | ft                         |                  |      |    |
| Formation ID:                                               |                      | 1006843471                 |                  |      |    |
| Layer:                                                      |                      | 1                          |                  |      |    |
| Color:                                                      |                      | 8                          |                  |      |    |
| General Color:                                              |                      | BLACK                      |                  |      |    |
| Mat1:                                                       |                      | 02                         |                  |      |    |
| Most Common Material:                                       |                      | TOPSOIL                    |                  |      |    |
| Mat2:                                                       |                      |                            |                  |      |    |
| Other Materials:                                            |                      |                            |                  |      |    |
| Mat3:                                                       |                      |                            |                  |      |    |
| Other Materials:                                            |                      |                            |                  |      |    |
| Formation Top Depth:                                        |                      | 0                          |                  |      |    |
| Formation End Depth:                                        |                      | .31                        |                  |      |    |
| Formation End Depth UOM:                                    |                      | ft                         |                  |      |    |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b>  |                      |                            |                  |      |    |
| Plug ID:                                                    |                      | 1006843481                 |                  |      |    |
| Layer:                                                      |                      | 1                          |                  |      |    |
| Plug From:                                                  |                      | 0                          |                  |      |    |
| Plug To:                                                    |                      | .31                        |                  |      |    |
| Plug Depth UOM:                                             |                      | ft                         |                  |      |    |
| Plug ID:                                                    |                      | 1006843483                 |                  |      |    |
| Layer:                                                      |                      | 3                          |                  |      |    |
| Plug From:                                                  |                      | 1.22                       |                  |      |    |
| Plug To:                                                    |                      | 4.57                       |                  |      |    |
| Plug Depth UOM:                                             |                      | ft                         |                  |      |    |
| Plug ID:                                                    |                      | 1006843482                 |                  |      |    |
| Layer:                                                      |                      | 2                          |                  |      |    |



| <b>Map Key</b>                                          | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|---------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug From:</b>                                       |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                         |                              | 1.22                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                  |                              | ft                                 |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                          |                              | 1006843480                         |                          |             |           |
| <b>Method Construction Code:</b>                        |                              | B                                  |                          |             |           |
| <b>Method Construction:</b>                             |                              | Other Method                       |                          |             |           |
| <b>Other Method Construction:</b>                       |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                          |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                         |                              | 1006843470                         |                          |             |           |
| <b>Casing No:</b>                                       |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                         |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                        |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>              |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                       |                              | 1006843476                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                        |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                           |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                      |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                        |                              | 1.5                                |                          |             |           |
| <b>Casing Diameter:</b>                                 |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                             |                              | inch                               |                          |             |           |
| <b>Casing Depth UOM:</b>                                |                              | ft                                 |                          |             |           |
| <b><u>Construction Record - Screen</u></b>              |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                       |                              | 1006843477                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                            |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                |                              | 1.5                                |                          |             |           |
| <b>Screen End Depth:</b>                                |                              | 4.57                               |                          |             |           |
| <b>Screen Material:</b>                                 |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                |                              | ft                                 |                          |             |           |
| <b>Screen Diameter UOM:</b>                             |                              | inch                               |                          |             |           |
| <b>Screen Diameter:</b>                                 |                              | 6.03                               |                          |             |           |
| <b><u>Water Details</u></b>                             |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                        |                              | 1006843475                         |                          |             |           |
| <b>Layer:</b>                                           |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind:</b>                                            |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                               |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                           |                              | ft                                 |                          |             |           |
| <b><u>Hole Diameter</u></b>                             |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                         |                              | 1006843474                         |                          |             |           |
| <b>Diameter:</b>                                        |                              | 11.4                               |                          |             |           |
| <b>Depth From:</b>                                      |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                        |                              | 4.57                               |                          |             |           |
| <b>Hole Depth UOM:</b>                                  |                              | ft                                 |                          |             |           |
| <b>Hole Diameter UOM:</b>                               |                              | inch                               |                          |             |           |

| Map Key                                            | Number of<br>Records | Direction/<br>Distance (m)                                                                                                           | Elev/Diff<br>(m) | Site      | DB                   |
|----------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------|----------------------|
| <a href="#">20</a>                                 | 1 of 1               | W/144.0                                                                                                                              | 66.0 / 4.37      | ON        | <a href="#">BORE</a> |
| <b>Borehole ID:</b> 847628                         |                      | <b>Type:</b> Borehole                                                                                                                |                  |           |                      |
| <b>Use:</b> Geotechnical/Geological Investigation  |                      | <b>Status::</b> Decommissioned                                                                                                       |                  |           |                      |
| <b>Drill Method::</b> Diamond Drill                |                      | <b>UTM Zone::</b> 18                                                                                                                 |                  |           |                      |
| <b>Easting::</b> 447631                            |                      | <b>Northing::</b> 5029611                                                                                                            |                  |           |                      |
| <b>Location Accuracy::</b>                         |                      | <b>Orig. Ground Elev m::</b> 61.1                                                                                                    |                  |           |                      |
| <b>Elev. Reliability Note::</b>                    |                      | <b>DEM Ground Elev m::</b> 68.3                                                                                                      |                  |           |                      |
| <b>Total Depth m::</b> 4.7                         |                      | <b>Primary Name::</b>                                                                                                                |                  |           |                      |
| <b>Township::</b> NEPEAN                           |                      | <b>Concession::</b> BROKEN FRONT D                                                                                                   |                  |           |                      |
| <b>Lot::</b> LOT F                                 |                      | <b>Municipality:</b>                                                                                                                 |                  |           |                      |
| <b>Completion Date::</b> 22-FEB-1964               |                      | <b>Static Water Level::</b> 3.2                                                                                                      |                  |           |                      |
| <b>Primary Water Use::</b>                         |                      | <b>Sec. Water Use::</b>                                                                                                              |                  |           |                      |
| <b>--Details--</b>                                 |                      |                                                                                                                                      |                  |           |                      |
| <b>Stratum ID:</b> 6558296                         |                      | <b>Top Depth(m):</b> 0.0                                                                                                             |                  |           |                      |
| <b>Bottom Depth(m):</b> 0.6                        |                      | <b>Stratum Desc:</b> LOOSE TO COMPACT BROWN SAND SOME GRAVEL AND CINDERS FILL                                                        |                  |           |                      |
| <b>Stratum ID:</b> 6558297                         |                      | <b>Top Depth(m):</b> 0.6                                                                                                             |                  |           |                      |
| <b>Bottom Depth(m):</b> 2.7                        |                      | <b>Stratum Desc:</b> DENSE TO VERY DENSE GREY BROWN TO BROWN SANDY SILT TO SILTY SAND WITH GRAVEL TRACE OF CLAY WEATHERED UPPER TILL |                  |           |                      |
| <b>Stratum ID:</b> 6558298                         |                      | <b>Top Depth(m):</b> 2.7                                                                                                             |                  |           |                      |
| <b>Bottom Depth(m):</b> 4.7                        |                      | <b>Stratum Desc:</b> VERY DENSE DARK GREY SILTY SAND TO SAND WITH GRAVEL                                                             |                  |           |                      |
| <a href="#">21</a>                                 | 1 of 1               | NNW/144.4                                                                                                                            | 63.5 / 1.89      | Ottawa ON | <a href="#">WWIS</a> |
| <b>Well ID:</b> 7284721                            |                      | <b>Data Entry Status:</b>                                                                                                            |                  |           |                      |
| <b>Construction Date:</b>                          |                      | <b>Data Src:</b>                                                                                                                     |                  |           |                      |
| <b>Primary Water Use:</b> Test Hole                |                      | <b>Date Received:</b> 4/10/2017                                                                                                      |                  |           |                      |
| <b>Sec. Water Use:</b> Monitoring                  |                      | <b>Selected Flag:</b> Yes                                                                                                            |                  |           |                      |
| <b>Final Well Status:</b> Monitoring and Test Hole |                      | <b>Abandonment Rec:</b>                                                                                                              |                  |           |                      |
| <b>Water Type:</b>                                 |                      | <b>Contractor:</b> 7241                                                                                                              |                  |           |                      |
| <b>Casing Material:</b>                            |                      | <b>Form Version:</b> 7                                                                                                               |                  |           |                      |
| <b>Audit No:</b> Z250775                           |                      | <b>Owner:</b>                                                                                                                        |                  |           |                      |
| <b>Tag:</b> A190085                                |                      | <b>Street Name:</b> 430 WIGGINS PVT                                                                                                  |                  |           |                      |
| <b>Construction Method:</b>                        |                      | <b>County:</b> OTTAWA-CARLETON                                                                                                       |                  |           |                      |
| <b>Elevation (m):</b>                              |                      | <b>Municipality:</b> NEPEAN TOWNSHIP                                                                                                 |                  |           |                      |
| <b>Elevation Reliability:</b>                      |                      | <b>Site Info:</b>                                                                                                                    |                  |           |                      |
| <b>Depth to Bedrock:</b>                           |                      | <b>Lot:</b>                                                                                                                          |                  |           |                      |
| <b>Well Depth:</b>                                 |                      | <b>Concession:</b>                                                                                                                   |                  |           |                      |
| <b>Overburden/Bedrock:</b>                         |                      | <b>Concession Name:</b>                                                                                                              |                  |           |                      |
| <b>Pump Rate:</b>                                  |                      | <b>Easting NAD83:</b>                                                                                                                |                  |           |                      |
| <b>Static Water Level:</b>                         |                      | <b>Northing NAD83:</b>                                                                                                               |                  |           |                      |
| <b>Flowing (Y/N):</b>                              |                      | <b>Zone:</b>                                                                                                                         |                  |           |                      |
| <b>Flow Rate:</b>                                  |                      | <b>UTM Reliability:</b>                                                                                                              |                  |           |                      |
| <b>Clear/Cloudy:</b>                               |                      |                                                                                                                                      |                  |           |                      |
| <b><u>Bore Hole Information</u></b>                |                      |                                                                                                                                      |                  |           |                      |
| <b>Bore Hole ID:</b> 1006377925                    |                      | <b>Elevation:</b> 62.84                                                                                                              |                  |           |                      |
| <b>DP2BR:</b>                                      |                      | <b>Elevrc:</b>                                                                                                                       |                  |           |                      |
| <b>Spatial Status:</b>                             |                      | <b>Zone:</b> 18                                                                                                                      |                  |           |                      |
| <b>Code OB:</b>                                    |                      | <b>East83:</b> 447697                                                                                                                |                  |           |                      |
| <b>Code OB Desc:</b>                               |                      | <b>Org CS:</b> UTM83                                                                                                                 |                  |           |                      |
| <b>Open Hole:</b>                                  |                      | <b>North83:</b> 5029746                                                                                                              |                  |           |                      |

| Map Key                              | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                    | DB                             |
|--------------------------------------|----------------------|----------------------------|------------------|-------------------------|--------------------------------|
| <b>Cluster Kind:</b>                 |                      |                            |                  | <b>UTMRC:</b>           | 4                              |
| <b>Date Completed:</b>               | 23-MAR-17            |                            |                  | <b>UTMRC Desc:</b>      | margin of error : 30 m - 100 m |
| <b>Remarks:</b>                      |                      |                            |                  | <b>Location Method:</b> | WWF                            |
| <b>Elevrc Desc:</b>                  |                      |                            |                  |                         |                                |
| <b>Location Source Date:</b>         |                      |                            |                  |                         |                                |
| <b>Improvement Location Source:</b>  |                      |                            |                  |                         |                                |
| <b>Improvement Location Method:</b>  |                      |                            |                  |                         |                                |
| <b>Source Revision Comment:</b>      |                      |                            |                  |                         |                                |
| <b>Supplier Comment:</b>             |                      |                            |                  |                         |                                |
| <b><u>Overburden and Bedrock</u></b> |                      |                            |                  |                         |                                |
| <b><u>Materials Interval</u></b>     |                      |                            |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1006639043                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 1                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 2                          |                  |                         |                                |
| <b>General Color:</b>                |                      | GREY                       |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 11                         |                  |                         |                                |
| <b>Most Common Material:</b>         |                      | GRAVEL                     |                  |                         |                                |
| <b>Mat2:</b>                         |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>              |                      |                            |                  |                         |                                |
| <b>Mat3:</b>                         |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>              |                      |                            |                  |                         |                                |
| <b>Formation Top Depth:</b>          |                      | 0                          |                  |                         |                                |
| <b>Formation End Depth:</b>          |                      | .61                        |                  |                         |                                |
| <b>Formation End Depth UOM:</b>      |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1006639046                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 4                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 6                          |                  |                         |                                |
| <b>General Color:</b>                |                      | BROWN                      |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 28                         |                  |                         |                                |
| <b>Most Common Material:</b>         |                      | SAND                       |                  |                         |                                |
| <b>Mat2:</b>                         |                      | 06                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | SILT                       |                  |                         |                                |
| <b>Mat3:</b>                         |                      | 79                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | PACKED                     |                  |                         |                                |
| <b>Formation Top Depth:</b>          |                      | 2.44                       |                  |                         |                                |
| <b>Formation End Depth:</b>          |                      | 3.35                       |                  |                         |                                |
| <b>Formation End Depth UOM:</b>      |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1006639045                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 3                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 2                          |                  |                         |                                |
| <b>General Color:</b>                |                      | GREY                       |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 11                         |                  |                         |                                |
| <b>Most Common Material:</b>         |                      | GRAVEL                     |                  |                         |                                |
| <b>Mat2:</b>                         |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>              |                      |                            |                  |                         |                                |
| <b>Mat3:</b>                         |                      | 73                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | HARD                       |                  |                         |                                |
| <b>Formation Top Depth:</b>          |                      | .91                        |                  |                         |                                |
| <b>Formation End Depth:</b>          |                      | 2.44                       |                  |                         |                                |
| <b>Formation End Depth UOM:</b>      |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1006639044                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 2                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 2                          |                  |                         |                                |
| <b>General Color:</b>                |                      | GREY                       |                  |                         |                                |
| <b>Mat1:</b>                         |                      |                            |                  |                         |                                |
| <b>Most Common Material:</b>         |                      |                            |                  |                         |                                |
| <b>Mat2:</b>                         |                      | 60                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | CEMENTED                   |                  |                         |                                |
| <b>Mat3:</b>                         |                      |                            |                  |                         |                                |
| <b>Other Materials:</b>              |                      |                            |                  |                         |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Formation Top Depth:</b>                                |                              | .61                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .91                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006639056                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 1.5                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006639057                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 1.5                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 3.35                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006639055                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1006639054                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              | B                                  |                          |             |           |
| <b>Method Construction:</b>                                |                              | Other Method                       |                          |             |           |
| <b>Other Method Construction:</b>                          |                              | DP                                 |                          |             |           |
| <b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                            |                              | 1006639042                         |                          |             |           |
| <b>Casing No:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                            |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                           |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                          |                              | 1006639050                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                           |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                              |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                         |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                           |                              | 1.83                               |                          |             |           |
| <b>Casing Diameter:</b>                                    |                              | 3.45                               |                          |             |           |
| <b>Casing Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>                 |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                          |                              | 1006639051                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                   |                              | 1.83                               |                          |             |           |
| <b>Screen End Depth:</b>                                   |                              | 3.35                               |                          |             |           |
| <b>Screen Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |

| Map Key                | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|------------------------|-------------------|----------------------------|------------------|------|----|
| Screen Diameter:       |                   | 4.21                       |                  |      |    |
| <u>Water Details</u>   |                   |                            |                  |      |    |
| Water ID:              |                   | 1006639049                 |                  |      |    |
| Layer:                 |                   |                            |                  |      |    |
| Kind Code:             |                   |                            |                  |      |    |
| Kind:                  |                   |                            |                  |      |    |
| Water Found Depth:     |                   |                            |                  |      |    |
| Water Found Depth UOM: |                   | m                          |                  |      |    |
| <u>Hole Diameter</u>   |                   |                            |                  |      |    |
| Hole ID:               |                   | 1006639048                 |                  |      |    |
| Diameter:              |                   | 5.71                       |                  |      |    |
| Depth From:            |                   | .91                        |                  |      |    |
| Depth To:              |                   | 3.35                       |                  |      |    |
| Hole Depth UOM:        |                   | m                          |                  |      |    |
| Hole Diameter UOM:     |                   | cm                         |                  |      |    |
| Hole ID:               |                   | 1006639047                 |                  |      |    |
| Diameter:              |                   | 8                          |                  |      |    |
| Depth From:            |                   | 0                          |                  |      |    |
| Depth To:              |                   | .941                       |                  |      |    |
| Hole Depth UOM:        |                   | m                          |                  |      |    |
| Hole Diameter UOM:     |                   | cm                         |                  |      |    |

|                              |        |                          |              |                    |                                |
|------------------------------|--------|--------------------------|--------------|--------------------|--------------------------------|
| <u>22</u>                    | 1 of 1 | NNE/147.1                | 58.1 / -3.54 | OTTAWA ON          | WWIS                           |
| Well ID:                     |        | 7292936                  |              | Data Entry Status: |                                |
| Construction Date:           |        |                          |              | Data Src:          |                                |
| Primary Water Use:           |        | Test Hole                |              | Date Received:     | 8/18/2017                      |
| Sec. Water Use:              |        | Monitoring               |              | Selected Flag:     | Yes                            |
| Final Well Status:           |        | Monitoring and Test Hole |              | Abandonment Rec:   |                                |
| Water Type:                  |        |                          |              | Contractor:        | 7241                           |
| Casing Material:             |        |                          |              | Form Version:      | 7                              |
| Audit No:                    |        | Z258441                  |              | Owner:             |                                |
| Tag:                         |        | A182467                  |              | Street Name:       | 3 HARDEN ROAD                  |
| Construction Method:         |        |                          |              | County:            | OTTAWA-CARLETON                |
| Elevation (m):               |        |                          |              | Municipality:      | OTTAWA CITY                    |
| Elevation Reliability:       |        |                          |              | Site Info:         |                                |
| Depth to Bedrock:            |        |                          |              | Lot:               |                                |
| Well Depth:                  |        |                          |              | Concession:        |                                |
| Overburden/Bedrock:          |        |                          |              | Concession Name:   |                                |
| Pump Rate:                   |        |                          |              | Easting NAD83:     |                                |
| Static Water Level:          |        |                          |              | Northing NAD83:    |                                |
| Flowing (Y/N):               |        |                          |              | Zone:              |                                |
| Flow Rate:                   |        |                          |              | UTM Reliability:   |                                |
| Clear/Cloudy:                |        |                          |              |                    |                                |
| <u>Bore Hole Information</u> |        |                          |              |                    |                                |
| Bore Hole ID:                |        | 1006711141               |              | Elevation:         | 57.43                          |
| DP2BR:                       |        |                          |              | Elevrc:            |                                |
| Spatial Status:              |        |                          |              | Zone:              | 18                             |
| Code OB:                     |        |                          |              | East83:            | 447853                         |
| Code OB Desc:                |        |                          |              | Org CS:            | UTM83                          |
| Open Hole:                   |        |                          |              | North83:           | 5029749                        |
| Cluster Kind:                |        |                          |              | UTMRC:             | 4                              |
| Date Completed:              |        | 19-JUL-17                |              | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                     |        |                          |              | Location Method:   | wwr                            |

| Map Key                                                                                                                                                                                          | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b> |                      |                            |                  |      |    |
| <u><b>Overburden and Bedrock</b></u><br><u><b>Materials Interval</b></u>                                                                                                                         |                      |                            |                  |      |    |
| <b>Formation ID:</b>                                                                                                                                                                             |                      | 1006843458                 |                  |      |    |
| <b>Layer:</b>                                                                                                                                                                                    |                      | 3                          |                  |      |    |
| <b>Color:</b>                                                                                                                                                                                    |                      | 6                          |                  |      |    |
| <b>General Color:</b>                                                                                                                                                                            |                      | BROWN                      |                  |      |    |
| <b>Mat1:</b>                                                                                                                                                                                     |                      | 28                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                                                                                     |                      | SAND                       |                  |      |    |
| <b>Mat2:</b>                                                                                                                                                                                     |                      | 06                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      | SILT                       |                  |      |    |
| <b>Mat3:</b>                                                                                                                                                                                     |                      | 05                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      | CLAY                       |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                                                                                      |                      | 1.5                        |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                                                                                      |                      | 2.94                       |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                  |                      | m                          |                  |      |    |
| <b>Formation ID:</b>                                                                                                                                                                             |                      | 1006843459                 |                  |      |    |
| <b>Layer:</b>                                                                                                                                                                                    |                      | 4                          |                  |      |    |
| <b>Color:</b>                                                                                                                                                                                    |                      | 2                          |                  |      |    |
| <b>General Color:</b>                                                                                                                                                                            |                      | GREY                       |                  |      |    |
| <b>Mat1:</b>                                                                                                                                                                                     |                      | 28                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                                                                                     |                      | SAND                       |                  |      |    |
| <b>Mat2:</b>                                                                                                                                                                                     |                      | 06                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      | SILT                       |                  |      |    |
| <b>Mat3:</b>                                                                                                                                                                                     |                      |                            |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      |                            |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                                                                                      |                      | 2.94                       |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                                                                                      |                      | 4.57                       |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                  |                      | m                          |                  |      |    |
| <b>Formation ID:</b>                                                                                                                                                                             |                      | 1006843457                 |                  |      |    |
| <b>Layer:</b>                                                                                                                                                                                    |                      | 2                          |                  |      |    |
| <b>Color:</b>                                                                                                                                                                                    |                      | 6                          |                  |      |    |
| <b>General Color:</b>                                                                                                                                                                            |                      | BROWN                      |                  |      |    |
| <b>Mat1:</b>                                                                                                                                                                                     |                      | 01                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                                                                                     |                      | FILL                       |                  |      |    |
| <b>Mat2:</b>                                                                                                                                                                                     |                      |                            |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      |                            |                  |      |    |
| <b>Mat3:</b>                                                                                                                                                                                     |                      |                            |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      |                            |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                                                                                      |                      | .31                        |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                                                                                      |                      | 1.5                        |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                  |                      | m                          |                  |      |    |
| <b>Formation ID:</b>                                                                                                                                                                             |                      | 1006843456                 |                  |      |    |
| <b>Layer:</b>                                                                                                                                                                                    |                      | 1                          |                  |      |    |
| <b>Color:</b>                                                                                                                                                                                    |                      | 8                          |                  |      |    |
| <b>General Color:</b>                                                                                                                                                                            |                      | BLACK                      |                  |      |    |
| <b>Mat1:</b>                                                                                                                                                                                     |                      | 02                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                                                                                     |                      | TOPSOIL                    |                  |      |    |
| <b>Mat2:</b>                                                                                                                                                                                     |                      |                            |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      |                            |                  |      |    |
| <b>Mat3:</b>                                                                                                                                                                                     |                      |                            |                  |      |    |
| <b>Other Materials:</b>                                                                                                                                                                          |                      |                            |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                                                                                      |                      | 0                          |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                                                                                      |                      | .31                        |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                  |                      | m                          |                  |      |    |



| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006843469                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 1.22                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 4.57                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006843468                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 1.22                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006843467                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1006843466                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              | B                                  |                          |             |           |
| <b>Method Construction:</b>                                |                              | Other Method                       |                          |             |           |
| <b>Other Method Construction:</b>                          |                              | DIRECT PUSH                        |                          |             |           |
| <b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                            |                              | 1006843455                         |                          |             |           |
| <b>Casing No:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                            |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                           |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                          |                              | 1006843462                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                           |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                              |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                         |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                           |                              | 1.5                                |                          |             |           |
| <b>Casing Diameter:</b>                                    |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>                 |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                          |                              | 1006843463                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                   |                              | 1.5                                |                          |             |           |
| <b>Screen End Depth:</b>                                   |                              | 4.57                               |                          |             |           |
| <b>Screen Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                                    |                              | 6.03                               |                          |             |           |

| Map Key                     | Number of Records | Direction/<br>Distance (m)            | Elev/Diff<br>(m) | Site                                                                               | DB             |
|-----------------------------|-------------------|---------------------------------------|------------------|------------------------------------------------------------------------------------|----------------|
| <b><u>Water Details</u></b> |                   |                                       |                  |                                                                                    |                |
| Water ID:                   |                   | 1006843461                            |                  |                                                                                    |                |
| Layer:                      |                   |                                       |                  |                                                                                    |                |
| Kind Code:                  |                   |                                       |                  |                                                                                    |                |
| Kind:                       |                   |                                       |                  |                                                                                    |                |
| Water Found Depth:          |                   |                                       |                  |                                                                                    |                |
| Water Found Depth UOM:      |                   | m                                     |                  |                                                                                    |                |
| <b><u>Hole Diameter</u></b> |                   |                                       |                  |                                                                                    |                |
| Hole ID:                    |                   | 1006843460                            |                  |                                                                                    |                |
| Diameter:                   |                   | 11.4                                  |                  |                                                                                    |                |
| Depth From:                 |                   | 0                                     |                  |                                                                                    |                |
| Depth To:                   |                   | 4.57                                  |                  |                                                                                    |                |
| Hole Depth UOM:             |                   | m                                     |                  |                                                                                    |                |
| Hole Diameter UOM:          |                   | cm                                    |                  |                                                                                    |                |
| <a href="#"><u>23</u></a>   | 1 of 2            | WSW/147.6                             | 64.9 / 3.19      | DANBAR HOLDINGS (OTTAWA) LIMITED<br>ROBINSON AVE/LEES AVE.<br>OTTAWA CITY ON       | CA             |
| Certificate #:              |                   | 7-0924-97-                            |                  |                                                                                    |                |
| Application Year:           |                   | 97                                    |                  |                                                                                    |                |
| Issue Date:                 |                   | 8/28/1997                             |                  |                                                                                    |                |
| Approval Type:              |                   | Municipal water                       |                  |                                                                                    |                |
| Status:                     |                   | Approved                              |                  |                                                                                    |                |
| Application Type:           |                   |                                       |                  |                                                                                    |                |
| Client Name::               |                   |                                       |                  |                                                                                    |                |
| Client Address::            |                   |                                       |                  |                                                                                    |                |
| Client City::               |                   |                                       |                  |                                                                                    |                |
| Client Postal Code::        |                   |                                       |                  |                                                                                    |                |
| Project Description::       |                   |                                       |                  |                                                                                    |                |
| Contaminants::              |                   |                                       |                  |                                                                                    |                |
| Emission Control::          |                   |                                       |                  |                                                                                    |                |
| <a href="#"><u>23</u></a>   | 2 of 2            | WSW/147.6                             | 64.9 / 3.19      | DANBAR HOLDINGS (OTTAWA) LIMITED<br>LEES AVE./ROBINSON AVE., CSO<br>OTTAWA CITY ON | CA             |
| Certificate #:              |                   | 3-1213-97-                            |                  |                                                                                    |                |
| Application Year:           |                   | 97                                    |                  |                                                                                    |                |
| Issue Date:                 |                   | 8/27/1997                             |                  |                                                                                    |                |
| Approval Type:              |                   | Municipal sewage                      |                  |                                                                                    |                |
| Status:                     |                   | Approved                              |                  |                                                                                    |                |
| Application Type:           |                   |                                       |                  |                                                                                    |                |
| Client Name::               |                   |                                       |                  |                                                                                    |                |
| Client Address::            |                   |                                       |                  |                                                                                    |                |
| Client City::               |                   |                                       |                  |                                                                                    |                |
| Client Postal Code::        |                   |                                       |                  |                                                                                    |                |
| Project Description::       |                   |                                       |                  |                                                                                    |                |
| Contaminants::              |                   |                                       |                  |                                                                                    |                |
| Emission Control::          |                   |                                       |                  |                                                                                    |                |
| <a href="#"><u>24</u></a>   | 1 of 1            | SW/149.2                              | 64.9 / 3.19      | ON                                                                                 | BORE           |
| Borehole ID:                |                   | 847631                                |                  | Type:                                                                              | Borehole       |
| Use:                        |                   | Geotechnical/Geological Investigation |                  | Status::                                                                           | Decommissioned |
| Drill Method::              |                   | Diamond Drill                         |                  | UTM Zone::                                                                         | 18             |
| Easting::                   |                   | 447658                                |                  | Northing::                                                                         | 5029531        |

| Map Key                                                                                                                                                                                                                                                                                                                                                                  | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                                                                                                                                                                                                                                                                                         | DB                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Location Accuracy::</b><br><b>Elev. Reliability Note::</b><br><b>Total Depth m::</b> 5<br><b>Township::</b> NEPEAN<br><b>Lot::</b> LOT G<br><b>Completion Date::</b> 21-FEB-1964<br><b>Primary Water Use::</b>                                                                                                                                                        |                   |                            |                  | <b>Orig. Ground Elev m::</b> 60.7<br><b>DEM Ground Elev m::</b> 62<br><b>Primary Name::</b><br><b>Concession::</b> BROKEN FRONT D<br><b>Municipality:</b><br><b>Static Water Level::</b> 4.6<br><b>Sec. Water Use::</b>                                                                                                                      |                                                                                              |
| <b>--Details--</b>                                                                                                                                                                                                                                                                                                                                                       |                   |                            |                  |                                                                                                                                                                                                                                                                                                                                              |                                                                                              |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558305           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 0.0                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 0.6               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | LOOSE TO COMPACT BROWN SAND AND CINDERS TILL                                                 |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558306           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 0.6                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 2.4               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | FILL COMPACT TO DENSE BROWN TO GREY SILTY SAND WITH GRAVEL                                   |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558307           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 2.4                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 3.0               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | VERY DENSE BROWN TO DARK GREY SILTY SAND WITH GRAVEL OCCASIONAL COBBLES WEATHERED UPPER TILL |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558308           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 3.0                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 5.0               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | VERY DENSE DARK GREY SAND AND GRAVEL TRACE OF SILT                                           |
| <a href="#">25</a>                                                                                                                                                                                                                                                                                                                                                       | 1 of 1            | WSW/151.7                  | 65.8 / 4.17      | ON                                                                                                                                                                                                                                                                                                                                           | BORE                                                                                         |
| <b>Borehole ID:</b> 847630<br><b>Use:</b> Geotechnical/Geological Investigation<br><b>Drill Method::</b> Diamond Drill<br><b>Easting::</b> 447639<br><b>Location Accuracy::</b><br><b>Elev. Reliability Note::</b><br><b>Total Depth m::</b> 4.9<br><b>Township::</b> NEPEAN<br><b>Lot::</b> LOT G<br><b>Completion Date::</b> 21-FEB-1964<br><b>Primary Water Use::</b> |                   |                            |                  | <b>Type:</b> Borehole<br><b>Status::</b> Decommissioned<br><b>UTM Zone::</b> 18<br><b>Northing::</b> 5029557<br><b>Orig. Ground Elev m::</b> 60.9<br><b>DEM Ground Elev m::</b> 64.3<br><b>Primary Name::</b><br><b>Concession::</b> BROKEN FRONT D<br><b>Municipality:</b><br><b>Static Water Level::</b> -999.9<br><b>Sec. Water Use::</b> |                                                                                              |
| <b>--Details--</b>                                                                                                                                                                                                                                                                                                                                                       |                   |                            |                  |                                                                                                                                                                                                                                                                                                                                              |                                                                                              |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558302           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 0.0                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 2.1               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | COMPACT TO VERY DENSE DARK BROWN SILTY SAND GRAVEL COBBLES AND BOULDERS                      |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558303           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 2.1                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 3.4               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | WEATHERED UPPER TILL VERY DENSE GREY BROWN SILTY SAND WITH GRAVEL TRACE OF CLAY              |
| <b>Stratum ID:</b>                                                                                                                                                                                                                                                                                                                                                       | 6558304           |                            |                  | <b>Top Depth(m):</b>                                                                                                                                                                                                                                                                                                                         | 3.4                                                                                          |
| <b>Bottom Depth(m):</b>                                                                                                                                                                                                                                                                                                                                                  | 4.9               |                            |                  | <b>Stratum Desc:</b>                                                                                                                                                                                                                                                                                                                         | VERY DENSE DARK GREY SAND AND GRAVEL TRACE OF SILT                                           |
| <a href="#">26</a>                                                                                                                                                                                                                                                                                                                                                       | 1 of 1            | SW/153.2                   | 64.9 / 3.19      | ON                                                                                                                                                                                                                                                                                                                                           | BORE                                                                                         |
| <b>Borehole ID:</b>                                                                                                                                                                                                                                                                                                                                                      | 613310            |                            |                  | <b>Type:</b>                                                                                                                                                                                                                                                                                                                                 | Borehole                                                                                     |
| <b>Use:</b>                                                                                                                                                                                                                                                                                                                                                              |                   |                            |                  | <b>Status::</b>                                                                                                                                                                                                                                                                                                                              |                                                                                              |

| Map Key                         | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                         | DB                                                                                         |
|---------------------------------|-------------------|----------------------------|------------------|------------------------------|--------------------------------------------------------------------------------------------|
| <b>Drill Method::</b>           |                   |                            |                  | <b>UTM Zone::</b>            | 18                                                                                         |
| <b>Easting::</b>                | 447661            |                            |                  | <b>Northing::</b>            | 5029522                                                                                    |
| <b>Location Accuracy::</b>      |                   |                            |                  | <b>Orig. Ground Elev m::</b> | 60.3                                                                                       |
| <b>Elev. Reliability Note::</b> |                   |                            |                  | <b>DEM Ground Elev m::</b>   | 62.2                                                                                       |
| <b>Total Depth m::</b>          | 1.4               |                            |                  | <b>Primary Name::</b>        |                                                                                            |
| <b>Township::</b>               |                   |                            |                  | <b>Concession::</b>          |                                                                                            |
| <b>Lot::</b>                    |                   |                            |                  | <b>Municipality:</b>         |                                                                                            |
| <b>Completion Date::</b>        | JUL-1962          |                            |                  | <b>Static Water Level::</b>  | -6.6                                                                                       |
| <b>Primary Water Use::</b>      |                   |                            |                  | <b>Sec. Water Use::</b>      |                                                                                            |
| <b>--Details--</b>              |                   |                            |                  |                              |                                                                                            |
| <b>Stratum ID:</b>              | 218394595         |                            |                  | <b>Top Depth(m):</b>         | 0.0                                                                                        |
| <b>Bottom Depth(m):</b>         | 0.8               |                            |                  | <b>Stratum Desc:</b>         | ARTIFICIAL.                                                                                |
| <b>Stratum ID:</b>              | 218394596         |                            |                  | <b>Top Depth(m):</b>         | 0.8                                                                                        |
| <b>Bottom Depth(m):</b>         | 1.4               |                            |                  | <b>Stratum Desc:</b>         | ARTIFICIAL. WN.HARD. TILL. GREY,FIRM. BEDROCK. GREY,FRACTURED, WATER STABLE AT 219.4 FEET. |

|                                 |                                       |           |             |                              |                                                                  |
|---------------------------------|---------------------------------------|-----------|-------------|------------------------------|------------------------------------------------------------------|
| <a href="#">27</a>              | 1 of 1                                | ESE/157.3 | 61.9 / 0.22 | ON                           | BORE                                                             |
| <b>Borehole ID:</b>             | 802676                                |           |             | <b>Type:</b>                 | Borehole                                                         |
| <b>Use:</b>                     | Geotechnical/Geological Investigation |           |             | <b>Status::</b>              |                                                                  |
| <b>Drill Method::</b>           | Hollow stem auger                     |           |             | <b>UTM Zone::</b>            | 18                                                               |
| <b>Easting::</b>                | 447909.47                             |           |             | <b>Northing::</b>            | 5029543.1                                                        |
| <b>Location Accuracy::</b>      |                                       |           |             | <b>Orig. Ground Elev m::</b> | 61.5                                                             |
| <b>Elev. Reliability Note::</b> |                                       |           |             | <b>DEM Ground Elev m::</b>   | 60.9                                                             |
| <b>Total Depth m::</b>          | 10.2                                  |           |             | <b>Primary Name::</b>        | BH 1                                                             |
| <b>Township::</b>               |                                       |           |             | <b>Concession::</b>          |                                                                  |
| <b>Lot::</b>                    |                                       |           |             | <b>Municipality:</b>         |                                                                  |
| <b>Completion Date::</b>        | 09-FEB-1982                           |           |             | <b>Static Water Level::</b>  | 4.3                                                              |
| <b>Primary Water Use::</b>      |                                       |           |             | <b>Sec. Water Use::</b>      |                                                                  |
| <b>--Details--</b>              |                                       |           |             |                              |                                                                  |
| <b>Stratum ID:</b>              | 218573078                             |           |             | <b>Top Depth(m):</b>         | 0.0                                                              |
| <b>Bottom Depth(m):</b>         | 0.1                                   |           |             | <b>Stratum Desc:</b>         | Concrete                                                         |
| <b>Stratum ID:</b>              | 218573079                             |           |             | <b>Top Depth(m):</b>         | 0.1                                                              |
| <b>Bottom Depth(m):</b>         | 0.6                                   |           |             | <b>Stratum Desc:</b>         | Dark Brown Fill-Misc sand silt Trace: Gr Tr Brk Frag             |
| <b>Stratum ID:</b>              | 218573080                             |           |             | <b>Top Depth(m):</b>         | 0.6                                                              |
| <b>Bottom Depth(m):</b>         | 1.1                                   |           |             | <b>Stratum Desc:</b>         | Dark Brown sand silt With: Org M                                 |
| <b>Stratum ID:</b>              | 218573081                             |           |             | <b>Top Depth(m):</b>         | 1.1                                                              |
| <b>Bottom Depth(m):</b>         | 2.9                                   |           |             | <b>Stratum Desc:</b>         | Brown Compact to Dense Till sand silt With: Cl W Gr              |
| <b>Stratum ID:</b>              | 218573082                             |           |             | <b>Top Depth(m):</b>         | 2.9                                                              |
| <b>Bottom Depth(m):</b>         | 4.0                                   |           |             | <b>Stratum Desc:</b>         | Brown Dense Sand                                                 |
| <b>Stratum ID:</b>              | 218573083                             |           |             | <b>Top Depth(m):</b>         | 4.0                                                              |
| <b>Bottom Depth(m):</b>         | 5.5                                   |           |             | <b>Stratum Desc:</b>         | Grey Dense Till Silt - Sand With: Gr W Cob Trace: Cl             |
| <b>Stratum ID:</b>              | 218573084                             |           |             | <b>Top Depth(m):</b>         | 5.5                                                              |
| <b>Bottom Depth(m):</b>         | 10.1                                  |           |             | <b>Stratum Desc:</b>         | Dark Grey Compact to Dense Till Silt - Sand With: Cl W Gr W Blds |
| <b>Stratum ID:</b>              | 218573085                             |           |             | <b>Top Depth(m):</b>         | 10.1                                                             |
| <b>Bottom Depth(m):</b>         | 10.2                                  |           |             | <b>Stratum Desc:</b>         | Bedrock Shale                                                    |

| Map Key                                           | Number of Records | Direction/<br>Distance (m)                                                                                     | Elev/Diff<br>(m) | Site | DB   |
|---------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------|------------------|------|------|
| <a href="#">28</a>                                | 1 of 1            | SW/159.9                                                                                                       | 64.9 / 3.19      | ON   | BORE |
| <b>Borehole ID:</b> 847626                        |                   | <b>Type:</b> Borehole                                                                                          |                  |      |      |
| <b>Use:</b> Geotechnical/Geological Investigation |                   | <b>Status::</b> Decommissioned                                                                                 |                  |      |      |
| <b>Drill Method::</b> Diamond Drill               |                   | <b>UTM Zone::</b> 18                                                                                           |                  |      |      |
| <b>Easting::</b> 447645                           |                   | <b>Northing::</b> 5029531                                                                                      |                  |      |      |
| <b>Location Accuracy::</b>                        |                   | <b>Orig. Ground Elev m::</b> 60.7                                                                              |                  |      |      |
| <b>Elev. Reliability Note::</b>                   |                   | <b>DEM Ground Elev m::</b> 63.4                                                                                |                  |      |      |
| <b>Total Depth m::</b> 13.7                       |                   | <b>Primary Name::</b>                                                                                          |                  |      |      |
| <b>Township::</b> NEPEAN                          |                   | <b>Concession::</b> BROKEN FRONT D                                                                             |                  |      |      |
| <b>Lot::</b> LOT G                                |                   | <b>Municipality:</b>                                                                                           |                  |      |      |
| <b>Completion Date::</b> 19-FEB-1964              |                   | <b>Static Water Level::</b> 4.2                                                                                |                  |      |      |
| <b>Primary Water Use::</b>                        |                   | <b>Sec. Water Use::</b>                                                                                        |                  |      |      |
| <b>--Details--</b>                                |                   |                                                                                                                |                  |      |      |
| <b>Stratum ID:</b> 6558282                        |                   | <b>Top Depth(m):</b> 0.0                                                                                       |                  |      |      |
| <b>Bottom Depth(m):</b> 0.8                       |                   | <b>Stratum Desc:</b> LOOSE TO COMPACT BROWN SAND WITH CINDERS FILL                                             |                  |      |      |
| <b>Stratum ID:</b> 6558283                        |                   | <b>Top Depth(m):</b> 0.8                                                                                       |                  |      |      |
| <b>Bottom Depth(m):</b> 2.4                       |                   | <b>Stratum Desc:</b> COMPACT TO DENSE DARK BROWN TO BROWN SILTY SAND WITH GRAVEL TRACE OF CLAY FILL            |                  |      |      |
| <b>Stratum ID:</b> 6558284                        |                   | <b>Top Depth(m):</b> 2.4                                                                                       |                  |      |      |
| <b>Bottom Depth(m):</b> 3.7                       |                   | <b>Stratum Desc:</b> DENSE DARK BROWN SILTY SAND WITH GRAVEL TRACE OF CLAY WEATHERED UPPER TILL                |                  |      |      |
| <b>Stratum ID:</b> 6558285                        |                   | <b>Top Depth(m):</b> 3.7                                                                                       |                  |      |      |
| <b>Bottom Depth(m):</b> 7.5                       |                   | <b>Stratum Desc:</b> DENSE TO VERY DENSE DARK GREY SAND WITH GRAVEL TO SAND TRACE OF SILT AND GRAVEL           |                  |      |      |
| <b>Stratum ID:</b> 6558286                        |                   | <b>Top Depth(m):</b> 7.5                                                                                       |                  |      |      |
| <b>Bottom Depth(m):</b> 9.0                       |                   | <b>Stratum Desc:</b> VERY DENSE GREY FINE SAND TRACE TO SOME SILT                                              |                  |      |      |
| <b>Stratum ID:</b> 6558287                        |                   | <b>Top Depth(m):</b> 9.0                                                                                       |                  |      |      |
| <b>Bottom Depth(m):</b> 10.9                      |                   | <b>Stratum Desc:</b> VERY DENSE DARK GREY SANDY SILT WITH GRAVEL COBBLES AND BOULDERS TRACE OF CLAY LOWER TILL |                  |      |      |
| <b>Stratum ID:</b> 6558288                        |                   | <b>Top Depth(m):</b> 10.9                                                                                      |                  |      |      |
| <b>Bottom Depth(m):</b> 13.7                      |                   | <b>Stratum Desc:</b> FAIRLY SOUND TO SOUND DARK GREY TO BLACK SHALE BEDROCK                                    |                  |      |      |
| <a href="#">29</a>                                | 1 of 1            | ESE/161.8                                                                                                      | 60.9 / -0.78     | ON   | BORE |
| <b>Borehole ID:</b> 802680                        |                   | <b>Type:</b> Borehole                                                                                          |                  |      |      |
| <b>Use:</b> Geotechnical/Geological Investigation |                   | <b>Status::</b>                                                                                                |                  |      |      |
| <b>Drill Method::</b> Hollow stem auger           |                   | <b>UTM Zone::</b> 18                                                                                           |                  |      |      |
| <b>Easting::</b> 447931.38                        |                   | <b>Northing::</b> 5029583.69                                                                                   |                  |      |      |
| <b>Location Accuracy::</b>                        |                   | <b>Orig. Ground Elev m::</b> 60.9                                                                              |                  |      |      |
| <b>Elev. Reliability Note::</b>                   |                   | <b>DEM Ground Elev m::</b> 59.4                                                                                |                  |      |      |
| <b>Total Depth m::</b> 12                         |                   | <b>Primary Name::</b> BH 3                                                                                     |                  |      |      |
| <b>Township::</b>                                 |                   | <b>Concession::</b>                                                                                            |                  |      |      |
| <b>Lot::</b>                                      |                   | <b>Municipality:</b>                                                                                           |                  |      |      |
| <b>Completion Date::</b> 11-FEB-1982              |                   | <b>Static Water Level::</b> 4.7                                                                                |                  |      |      |
| <b>Primary Water Use::</b>                        |                   | <b>Sec. Water Use::</b>                                                                                        |                  |      |      |

| Map Key                  | Number of Records                     | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                  | DB                                                                                          |
|--------------------------|---------------------------------------|----------------------------|------------------|-----------------------|---------------------------------------------------------------------------------------------|
| <b>--Details--</b>       |                                       |                            |                  |                       |                                                                                             |
| Stratum ID:              | 218573104                             |                            |                  | Top Depth(m):         | 0.0                                                                                         |
| Bottom Depth(m):         | 0.4                                   |                            |                  | Stratum Desc:         | Dark Grey Cinder Ash                                                                        |
| Stratum ID:              | 218573105                             |                            |                  | Top Depth(m):         | 0.4                                                                                         |
| Bottom Depth(m):         | 0.5                                   |                            |                  | Stratum Desc:         | Brown Topsoil Silt                                                                          |
| Stratum ID:              | 218573106                             |                            |                  | Top Depth(m):         | 0.5                                                                                         |
| Bottom Depth(m):         | 12.0                                  |                            |                  | Stratum Desc:         | Dark Brown to Grey Compact to Loose Till sand silt With: Cl W Gr Occasional: Cob Occ Blds   |
| <b>30</b>                | 1 of 1                                | SW/164.9                   | 65.0 / 3.31      | ON                    | BORE                                                                                        |
| Borehole ID:             | 847629                                |                            |                  | Type:                 | Borehole                                                                                    |
| Use:                     | Geotechnical/Geological Investigation |                            |                  | Status::              | Decommissioned                                                                              |
| Drill Method::           | Diamond Drill                         |                            |                  | UTM Zone::            | 18                                                                                          |
| Easting::                | 447651                                |                            |                  | Northing::            | 5029516                                                                                     |
| Location Accuracy::      |                                       |                            |                  | Orig. Ground Elev m:: | 60.3                                                                                        |
| Elev. Reliability Note:: |                                       |                            |                  | DEM Ground Elev m::   | 63.9                                                                                        |
| Total Depth m::          | 5                                     |                            |                  | Primary Name::        |                                                                                             |
| Township::               | NEPEAN                                |                            |                  | Concession::          | BROKEN FRONT D                                                                              |
| Lot::                    | LOT G                                 |                            |                  | Municipality:         |                                                                                             |
| Completion Date::        | 22-FEB-1964                           |                            |                  | Static Water Level::  | 4                                                                                           |
| Primary Water Use::      |                                       |                            |                  | Sec. Water Use::      |                                                                                             |
| <b>--Details--</b>       |                                       |                            |                  |                       |                                                                                             |
| Stratum ID:              | 6558299                               |                            |                  | Top Depth(m):         | 0.0                                                                                         |
| Bottom Depth(m):         | 1.8                                   |                            |                  | Stratum Desc:         | COMPACT TO DENSE BROWN SAND TO SILTY SAND WITH SOME GRAVEL FILL                             |
| Stratum ID:              | 6558300                               |                            |                  | Top Depth(m):         | 1.8                                                                                         |
| Bottom Depth(m):         | 3.0                                   |                            |                  | Stratum Desc:         | DENS ETO VERY DENSE BROWN TO GREY SILTY SAND WITH GRAVEL TRACE OF CLAY WEATHERED UPPER TILL |
| Stratum ID:              | 6558301                               |                            |                  | Top Depth(m):         | 3.0                                                                                         |
| Bottom Depth(m):         | 5.0                                   |                            |                  | Stratum Desc:         | VERY DENSE DARK GREY SAND WITH GRAVEL TRACE OF SILT                                         |
| <b>31</b>                | 1 of 1                                | ESE/171.0                  | 62.0 / 0.31      | ON                    | BORE                                                                                        |
| Borehole ID:             | 802682                                |                            |                  | Type:                 | Borehole                                                                                    |
| Use:                     | Geotechnical/Geological Investigation |                            |                  | Status::              |                                                                                             |
| Drill Method::           | Hollow stem auger                     |                            |                  | UTM Zone::            | 18                                                                                          |
| Easting::                | 447932.27                             |                            |                  | Northing::            | 5029557.68                                                                                  |
| Location Accuracy::      |                                       |                            |                  | Orig. Ground Elev m:: | 61.8                                                                                        |
| Elev. Reliability Note:: |                                       |                            |                  | DEM Ground Elev m::   | 59.8                                                                                        |
| Total Depth m::          | 6.7                                   |                            |                  | Primary Name::        | BH 4                                                                                        |
| Township::               |                                       |                            |                  | Concession::          |                                                                                             |
| Lot::                    |                                       |                            |                  | Municipality:         |                                                                                             |
| Completion Date::        | 10-FEB-1982                           |                            |                  | Static Water Level::  | -999.9                                                                                      |
| Primary Water Use::      |                                       |                            |                  | Sec. Water Use::      |                                                                                             |
| <b>--Details--</b>       |                                       |                            |                  |                       |                                                                                             |
| Stratum ID:              | 218573113                             |                            |                  | Top Depth(m):         | 0.0                                                                                         |
| Bottom Depth(m):         | 0.1                                   |                            |                  | Stratum Desc:         | Concrete                                                                                    |



| Map Key                                       | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                         | DB                                                                                                |
|-----------------------------------------------|-------------------|----------------------------|------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b> | 218573114<br>1.2  |                            |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b> | 0.1<br>Dark Grey to Black Cinder Ash                                                              |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b> | 218573115<br>1.4  |                            |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b> | 1.2<br>Dark Brown Topsoil Silt                                                                    |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b> | 218573116<br>2.0  |                            |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b> | 1.4<br>Brown Compact sand silt                                                                    |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b> | 218573117<br>6.7  |                            |                  | <b>Top Depth(m):</b><br><b>Stratum Desc:</b> | 2.0<br>Dark Brown to Grey Dense to Loose Till sand<br>silt With: Cl W Gr Occasional: Cob Occ Blds |

|                                                                                                                                                                                                                                                                           |                                                                                                                              |          |             |                                                                                                                                                                                                                                                                           |                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">32</a>                                                                                                                                                                                                                                                        | 1 of 1                                                                                                                       | SW/175.9 | 65.0 / 3.31 | ON                                                                                                                                                                                                                                                                        | BORE                                                                                                                                      |
| <b>Borehole ID:</b><br><b>Use:</b><br><b>Drill Method::</b><br><b>Easting::</b><br><b>Location Accuracy::</b><br><b>Elev. Reliability Note::</b><br><b>Total Depth m::</b><br><b>Township::</b><br><b>Lot::</b><br><b>Completion Date::</b><br><b>Primary Water Use::</b> | 847625<br>Geotechnical/Geological Investigation<br>Diamond Drill<br>447654<br><br><br>14.5<br>NEPEAN<br>LOT G<br>17-FEB-1964 |          |             | <b>Type:</b><br><b>Status::</b><br><b>UTM Zone::</b><br><b>Northing::</b><br><b>Orig. Ground Elev m::</b><br><b>DEM Ground Elev m::</b><br><b>Primary Name::</b><br><b>Concession::</b><br><b>Municipality:</b><br><b>Static Water Level::</b><br><b>Sec. Water Use::</b> | Borehole<br>Decommissioned<br>18<br>5029496<br>60.8<br>61.8<br><br>BROKEN FRONT D<br><br>4.5                                              |
| <b>--Details--</b><br><b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                       | 6558277<br>2.9                                                                                                               |          |             | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              | 0.0<br>COMPACT TO VERY DENSE DARK BROWN<br>TO BLACK SILTY SAND TO SAND WITH<br>GRAVEL AND LIMESTONE FRAGMENTS,<br>OCCASIONAL CINDERS FILL |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             | 6558278<br>6.7                                                                                                               |          |             | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              | 2.9<br>VERY DENSE BROWN TO DARK GREY<br>SAND TRACE TO SOME SILT AND GRAVEL                                                                |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             | 6558279<br>8.7                                                                                                               |          |             | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              | 6.7<br>VERY DENSE GREY SILTY FINE SAND<br>TRACE OF GRAVEL AND OCCASIONAL<br>THIN LAYERS OF SILT AND SAND                                  |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             | 6558280<br>11.1                                                                                                              |          |             | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              | 8.7<br>VERY DENSE DARK GREY SILTY SAND TO<br>SANDY SILT WITH GRAVEL COBBLES AND<br>BOULDERS TRACE TO SOME CLAY LOWER<br>TILL              |
| <b>Stratum ID:</b><br><b>Bottom Depth(m):</b>                                                                                                                                                                                                                             | 6558281<br>14.5                                                                                                              |          |             | <b>Top Depth(m):</b><br><b>Stratum Desc:</b>                                                                                                                                                                                                                              | 11.1<br>SOUND DARK GREY TO BLACK SHALE<br>BEDROCK                                                                                         |

|                                                                                   |                                      |          |             |                                                                                                         |                         |
|-----------------------------------------------------------------------------------|--------------------------------------|----------|-------------|---------------------------------------------------------------------------------------------------------|-------------------------|
| <a href="#">33</a>                                                                | 1 of 1                               | NW/176.3 | 66.2 / 4.58 | 310 Wiggins Pvt<br>Ottawa ON K1N1B1                                                                     | EHS                     |
| <b>Order ID:</b><br><b>Order No:</b><br><b>Customer ID:</b><br><b>Company ID:</b> | 495976<br>20170118023<br>77170<br>97 |          |             | <b>Date Received:</b><br><b>Lot/Building Size:</b><br><b>Municipality:</b><br><b>Client Prov/State:</b> | 18-JAN-17<br><br><br>ON |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                           | DB  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|--------------------------------------------------------------------------------|-----|
| <b>Status:</b> C<br><b>Report Code:</b> 3CAN<br><b>Report Type:</b> Standard Report<br><b>Report Date:</b> 24-JAN-17<br><b>Report Requested by:</b> exp Services Inc.<br><b>Nearest Intersection:</b><br><b>Previous Site Name:</b><br><b>Additional Info Ordered:</b> Fire Insur. Maps and/or Site Plans; City Directory                                                                                                                                                                                                                                                          |                   |                            |                  |                                                                                |     |
| <b>Search Radius (km):</b> .25<br><b>Large Radius:</b> .3<br><b>X:</b> -75.668894<br><b>Y:</b> 45.419437                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                            |                  |                                                                                |     |
| <a href="#">34</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1 of 3            | SSW/184.3                  | 63.9 / 2.25      | REGIONAL MUNICIPALITY OF OTTAWA<br>CARLETON<br>195 LEES AVE.<br>OTTAWA CITY ON | CA  |
| <b>Certificate #:</b> 8-4059-86-<br><b>Application Year:</b> 86<br><b>Issue Date:</b> 11/21/1986<br><b>Approval Type:</b> Industrial air<br><b>Status:</b> Approved<br><b>Application Type:</b><br><b>Client Name::</b><br><b>Client Address::</b><br><b>Client City::</b><br><b>Client Postal Code::</b><br><b>Project Description::</b> COAL-FOR TREATMENT SYSTEM EXHAUST<br><b>Contaminants::</b> Benzene (Carcinogen Requires Bact), Toluene(Pentyl Methane)(Methyl Benzene), Xylene, Ethyl Benzene, Other Organic Compounds<br><b>Emission Control::</b> Act. Charcoal Filter |                   |                            |                  |                                                                                |     |
| <a href="#">34</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2 of 3            | SSW/184.3                  | 63.9 / 2.25      | City of Ottawa<br>195 Lees Avenue<br>Ottawa ON                                 | CA  |
| <b>Certificate #:</b> 3-1458-86-006<br><b>Application Year:</b> 2005<br><b>Issue Date:</b> 1/6/2005<br><b>Approval Type:</b> Municipal and Private Sewage Works<br><b>Status:</b> Approved<br><b>Application Type:</b><br><b>Client Name::</b><br><b>Client Address::</b><br><b>Client City::</b><br><b>Client Postal Code::</b><br><b>Project Description::</b><br><b>Contaminants::</b><br><b>Emission Control::</b>                                                                                                                                                             |                   |                            |                  |                                                                                |     |
| <a href="#">34</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 3 of 3            | SSW/184.3                  | 63.9 / 2.25      | City of Ottawa<br>195 Lees Avenue<br>Ottawa ON K1P 1J1                         | ECA |
| <b>Approval No:</b> 3-1458-86-006<br><b>Approval Date:</b> 2005-01-06<br><b>Status:</b> Approved<br><b>Record Type:</b> ECA<br><b>Link Source:</b> IDS<br><b>Approval Type:</b> ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS<br><b>Project Type:</b> MUNICIPAL AND PRIVATE SEWAGE WORKS<br><b>Address:</b> 195 Lees Avenue<br><b>Full Address:</b>                                                                                                                                                                                                                                       |                   |                            |                  |                                                                                |     |
| <b>SWP Area Name:</b> Rideau Valley<br><b>MOE District:</b> Ottawa<br><b>City:</b> Ottawa<br><b>Longitude:</b> -75.66592<br><b>Latitude:</b> 45.41795                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |                            |                  |                                                                                |     |

| Map Key                                                                    | Number of Records | Direction/<br>Distance (m)                                                                    | Elev/Diff<br>(m) | Site                                                           | DB   |
|----------------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------|------|
| Full PDF Link:                                                             |                   | https://www.accessenvironment.ene.gov.on.ca/instruments/3294-67APJQ-14.pdf                    |                  |                                                                |      |
| <a href="#">35</a>                                                         | 1 of 1            | SW/185.0                                                                                      | 64.9 / 3.22      | ON                                                             | BORE |
| <b>Borehole ID:</b> 847632                                                 |                   | <b>Type:</b> Borehole                                                                         |                  |                                                                |      |
| <b>Use:</b> Geotechnical/Geological Investigation                          |                   | <b>Status::</b> Decommissioned                                                                |                  |                                                                |      |
| <b>Drill Method::</b> Diamond Drill                                        |                   | <b>UTM Zone::</b> 18                                                                          |                  |                                                                |      |
| <b>Easting::</b> 447640                                                    |                   | <b>Northing::</b> 5029498                                                                     |                  |                                                                |      |
| <b>Location Accuracy::</b>                                                 |                   | <b>Orig. Ground Elev m::</b> 60.8                                                             |                  |                                                                |      |
| <b>Elev. Reliability Note::</b>                                            |                   | <b>DEM Ground Elev m::</b> 62.8                                                               |                  |                                                                |      |
| <b>Total Depth m::</b> 5.3                                                 |                   | <b>Primary Name::</b>                                                                         |                  |                                                                |      |
| <b>Township::</b> NEPEAN                                                   |                   | <b>Concession::</b> BROKEN FRONT D                                                            |                  |                                                                |      |
| <b>Lot::</b> LOT G                                                         |                   | <b>Municipality:</b>                                                                          |                  |                                                                |      |
| <b>Completion Date::</b> 22-FEB-1964                                       |                   | <b>Static Water Level::</b> 4.5                                                               |                  |                                                                |      |
| <b>Primary Water Use::</b>                                                 |                   | <b>Sec. Water Use::</b>                                                                       |                  |                                                                |      |
| <b>--Details--</b>                                                         |                   |                                                                                               |                  |                                                                |      |
| <b>Stratum ID:</b> 6558309                                                 |                   | <b>Top Depth(m):</b> 0.0                                                                      |                  |                                                                |      |
| <b>Bottom Depth(m):</b> 3.2                                                |                   | <b>Stratum Desc:</b> COMPACT TO DENSE BROWN TO DARK BROWN SAND TO SILTY SAND WITH GRAVEL FILL |                  |                                                                |      |
| <b>Stratum ID:</b> 6558310                                                 |                   | <b>Top Depth(m):</b> 3.2                                                                      |                  |                                                                |      |
| <b>Bottom Depth(m):</b> 5.3                                                |                   | <b>Stratum Desc:</b> DENSE TO VERY DENSE DARK GREY SAND TRACE OF SILT SOME GRAVEL             |                  |                                                                |      |
| <a href="#">36</a>                                                         | 1 of 1            | NW/185.0                                                                                      | 66.2 / 4.58      | Ottawa Housing Corporation<br>310 Wiggins<br>ottawa ON K1N 1B1 | GEN  |
| <b>Generator No.:</b> ON5170121                                            |                   | <b>PO Box No.:</b>                                                                            |                  |                                                                |      |
| <b>Status:</b>                                                             |                   | <b>Country:</b>                                                                               |                  |                                                                |      |
| <b>Approval Years:</b> 06                                                  |                   | <b>Choice of Contact:</b>                                                                     |                  |                                                                |      |
| <b>Contam. Facility:</b>                                                   |                   | <b>Co Admin:</b>                                                                              |                  |                                                                |      |
| <b>MHSW Facility:</b>                                                      |                   | <b>Phone No. Admin:</b>                                                                       |                  |                                                                |      |
| <b>SIC Code:</b> 913910                                                    |                   |                                                                                               |                  |                                                                |      |
| <b>SIC Description:</b> Other Local Municipal and Regional Public Administ |                   |                                                                                               |                  |                                                                |      |
| <b>--Details--</b>                                                         |                   |                                                                                               |                  |                                                                |      |
| <b>Waste Code:</b> 251                                                     |                   |                                                                                               |                  |                                                                |      |
| <b>Waste Description:</b> OIL SKIMMINGS & SLUDGES                          |                   |                                                                                               |                  |                                                                |      |
| <a href="#">37</a>                                                         | 1 of 1            | ESE/185.9                                                                                     | 60.9 / -0.78     | ON                                                             | BORE |
| <b>Borehole ID:</b> 802685                                                 |                   | <b>Type:</b> Borehole                                                                         |                  |                                                                |      |
| <b>Use:</b> Geotechnical/Geological Investigation                          |                   | <b>Status::</b>                                                                               |                  |                                                                |      |
| <b>Drill Method::</b> Hollow stem auger                                    |                   | <b>UTM Zone::</b> 18                                                                          |                  |                                                                |      |
| <b>Easting::</b> 447954.87                                                 |                   | <b>Northing::</b> 5029578.25                                                                  |                  |                                                                |      |
| <b>Location Accuracy::</b>                                                 |                   | <b>Orig. Ground Elev m::</b> 61.8                                                             |                  |                                                                |      |
| <b>Elev. Reliability Note::</b>                                            |                   | <b>DEM Ground Elev m::</b> 59.7                                                               |                  |                                                                |      |
| <b>Total Depth m::</b> 9.1                                                 |                   | <b>Primary Name::</b> BH 5                                                                    |                  |                                                                |      |
| <b>Township::</b>                                                          |                   | <b>Concession::</b>                                                                           |                  |                                                                |      |
| <b>Lot::</b>                                                               |                   | <b>Municipality:</b>                                                                          |                  |                                                                |      |
| <b>Completion Date::</b> 12-FEB-1982                                       |                   | <b>Static Water Level::</b> 4.4                                                               |                  |                                                                |      |
| <b>Primary Water Use::</b>                                                 |                   | <b>Sec. Water Use::</b>                                                                       |                  |                                                                |      |

| Map Key                 | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                 | DB                                                                                              |
|-------------------------|-------------------|----------------------------|------------------|----------------------|-------------------------------------------------------------------------------------------------|
| <b>--Details--</b>      |                   |                            |                  |                      |                                                                                                 |
| <b>Stratum ID:</b>      | 218573129         |                            |                  | <b>Top Depth(m):</b> | 0.0                                                                                             |
| <b>Bottom Depth(m):</b> | 1.5               |                            |                  | <b>Stratum Desc:</b> | Dark Grey Very Loose Fill-Misc sand silt With:<br>Brk Frag W Blds W Org M                       |
| <b>Stratum ID:</b>      | 218573130         |                            |                  | <b>Top Depth(m):</b> | 1.5                                                                                             |
| <b>Bottom Depth(m):</b> | 2.0               |                            |                  | <b>Stratum Desc:</b> | Brown Compact Layered Sandy Silt & Silty<br>Sand                                                |
| <b>Stratum ID:</b>      | 218573131         |                            |                  | <b>Top Depth(m):</b> | 2.0                                                                                             |
| <b>Bottom Depth(m):</b> | 9.1               |                            |                  | <b>Stratum Desc:</b> | Dark Brown to Grey Compact to Loose Till<br>sand silt With: Cl W Gr Occasional: Cob Occ<br>Blds |

|                                      |                          |                  |                    |                           |                                |
|--------------------------------------|--------------------------|------------------|--------------------|---------------------------|--------------------------------|
| <b>38</b>                            | <b>1 of 1</b>            | <b>WNW/187.5</b> | <b>67.7 / 6.08</b> | <b>Ottawa ON</b>          | <b>WWIS</b>                    |
| <b>Well ID:</b>                      | 7293326                  |                  |                    | <b>Data Entry Status:</b> |                                |
| <b>Construction Date:</b>            |                          |                  |                    | <b>Data Src:</b>          |                                |
| <b>Primary Water Use:</b>            | Test Hole                |                  |                    | <b>Date Received:</b>     | 8/18/2017                      |
| <b>Sec. Water Use:</b>               | Monitoring               |                  |                    | <b>Selected Flag:</b>     | Yes                            |
| <b>Final Well Status:</b>            | Monitoring and Test Hole |                  |                    | <b>Abandonment Rec:</b>   |                                |
| <b>Water Type:</b>                   |                          |                  |                    | <b>Contractor:</b>        | 7241                           |
| <b>Casing Material:</b>              |                          |                  |                    | <b>Form Version:</b>      | 7                              |
| <b>Audit No:</b>                     | Z206427                  |                  |                    | <b>Owner:</b>             |                                |
| <b>Tag:</b>                          | A182471                  |                  |                    | <b>Street Name:</b>       | 3 HURDMAN ROAD                 |
| <b>Construction Method:</b>          |                          |                  |                    | <b>County:</b>            | OTTAWA-CARLETON                |
| <b>Elevation (m):</b>                |                          |                  |                    | <b>Municipality:</b>      | OTTAWA CITY                    |
| <b>Elevation Reliability:</b>        |                          |                  |                    | <b>Site Info:</b>         |                                |
| <b>Depth to Bedrock:</b>             |                          |                  |                    | <b>Lot:</b>               |                                |
| <b>Well Depth:</b>                   |                          |                  |                    | <b>Concession:</b>        |                                |
| <b>Overburden/Bedrock:</b>           |                          |                  |                    | <b>Concession Name:</b>   |                                |
| <b>Pump Rate:</b>                    |                          |                  |                    | <b>Easting NAD83:</b>     |                                |
| <b>Static Water Level:</b>           |                          |                  |                    | <b>Northing NAD83:</b>    |                                |
| <b>Flowing (Y/N):</b>                |                          |                  |                    | <b>Zone:</b>              |                                |
| <b>Flow Rate:</b>                    |                          |                  |                    | <b>UTM Reliability:</b>   |                                |
| <b>Clear/Cloudy:</b>                 |                          |                  |                    |                           |                                |
| <b><u>Bore Hole Information</u></b>  |                          |                  |                    |                           |                                |
| <b>Bore Hole ID:</b>                 | 1006710688               |                  |                    | <b>Elevation:</b>         | 69.67                          |
| <b>DP2BR:</b>                        |                          |                  |                    | <b>Elevrc:</b>            |                                |
| <b>Spatial Status:</b>               |                          |                  |                    | <b>Zone:</b>              | 18                             |
| <b>Code OB:</b>                      |                          |                  |                    | <b>East83:</b>            | 447593                         |
| <b>Code OB Desc:</b>                 |                          |                  |                    | <b>Org CS:</b>            | UTM83                          |
| <b>Open Hole:</b>                    |                          |                  |                    | <b>North83:</b>           | 5029670                        |
| <b>Cluster Kind:</b>                 |                          |                  |                    | <b>UTMRC:</b>             | 4                              |
| <b>Date Completed:</b>               | 20-JUL-17                |                  |                    | <b>UTMRC Desc:</b>        | margin of error : 30 m - 100 m |
| <b>Remarks:</b>                      |                          |                  |                    | <b>Location Method:</b>   | wwr                            |
| <b>Elevrc Desc:</b>                  |                          |                  |                    |                           |                                |
| <b>Location Source Date:</b>         |                          |                  |                    |                           |                                |
| <b>Improvement Location Source:</b>  |                          |                  |                    |                           |                                |
| <b>Improvement Location Method:</b>  |                          |                  |                    |                           |                                |
| <b>Source Revision Comment:</b>      |                          |                  |                    |                           |                                |
| <b>Supplier Comment:</b>             |                          |                  |                    |                           |                                |
| <b><u>Overburden and Bedrock</u></b> |                          |                  |                    |                           |                                |
| <b><u>Materials Interval</u></b>     |                          |                  |                    |                           |                                |
| <b>Formation ID:</b>                 | 1006830460               |                  |                    |                           |                                |
| <b>Layer:</b>                        | 2                        |                  |                    |                           |                                |
| <b>Color:</b>                        | 6                        |                  |                    |                           |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 05                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | CLAY                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 81                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SANDY                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1006830459                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 8                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BLACK                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 02                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | TOPSOIL                            |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1006830461                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | GRAVEL                             |                          |             |           |
| <b>Mat2:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SAND                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 4.88                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006830471                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 1.5                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 4.88                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006830469                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1006830470                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 1.5                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1006830468                         |                          |             |           |

| Map Key                                    | Number of Records | Direction/<br>Distance (m)            | Elev/Diff<br>(m)   | Site                         | DB             |
|--------------------------------------------|-------------------|---------------------------------------|--------------------|------------------------------|----------------|
| <b>Method Construction Code:</b>           |                   | D                                     |                    |                              |                |
| <b>Method Construction:</b>                |                   | Direct Push                           |                    |                              |                |
| <b>Other Method Construction:</b>          |                   |                                       |                    |                              |                |
| <b><u>Pipe Information</u></b>             |                   |                                       |                    |                              |                |
| <b>Pipe ID:</b>                            |                   | 1006830458                            |                    |                              |                |
| <b>Casing No:</b>                          |                   | 0                                     |                    |                              |                |
| <b>Comment:</b>                            |                   |                                       |                    |                              |                |
| <b>Alt Name:</b>                           |                   |                                       |                    |                              |                |
| <b><u>Construction Record - Casing</u></b> |                   |                                       |                    |                              |                |
| <b>Casing ID:</b>                          |                   | 1006830464                            |                    |                              |                |
| <b>Layer:</b>                              |                   | 1                                     |                    |                              |                |
| <b>Material:</b>                           |                   | 5                                     |                    |                              |                |
| <b>Open Hole or Material:</b>              |                   | PLASTIC                               |                    |                              |                |
| <b>Depth From:</b>                         |                   | 0                                     |                    |                              |                |
| <b>Depth To:</b>                           |                   | 1.83                                  |                    |                              |                |
| <b>Casing Diameter:</b>                    |                   | 5.2                                   |                    |                              |                |
| <b>Casing Diameter UOM:</b>                |                   | cm                                    |                    |                              |                |
| <b>Casing Depth UOM:</b>                   |                   | m                                     |                    |                              |                |
| <b><u>Construction Record - Screen</u></b> |                   |                                       |                    |                              |                |
| <b>Screen ID:</b>                          |                   | 1006830465                            |                    |                              |                |
| <b>Layer:</b>                              |                   | 1                                     |                    |                              |                |
| <b>Slot:</b>                               |                   | 10                                    |                    |                              |                |
| <b>Screen Top Depth:</b>                   |                   | 1.83                                  |                    |                              |                |
| <b>Screen End Depth:</b>                   |                   | 4.88                                  |                    |                              |                |
| <b>Screen Material:</b>                    |                   | 5                                     |                    |                              |                |
| <b>Screen Depth UOM:</b>                   |                   | m                                     |                    |                              |                |
| <b>Screen Diameter UOM:</b>                |                   | cm                                    |                    |                              |                |
| <b>Screen Diameter:</b>                    |                   | 6.03                                  |                    |                              |                |
| <b><u>Water Details</u></b>                |                   |                                       |                    |                              |                |
| <b>Water ID:</b>                           |                   | 1006830463                            |                    |                              |                |
| <b>Layer:</b>                              |                   |                                       |                    |                              |                |
| <b>Kind Code:</b>                          |                   |                                       |                    |                              |                |
| <b>Kind:</b>                               |                   |                                       |                    |                              |                |
| <b>Water Found Depth:</b>                  |                   |                                       |                    |                              |                |
| <b>Water Found Depth UOM:</b>              |                   | m                                     |                    |                              |                |
| <b><u>Hole Diameter</u></b>                |                   |                                       |                    |                              |                |
| <b>Hole ID:</b>                            |                   | 1006830462                            |                    |                              |                |
| <b>Diameter:</b>                           |                   | 11.4                                  |                    |                              |                |
| <b>Depth From:</b>                         |                   | 0                                     |                    |                              |                |
| <b>Depth To:</b>                           |                   | 4.88                                  |                    |                              |                |
| <b>Hole Depth UOM:</b>                     |                   | m                                     |                    |                              |                |
| <b>Hole Diameter UOM:</b>                  |                   | cm                                    |                    |                              |                |
| <b>39</b>                                  | <b>1 of 1</b>     | <b>SW/192.4</b>                       | <b>64.0 / 2.37</b> | <b>ON</b>                    | <b>BORE</b>    |
| <b>Borehole ID:</b>                        |                   | 847633                                |                    | <b>Type:</b>                 | Borehole       |
| <b>Use:</b>                                |                   | Geotechnical/Geological Investigation |                    | <b>Status::</b>              | Decommissioned |
| <b>Drill Method::</b>                      |                   | Diamond Drill                         |                    | <b>UTM Zone::</b>            | 18             |
| <b>Easting::</b>                           |                   | 447652                                |                    | <b>Northing::</b>            | 5029476        |
| <b>Location Accuracy::</b>                 |                   |                                       |                    | <b>Orig. Ground Elev m::</b> | 60.3           |



| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DB   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>Elev. Reliability Note::</b><br><b>Total Depth m::</b> 4.1<br><b>Township::</b> NEPEAN<br><b>Lot::</b> LOT G<br><b>Completion Date::</b> 22-FEB-1964<br><b>Primary Water Use::</b>                                                                                                                                                                                                                                                                                                                                                                                               |                   |                            |                  | <b>DEM Ground Elev m::</b> 62.4<br><b>Primary Name::</b><br><b>Concession::</b> BROKEN FRONT D<br><b>Municipality:</b><br><b>Static Water Level::</b> -999.9<br><b>Sec. Water Use::</b>                                                                                                                                                                                                                                                                                                                     |      |
| <b>--Details--</b><br><b>Stratum ID:</b> 6558311<br><b>Bottom Depth(m):</b> 2.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                            |                  | <b>Top Depth(m):</b> 0.0<br><b>Stratum Desc:</b> DENSE TO VERY DENSE DARK BROWN SILTY SAND WITH GRAVEL A FEW COBBLES AND BOULDERS TILL                                                                                                                                                                                                                                                                                                                                                                      |      |
| <b>Stratum ID:</b> 6558312<br><b>Bottom Depth(m):</b> 4.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                            |                  | <b>Top Depth(m):</b> 2.7<br><b>Stratum Desc:</b> VERY DENSE DARK GREY SAND TRACE TO SOME SILT AND GRAVEL                                                                                                                                                                                                                                                                                                                                                                                                    |      |
| <a href="#">40</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 of 1            | SSW/194.1                  | 63.9 / 2.25      | Ottawa ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | WWIS |
| <b>Well ID:</b> 7190979<br><b>Construction Date:</b><br><b>Primary Water Use:</b> Monitoring and Test Hole<br><b>Sec. Water Use:</b> 0<br><b>Final Well Status:</b> Test Hole<br><b>Water Type:</b><br><b>Casing Material:</b><br><b>Audit No:</b> Z156955<br><b>Tag:</b> A135006<br><b>Construction Method:</b><br><b>Elevation (m):</b><br><b>Elevation Reliability:</b><br><b>Depth to Bedrock:</b><br><b>Well Depth:</b><br><b>Overburden/Bedrock:</b><br><b>Pump Rate:</b><br><b>Static Water Level:</b><br><b>Flowing (Y/N):</b><br><b>Flow Rate:</b><br><b>Clear/Cloudy:</b> |                   |                            |                  | <b>Data Entry Status:</b><br><b>Data Src:</b><br><b>Date Received:</b> 11/9/2012<br><b>Selected Flag:</b> Yes<br><b>Abandonment Rec:</b><br><b>Contractor:</b> 7241<br><b>Form Version:</b> 7<br><b>Owner:</b><br><b>Street Name:</b> 191 LEES AVE<br><b>County:</b> OTTAWA-CARLETON<br><b>Municipality:</b> OTTAWA CITY<br><b>Site Info:</b><br><b>Lot:</b><br><b>Concession:</b><br><b>Concession Name:</b><br><b>Easting NAD83:</b><br><b>Northing NAD83:</b><br><b>Zone:</b><br><b>UTM Reliability:</b> |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   |                            |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |
| <b>Bore Hole ID:</b> 1004199581<br><b>DP2BR:</b><br><b>Spatial Status:</b><br><b>Code OB:</b><br><b>Code OB Desc:</b><br><b>Open Hole:</b><br><b>Cluster Kind:</b><br><b>Date Completed:</b> 26-SEP-12<br><b>Remarks:</b><br><b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b>                                                                                                                                                       |                   |                            |                  | <b>Elevation:</b> 61.28<br><b>Elevrc:</b><br><b>Zone:</b> 18<br><b>East83:</b> 447667<br><b>Org CS:</b> UTM83<br><b>North83:</b> 5029463<br><b>UTMRC:</b> 4<br><b>UTMRC Desc:</b> margin of error : 30 m - 100 m<br><b>Location Method:</b> wwr                                                                                                                                                                                                                                                             |      |
| <b><u>Overburden and Bedrock</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |                            |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |
| <b><u>Materials Interval</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |                            |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Formation ID:</b>                                       |                              | 1004486847                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004486848                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 4                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 05                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | CLAY                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 9.14                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004486846                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | .61                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004486845                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 02                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | TOPSOIL                            |                          |             |           |
| <b>Mat2:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .61                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004486857                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 7.32                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 9.14                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |

| <b>Map Key</b>                                      | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-----------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug ID:</b>                                     |                              | 1004486856                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                     |                              | 7.32                               |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                      |                              | 1004486855                         |                          |             |           |
| <b>Method Construction Code:</b>                    |                              | 2                                  |                          |             |           |
| <b>Method Construction:</b>                         |                              | Rotary (Convent.)                  |                          |             |           |
| <b>Other Method Construction:</b>                   |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                      |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                     |                              | 1004486844                         |                          |             |           |
| <b>Casing No:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                     |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                    |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>          |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                   |                              | 1004486851                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                       |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                  |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                    |                              | 7.62                               |                          |             |           |
| <b>Casing Diameter:</b>                             |                              | 4.08                               |                          |             |           |
| <b>Casing Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>          |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                   |                              | 1004486852                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                        |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                            |                              | 7.62                               |                          |             |           |
| <b>Screen End Depth:</b>                            |                              | 9.14                               |                          |             |           |
| <b>Screen Material:</b>                             |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                             |                              | 4.82                               |                          |             |           |
| <b><u>Water Details</u></b>                         |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                    |                              | 1004486850                         |                          |             |           |
| <b>Layer:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                   |                              |                                    |                          |             |           |
| <b>Kind:</b>                                        |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                           |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                       |                              | m                                  |                          |             |           |
| <b><u>Hole Diameter</u></b>                         |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                     |                              | 1004486849                         |                          |             |           |
| <b>Diameter:</b>                                    |                              | 10.92                              |                          |             |           |
| <b>Depth From:</b>                                  |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                    |                              | 9.14                               |                          |             |           |
| <b>Hole Depth UOM:</b>                              |                              | m                                  |                          |             |           |

| Map Key                                     | Number of<br>Records | Direction/<br>Distance (m)                 | Elev/Diff<br>(m) | Site      | DB   |
|---------------------------------------------|----------------------|--------------------------------------------|------------------|-----------|------|
| Hole Diameter UOM:                          |                      | cm                                         |                  |           |      |
| <a href="#">41</a>                          | 1 of 1               | WSW/194.3                                  | 67.0 / 5.31      | Ottawa ON | WWIS |
| Well ID: 7201657                            |                      | Data Entry Status:                         |                  |           |      |
| Construction Date:                          |                      | Data Src:                                  |                  |           |      |
| Primary Water Use: Monitoring and Test Hole |                      | Date Received: 5/15/2013                   |                  |           |      |
| Sec. Water Use:                             |                      | Selected Flag: Yes                         |                  |           |      |
| Final Well Status: Test Hole                |                      | Abandonment Rec:                           |                  |           |      |
| Water Type:                                 |                      | Contractor: 7241                           |                  |           |      |
| Casing Material:                            |                      | Form Version: 7                            |                  |           |      |
| Audit No: Z168580                           |                      | Owner:                                     |                  |           |      |
| Tag: A145286                                |                      | Street Name: 1 ROBINSON AVE                |                  |           |      |
| Construction Method:                        |                      | County: OTTAWA-CARLETON                    |                  |           |      |
| Elevation (m):                              |                      | Municipality: OTTAWA CITY                  |                  |           |      |
| Elevation Reliability:                      |                      | Site Info:                                 |                  |           |      |
| Depth to Bedrock:                           |                      | Lot:                                       |                  |           |      |
| Well Depth:                                 |                      | Concession:                                |                  |           |      |
| Overburden/Bedrock:                         |                      | Concession Name:                           |                  |           |      |
| Pump Rate:                                  |                      | Easting NAD83:                             |                  |           |      |
| Static Water Level:                         |                      | Northing NAD83:                            |                  |           |      |
| Flowing (Y/N):                              |                      | Zone:                                      |                  |           |      |
| Flow Rate:                                  |                      | UTM Reliability:                           |                  |           |      |
| Clear/Cloudy:                               |                      |                                            |                  |           |      |
| <b><u>Bore Hole Information</u></b>         |                      |                                            |                  |           |      |
| Bore Hole ID: 1004301547                    |                      | Elevation: 61.85                           |                  |           |      |
| DP2BR:                                      |                      | Elevrc:                                    |                  |           |      |
| Spatial Status:                             |                      | Zone: 18                                   |                  |           |      |
| Code OB:                                    |                      | East83: 447585                             |                  |           |      |
| Code OB Desc:                               |                      | Org CS: UTM83                              |                  |           |      |
| Open Hole:                                  |                      | North83: 5029583                           |                  |           |      |
| Cluster Kind:                               |                      | UTMRC: 4                                   |                  |           |      |
| Date Completed: 12-APR-13                   |                      | UTMRC Desc: margin of error : 30 m - 100 m |                  |           |      |
| Remarks:                                    |                      | Location Method: wwr                       |                  |           |      |
| Elevrc Desc:                                |                      |                                            |                  |           |      |
| Location Source Date:                       |                      |                                            |                  |           |      |
| Improvement Location Source:                |                      |                                            |                  |           |      |
| Improvement Location Method:                |                      |                                            |                  |           |      |
| Source Revision Comment:                    |                      |                                            |                  |           |      |
| Supplier Comment:                           |                      |                                            |                  |           |      |
| <b><u>Overburden and Bedrock</u></b>        |                      |                                            |                  |           |      |
| <b><u>Materials Interval</u></b>            |                      |                                            |                  |           |      |
| Formation ID: 1004843115                    |                      |                                            |                  |           |      |
| Layer: 2                                    |                      |                                            |                  |           |      |
| Color: 6                                    |                      |                                            |                  |           |      |
| General Color: BROWN                        |                      |                                            |                  |           |      |
| Mat1: 08                                    |                      |                                            |                  |           |      |
| Most Common Material: FINE SAND             |                      |                                            |                  |           |      |
| Mat2:                                       |                      |                                            |                  |           |      |
| Other Materials:                            |                      |                                            |                  |           |      |
| Mat3: 73                                    |                      |                                            |                  |           |      |
| Other Materials: HARD                       |                      |                                            |                  |           |      |
| Formation Top Depth: 3.1                    |                      |                                            |                  |           |      |
| Formation End Depth: 6.71                   |                      |                                            |                  |           |      |
| Formation End Depth UOM: m                  |                      |                                            |                  |           |      |
| Formation ID: 1004843116                    |                      |                                            |                  |           |      |
| Laver: 3                                    |                      |                                            |                  |           |      |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 34                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | TILL                               |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 6.71                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 8.53                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004843114                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | COARSE SAND                        |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843124                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | 5.18                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843125                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 5.18                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 8.53                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1004843123                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              |                                    |                          |             |           |
| <b>Method Construction:</b>                                |                              |                                    |                          |             |           |
| <b>Other Method Construction:</b>                          |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                            |                              | 1004843113                         |                          |             |           |
| <b>Casing No:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                            |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                           |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                          |                              | 1004843119                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                           |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                              |                              | PLASTIC                            |                          |             |           |

| Map Key                                        | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                      | DB              |
|------------------------------------------------|----------------------|----------------------------|------------------|---------------------------|-----------------|
| <hr/>                                          |                      |                            |                  |                           |                 |
| Depth From:                                    |                      | 0                          |                  |                           |                 |
| Depth To:                                      |                      | 5.49                       |                  |                           |                 |
| Casing Diameter:                               |                      | 5.2                        |                  |                           |                 |
| Casing Diameter UOM:                           |                      | cm                         |                  |                           |                 |
| Casing Depth UOM:                              |                      | m                          |                  |                           |                 |
| <br><b><u>Construction Record - Screen</u></b> |                      |                            |                  |                           |                 |
| Screen ID:                                     |                      | 1004843120                 |                  |                           |                 |
| Layer:                                         |                      | 1                          |                  |                           |                 |
| Slot:                                          |                      | 10                         |                  |                           |                 |
| Screen Top Depth:                              |                      | 5.49                       |                  |                           |                 |
| Screen End Depth:                              |                      | 8.53                       |                  |                           |                 |
| Screen Material:                               |                      | 5                          |                  |                           |                 |
| Screen Depth UOM:                              |                      | m                          |                  |                           |                 |
| Screen Diameter UOM:                           |                      | cm                         |                  |                           |                 |
| Screen Diameter:                               |                      | 6.03                       |                  |                           |                 |
| <br><b><u>Water Details</u></b>                |                      |                            |                  |                           |                 |
| Water ID:                                      |                      | 1004843118                 |                  |                           |                 |
| Layer:                                         |                      |                            |                  |                           |                 |
| Kind Code:                                     |                      |                            |                  |                           |                 |
| Kind:                                          |                      |                            |                  |                           |                 |
| Water Found Depth:                             |                      |                            |                  |                           |                 |
| Water Found Depth UOM:                         |                      | m                          |                  |                           |                 |
| <br><b><u>Hole Diameter</u></b>                |                      |                            |                  |                           |                 |
| Hole ID:                                       |                      | 1004843117                 |                  |                           |                 |
| Diameter:                                      |                      | 10.92                      |                  |                           |                 |
| Depth From:                                    |                      | 0                          |                  |                           |                 |
| Depth To:                                      |                      | 8.53                       |                  |                           |                 |
| Hole Depth UOM:                                |                      | m                          |                  |                           |                 |
| Hole Diameter UOM:                             |                      | cm                         |                  |                           |                 |
| <hr/>                                          |                      |                            |                  |                           |                 |
| <a href="#">42</a>                             | 1 of 1               | SSE/197.4                  | 61.9 / 0.22      | Ottawa ON                 | WWIS            |
| Well ID:                                       | 7180700              |                            |                  | <b>Data Entry Status:</b> |                 |
| Construction Date:                             |                      |                            |                  | <b>Data Src:</b>          |                 |
| Primary Water Use:                             |                      |                            |                  | <b>Date Received:</b>     | 5/10/2012       |
| Sec. Water Use:                                |                      |                            |                  | <b>Selected Flag:</b>     | Yes             |
| Final Well Status:                             | Abandoned-Other      |                            |                  | <b>Abandonment Rec:</b>   | Yes             |
| Water Type:                                    |                      |                            |                  | <b>Contractor:</b>        | 7241            |
| Casing Material:                               |                      |                            |                  | <b>Form Version:</b>      | 7               |
| Audit No:                                      | Z145267              |                            |                  | <b>Owner:</b>             |                 |
| Tag:                                           |                      |                            |                  | <b>Street Name:</b>       | 200 LEES AVE    |
| Construction Method:                           |                      |                            |                  | <b>County:</b>            | OTTAWA-CARLETON |
| Elevation (m):                                 |                      |                            |                  | <b>Municipality:</b>      | NEPEAN TOWNSHIP |
| Elevation Reliability:                         |                      |                            |                  | <b>Site Info:</b>         |                 |
| Depth to Bedrock:                              |                      |                            |                  | <b>Lot:</b>               |                 |
| Well Depth:                                    |                      |                            |                  | <b>Concession:</b>        |                 |
| Overburden/Bedrock:                            |                      |                            |                  | <b>Concession Name:</b>   |                 |
| Pump Rate:                                     |                      |                            |                  | <b>Easting NAD83:</b>     |                 |
| Static Water Level:                            |                      |                            |                  | <b>Northing NAD83:</b>    |                 |
| Flowing (Y/N):                                 |                      |                            |                  | <b>Zone:</b>              |                 |
| Flow Rate:                                     |                      |                            |                  | <b>UTM Reliability:</b>   |                 |
| Clear/Cloudy:                                  |                      |                            |                  |                           |                 |
| <br><b><u>Bore Hole Information</u></b>        |                      |                            |                  |                           |                 |



| Map Key                                      | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site             | DB                             |
|----------------------------------------------|----------------------|----------------------------|------------------|------------------|--------------------------------|
| <hr/>                                        |                      |                            |                  |                  |                                |
| Bore Hole ID:                                | 1003760707           |                            |                  | Elevation:       | 62.41                          |
| DP2BR:                                       |                      |                            |                  | Elevrc:          |                                |
| Spatial Status:                              |                      |                            |                  | Zone:            | 18                             |
| Code OB:                                     |                      |                            |                  | East83:          | 447827                         |
| Code OB Desc:                                |                      |                            |                  | Org CS:          | UTM83                          |
| Open Hole:                                   |                      |                            |                  | North83:         | 5029434                        |
| Cluster Kind:                                |                      |                            |                  | UTMRC:           | 4                              |
| Date Completed:                              | 24-FEB-12            |                            |                  | UTMRC Desc:      | margin of error : 30 m - 100 m |
| Remarks:                                     |                      |                            |                  | Location Method: | wwr                            |
| Elevrc Desc:                                 |                      |                            |                  |                  |                                |
| Location Source Date:                        |                      |                            |                  |                  |                                |
| Improvement Location Source:                 |                      |                            |                  |                  |                                |
| Improvement Location Method:                 |                      |                            |                  |                  |                                |
| Source Revision Comment:                     |                      |                            |                  |                  |                                |
| Supplier Comment:                            |                      |                            |                  |                  |                                |
| <br><u>Annular Space/Abandonment</u>         |                      |                            |                  |                  |                                |
| <u>Sealing Record</u>                        |                      |                            |                  |                  |                                |
| Plug ID:                                     | 1004304047           |                            |                  |                  |                                |
| Layer:                                       | 1                    |                            |                  |                  |                                |
| Plug From:                                   | 0                    |                            |                  |                  |                                |
| Plug To:                                     | 5.2                  |                            |                  |                  |                                |
| Plug Depth UOM:                              | m                    |                            |                  |                  |                                |
| <br><u>Method of Construction &amp; Well</u> |                      |                            |                  |                  |                                |
| <u>Use</u>                                   |                      |                            |                  |                  |                                |
| Method Construction ID:                      | 1004304046           |                            |                  |                  |                                |
| Method Construction Code:                    | 6                    |                            |                  |                  |                                |
| Method Construction:                         | Boring               |                            |                  |                  |                                |
| Other Method Construction:                   |                      |                            |                  |                  |                                |
| <br><u>Pipe Information</u>                  |                      |                            |                  |                  |                                |
| Pipe ID:                                     | 1004304040           |                            |                  |                  |                                |
| Casing No:                                   | 0                    |                            |                  |                  |                                |
| Comment:                                     |                      |                            |                  |                  |                                |
| Alt Name:                                    |                      |                            |                  |                  |                                |
| <br><u>Construction Record - Casing</u>      |                      |                            |                  |                  |                                |
| Casing ID:                                   | 1004304044           |                            |                  |                  |                                |
| Layer:                                       |                      |                            |                  |                  |                                |
| Material:                                    |                      |                            |                  |                  |                                |
| Open Hole or Material:                       |                      |                            |                  |                  |                                |
| Depth From:                                  |                      |                            |                  |                  |                                |
| Depth To:                                    |                      |                            |                  |                  |                                |
| Casing Diameter:                             |                      |                            |                  |                  |                                |
| Casing Diameter UOM:                         | cm                   |                            |                  |                  |                                |
| Casing Depth UOM:                            | m                    |                            |                  |                  |                                |
| <br><u>Construction Record - Screen</u>      |                      |                            |                  |                  |                                |
| Screen ID:                                   | 1004304045           |                            |                  |                  |                                |
| Layer:                                       |                      |                            |                  |                  |                                |
| Slot:                                        |                      |                            |                  |                  |                                |
| Screen Top Depth:                            |                      |                            |                  |                  |                                |
| Screen End Depth:                            |                      |                            |                  |                  |                                |
| Screen Material:                             |                      |                            |                  |                  |                                |
| Screen Depth UOM:                            | m                    |                            |                  |                  |                                |
| Screen Diameter UOM:                         | cm                   |                            |                  |                  |                                |

| Map Key                             | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m)   | Site               | DB                             |
|-------------------------------------|----------------------|----------------------------|--------------------|--------------------|--------------------------------|
| <b>Screen Diameter:</b>             |                      |                            |                    |                    |                                |
| <b><u>Water Details</u></b>         |                      |                            |                    |                    |                                |
| Water ID:                           |                      | 1004304043                 |                    |                    |                                |
| Layer:                              |                      |                            |                    |                    |                                |
| Kind Code:                          |                      |                            |                    |                    |                                |
| Kind:                               |                      |                            |                    |                    |                                |
| Water Found Depth:                  |                      |                            |                    |                    |                                |
| Water Found Depth UOM:              |                      | m                          |                    |                    |                                |
| <b><u>Hole Diameter</u></b>         |                      |                            |                    |                    |                                |
| Hole ID:                            |                      | 1004304042                 |                    |                    |                                |
| Diameter:                           |                      | 10.92                      |                    |                    |                                |
| Depth From:                         |                      | 0                          |                    |                    |                                |
| Depth To:                           |                      | 5.2                        |                    |                    |                                |
| Hole Depth UOM:                     |                      | m                          |                    |                    |                                |
| Hole Diameter UOM:                  |                      | cm                         |                    |                    |                                |
| <b>43</b>                           | <b>1 of 1</b>        | <b>SW/199.5</b>            | <b>64.6 / 2.91</b> | <b>ON</b>          | <b>WWIS</b>                    |
| Well ID:                            | 7231849              |                            |                    | Data Entry Status: | Yes                            |
| Construction Date:                  |                      |                            |                    | Data Src:          |                                |
| Primary Water Use:                  |                      |                            |                    | Date Received:     | 1/27/2014                      |
| Sec. Water Use:                     |                      |                            |                    | Selected Flag:     | Yes                            |
| Final Well Status:                  |                      |                            |                    | Abandonment Rec:   |                                |
| Water Type:                         |                      |                            |                    | Contractor:        | 6894                           |
| Casing Material:                    |                      |                            |                    | Form Version:      | 5                              |
| Audit No:                           | C13939               |                            |                    | Owner:             |                                |
| Tag:                                | A157433              |                            |                    | Street Name:       |                                |
| Construction Method:                |                      |                            |                    | County:            | OTTAWA-CARLETON                |
| Elevation (m):                      |                      |                            |                    | Municipality:      | OTTAWA CITY                    |
| Elevation Reliability:              |                      |                            |                    | Site Info:         |                                |
| Depth to Bedrock:                   |                      |                            |                    | Lot:               |                                |
| Well Depth:                         |                      |                            |                    | Concession:        |                                |
| Overburden/Bedrock:                 |                      |                            |                    | Concession Name:   |                                |
| Pump Rate:                          |                      |                            |                    | Easting NAD83:     |                                |
| Static Water Level:                 |                      |                            |                    | Northing NAD83:    |                                |
| Flowing (Y/N):                      |                      |                            |                    | Zone:              |                                |
| Flow Rate:                          |                      |                            |                    | UTM Reliability:   |                                |
| Clear/Cloudy:                       |                      |                            |                    |                    |                                |
| <b><u>Bore Hole Information</u></b> |                      |                            |                    |                    |                                |
| Bore Hole ID:                       | 1005300864           |                            |                    | Elevation:         | 63.15                          |
| DP2BR:                              |                      |                            |                    | Elevrc:            |                                |
| Spatial Status:                     |                      |                            |                    | Zone:              | 18                             |
| Code OB:                            |                      |                            |                    | East83:            | 447634                         |
| Code OB Desc:                       |                      |                            |                    | Org CS:            | UTM83                          |
| Open Hole:                          |                      |                            |                    | North83:           | 5029483                        |
| Cluster Kind:                       |                      |                            |                    | UTMRC:             | 4                              |
| Date Completed:                     | 09-JAN-14            |                            |                    | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                            |                      |                            |                    | Location Method:   | wwr                            |
| Elevrc Desc:                        |                      |                            |                    |                    |                                |
| Location Source Date:               |                      |                            |                    |                    |                                |
| Improvement Location Source:        |                      |                            |                    |                    |                                |
| Improvement Location Method:        |                      |                            |                    |                    |                                |
| Source Revision Comment:            |                      |                            |                    |                    |                                |
| Supplier Comment:                   |                      |                            |                    |                    |                                |

| Map Key                                           | Number of Records | Direction/<br>Distance (m)                                                                                                               | Elev/Diff<br>(m) | Site                                                                               | DB   |
|---------------------------------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------|------|
| <a href="#">44</a>                                | 1 of 1            | SW/203.5                                                                                                                                 | 64.6 / 2.91      | ON                                                                                 | BORE |
| <b>Borehole ID:</b> 847624                        |                   | <b>Type:</b> Borehole                                                                                                                    |                  |                                                                                    |      |
| <b>Use:</b> Geotechnical/Geological Investigation |                   | <b>Status::</b> Decommissioned                                                                                                           |                  |                                                                                    |      |
| <b>Drill Method::</b> Diamond Drill               |                   | <b>UTM Zone::</b> 18                                                                                                                     |                  |                                                                                    |      |
| <b>Easting::</b> 447635                           |                   | <b>Northing::</b> 5029477                                                                                                                |                  |                                                                                    |      |
| <b>Location Accuracy::</b>                        |                   | <b>Orig. Ground Elev m::</b> 59.8                                                                                                        |                  |                                                                                    |      |
| <b>Elev. Reliability Note::</b>                   |                   | <b>DEM Ground Elev m::</b> 63.4                                                                                                          |                  |                                                                                    |      |
| <b>Total Depth m::</b> 14.1                       |                   | <b>Primary Name::</b>                                                                                                                    |                  |                                                                                    |      |
| <b>Township::</b> NEPEAN                          |                   | <b>Concession::</b> BROKEN FRONT D                                                                                                       |                  |                                                                                    |      |
| <b>Lot::</b> LOT G                                |                   | <b>Municipality:</b>                                                                                                                     |                  |                                                                                    |      |
| <b>Completion Date::</b> 14-FEB-1964              |                   | <b>Static Water Level::</b> 3.6                                                                                                          |                  |                                                                                    |      |
| <b>Primary Water Use::</b>                        |                   | <b>Sec. Water Use::</b>                                                                                                                  |                  |                                                                                    |      |
| <b>--Details--</b>                                |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Stratum ID:</b> 6558275                        |                   | <b>Top Depth(m):</b> 7.8                                                                                                                 |                  |                                                                                    |      |
| <b>Bottom Depth(m):</b> 11.5                      |                   | <b>Stratum Desc:</b> VERY DENSE BROWN TO DARK GREY SILTY SAND WITH GRAVEL COBBLES AND BOULDERS TRACE OF CLAY LOWER TILL                  |                  |                                                                                    |      |
| <b>Stratum ID:</b> 6558276                        |                   | <b>Top Depth(m):</b> 11.5                                                                                                                |                  |                                                                                    |      |
| <b>Bottom Depth(m):</b> 14.1                      |                   | <b>Stratum Desc:</b> FAIRLY SOUND TO SOUND DARK GREY SHALE BEDROCK OCCASIONAL THIN CLAYEY SEAMS                                          |                  |                                                                                    |      |
| <b>Stratum ID:</b> 6558272                        |                   | <b>Top Depth(m):</b> 0.0                                                                                                                 |                  |                                                                                    |      |
| <b>Bottom Depth(m):</b> 2.2                       |                   | <b>Stratum Desc:</b> DENSE DARK BROWN TO BLACK SILTY SAND WITH GRAVEL TRACE OF CLAY OCCASIONAL CINDERS PIECES OF CEMENT AND COBBLES FILL |                  |                                                                                    |      |
| <b>Stratum ID:</b> 6558273                        |                   | <b>Top Depth(m):</b> 2.2                                                                                                                 |                  |                                                                                    |      |
| <b>Bottom Depth(m):</b> 5.6                       |                   | <b>Stratum Desc:</b> DENSE TO VERY DENSE BROWN TO DARK GREY SAND TRACE OF SILT AND GRAVEL                                                |                  |                                                                                    |      |
| <b>Stratum ID:</b> 6558274                        |                   | <b>Top Depth(m):</b> 5.6                                                                                                                 |                  |                                                                                    |      |
| <b>Bottom Depth(m):</b> 7.8                       |                   | <b>Stratum Desc:</b> VERY DENSE GREY SILTY FINE SAND WITH LAYERS OF SILT AND FINE TO COARSE SAND                                         |                  |                                                                                    |      |
| <a href="#">45</a>                                | 1 of 2            | SW/209.3                                                                                                                                 | 64.0 / 2.36      | ALGONQUIN COLLEGE OF APPLIED ARTS & TECH<br>LEES AVE/HIGHWAY 417<br>OTTAWA CITY ON | CA   |
| <b>Certificate #:</b> 7-0998-97-                  |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Application Year:</b> 97                       |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Issue Date:</b> 9/10/1997                      |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Approval Type:</b> Municipal water             |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Status:</b> Approved                           |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Application Type:</b>                          |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Client Name::</b>                              |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Client Address::</b>                           |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Client City::</b>                              |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Client Postal Code::</b>                       |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Project Description::</b>                      |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Contaminants::</b>                             |                   |                                                                                                                                          |                  |                                                                                    |      |
| <b>Emission Control::</b>                         |                   |                                                                                                                                          |                  |                                                                                    |      |
| <a href="#">45</a>                                | 2 of 2            | SW/209.3                                                                                                                                 | 64.0 / 2.36      | 200 Lees Ave<br>Ottawa ON K1N 6N5                                                  | EHS  |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                       | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|------|----|
| <b>Order ID:</b> 188075<br><b>Order No:</b> 20110615038<br><b>Customer ID:</b> 73967<br><b>Company ID:</b> 318<br><b>Status:</b> C<br><b>Report Code:</b> 4CAN<br><b>Report Type:</b> Custom Report<br><b>Report Date:</b> 6/24/2011<br><b>Report Requested by:</b> Franz Environmental Inc.<br><b>Nearest Intersection:</b><br><b>Previous Site Name:</b><br><b>Additional Info Ordered:</b> |                   |                            |                  |      |    |
| <b>Date Received:</b> 6/15/2011<br><b>Lot/Building Size:</b><br><b>Municipality:</b><br><b>Client Prov/State:</b> ON<br><b>Search Radius (km):</b> 0.25<br><b>Large Radius:</b> 0.25<br><b>X:</b> -75.664847<br><b>Y:</b> 45.416753                                                                                                                                                           |                   |                            |                  |      |    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |           |             |    |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|-------------|----|------|
| <a href="#">46</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1 of 1 | SSW/211.2 | 63.1 / 1.42 | ON | WWIS |
| <b>Well ID:</b> 7251493<br><b>Construction Date:</b><br><b>Primary Water Use:</b><br><b>Sec. Water Use:</b><br><b>Final Well Status:</b><br><b>Water Type:</b><br><b>Casing Material:</b><br><b>Audit No:</b> C23242<br><b>Tag:</b> A135013<br><b>Construction Method:</b><br><b>Elevation (m):</b><br><b>Elevation Reliability:</b><br><b>Depth to Bedrock:</b><br><b>Well Depth:</b><br><b>Overburden/Bedrock:</b><br><b>Pump Rate:</b><br><b>Static Water Level:</b><br><b>Flowing (Y/N):</b><br><b>Flow Rate:</b><br><b>Clear/Cloudy:</b> |        |           |             |    |      |
| <b>Data Entry Status:</b> Yes<br><b>Data Src:</b><br><b>Date Received:</b> 11/4/2015<br><b>Selected Flag:</b> Yes<br><b>Abandonment Rec:</b><br><b>Contractor:</b> 6894<br><b>Form Version:</b> 8<br><b>Owner:</b><br><b>Street Name:</b><br><b>County:</b> OTTAWA-CARLETON<br><b>Municipality:</b> OTTAWA CITY<br><b>Site Info:</b><br><b>Lot:</b><br><b>Concession:</b><br><b>Concession Name:</b><br><b>Easting NAD83:</b><br><b>Northing NAD83:</b><br><b>Zone:</b><br><b>UTM Reliability:</b>                                            |        |           |             |    |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |           |             |    |      |
| <b>Bore Hole ID:</b> 1005782114<br><b>DP2BR:</b><br><b>Spatial Status:</b><br><b>Code OB:</b><br><b>Code OB Desc:</b><br><b>Open Hole:</b><br><b>Cluster Kind:</b><br><b>Date Completed:</b> 01-AUG-13<br><b>Remarks:</b><br><b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b>                                                                                                                 |        |           |             |    |      |
| <b>Elevation:</b> 61.57<br><b>Elevrc:</b><br><b>Zone:</b> 18<br><b>East83:</b> 447697<br><b>Org CS:</b> UTM83<br><b>North83:</b> 5029428<br><b>UTMRC:</b> 4<br><b>UTMRC Desc:</b> margin of error : 30 m - 100 m<br><b>Location Method:</b> wwr                                                                                                                                                                                                                                                                                               |        |           |             |    |      |

|                                                                                                                                        |        |           |              |           |      |
|----------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|--------------|-----------|------|
| <a href="#">47</a>                                                                                                                     | 1 of 1 | ESE/211.5 | 61.0 / -0.63 | Ottawa ON | WWIS |
| <b>Well ID:</b> 7181836<br><b>Construction Date:</b><br><b>Primary Water Use:</b> Monitoring and Test Hole<br><b>Sec. Water Use:</b> 0 |        |           |              |           |      |
| <b>Data Entry Status:</b><br><b>Data Src:</b><br><b>Date Received:</b> 5/30/2012<br><b>Selected Flag:</b> Yes                          |        |           |              |           |      |

| Map Key                       | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                    | DB              |
|-------------------------------|-------------------|----------------------------|------------------|-------------------------|-----------------|
| <b>Final Well Status:</b>     | Test Hole         |                            |                  | <b>Abandonment Rec:</b> |                 |
| <b>Water Type:</b>            |                   |                            |                  | <b>Contractor:</b>      | 7241            |
| <b>Casing Material:</b>       |                   |                            |                  | <b>Form Version:</b>    | 7               |
| <b>Audit No:</b>              | Z146398           |                            |                  | <b>Owner:</b>           |                 |
| <b>Tag:</b>                   | A125599           |                            |                  | <b>Street Name:</b>     | 29 HURDMAN ST   |
| <b>Construction Method:</b>   |                   |                            |                  | <b>County:</b>          | OTTAWA-CARLETON |
| <b>Elevation (m):</b>         |                   |                            |                  | <b>Municipality:</b>    | NEPEAN TOWNSHIP |
| <b>Elevation Reliability:</b> |                   |                            |                  | <b>Site Info:</b>       |                 |
| <b>Depth to Bedrock:</b>      |                   |                            |                  | <b>Lot:</b>             |                 |
| <b>Well Depth:</b>            |                   |                            |                  | <b>Concession:</b>      |                 |
| <b>Overburden/Bedrock:</b>    |                   |                            |                  | <b>Concession Name:</b> |                 |
| <b>Pump Rate:</b>             |                   |                            |                  | <b>Easting NAD83:</b>   |                 |
| <b>Static Water Level:</b>    |                   |                            |                  | <b>Northing NAD83:</b>  |                 |
| <b>Flowing (Y/N):</b>         |                   |                            |                  | <b>Zone:</b>            |                 |
| <b>Flow Rate:</b>             |                   |                            |                  | <b>UTM Reliability:</b> |                 |
| <b>Clear/Cloudy:</b>          |                   |                            |                  |                         |                 |

#### Bore Hole Information

|                                     |            |                         |                                |
|-------------------------------------|------------|-------------------------|--------------------------------|
| <b>Bore Hole ID:</b>                | 1003830487 | <b>Elevation:</b>       | 60.28                          |
| <b>DP2BR:</b>                       |            | <b>Elevrc:</b>          |                                |
| <b>Spatial Status:</b>              |            | <b>Zone:</b>            | 18                             |
| <b>Code OB:</b>                     |            | <b>East83:</b>          | 447975                         |
| <b>Code OB Desc:</b>                |            | <b>Org CS:</b>          | UTM83                          |
| <b>Open Hole:</b>                   |            | <b>North83:</b>         | 5029556                        |
| <b>Cluster Kind:</b>                |            | <b>UTMRC:</b>           | 4                              |
| <b>Date Completed:</b>              | 26-APR-12  | <b>UTMRC Desc:</b>      | margin of error : 30 m - 100 m |
| <b>Remarks:</b>                     |            | <b>Location Method:</b> | wwr                            |
| <b>Elevrc Desc:</b>                 |            |                         |                                |
| <b>Location Source Date:</b>        |            |                         |                                |
| <b>Improvement Location Source:</b> |            |                         |                                |
| <b>Improvement Location Method:</b> |            |                         |                                |
| <b>Source Revision Comment:</b>     |            |                         |                                |
| <b>Supplier Comment:</b>            |            |                         |                                |

#### Overburden and Bedrock

##### Materials Interval

|                                 |               |
|---------------------------------|---------------|
| <b>Formation ID:</b>            | 1004327562    |
| <b>Layer:</b>                   | 4             |
| <b>Color:</b>                   | 2             |
| <b>General Color:</b>           | GREY          |
| <b>Mat1:</b>                    | 05            |
| <b>Most Common Material:</b>    | CLAY          |
| <b>Mat2:</b>                    | 06            |
| <b>Other Materials:</b>         | SILT          |
| <b>Mat3:</b>                    | 91            |
| <b>Other Materials:</b>         | WATER-BEARING |
| <b>Formation Top Depth:</b>     | 4.57          |
| <b>Formation End Depth:</b>     | 6.1           |
| <b>Formation End Depth UOM:</b> | m             |

|                              |            |
|------------------------------|------------|
| <b>Formation ID:</b>         | 1004327561 |
| <b>Layer:</b>                | 3          |
| <b>Color:</b>                | 6          |
| <b>General Color:</b>        | BROWN      |
| <b>Mat1:</b>                 | 28         |
| <b>Most Common Material:</b> | SAND       |
| <b>Mat2:</b>                 | 11         |
| <b>Other Materials:</b>      | GRAVEL     |
| <b>Mat3:</b>                 | 74         |
| <b>Other Materials:</b>      | LAYERED    |
| <b>Formation Top Depth:</b>  | 3.1        |
| <b>Formation End Depth:</b>  | 4.57       |

| <b>Map Key</b>                                                 | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|----------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <hr/>                                                          |                              |                                    |                          |             |           |
| <b>Formation End Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                           |                              | 1004327559                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                                  |                              | 8                                  |                          |             |           |
| <b>General Color:</b>                                          |                              | BLACK                              |                          |             |           |
| <b>Mat1:</b>                                                   |                              | 11                                 |                          |             |           |
| <b>Most Common Material:</b>                                   |                              | GRAVEL                             |                          |             |           |
| <b>Mat2:</b>                                                   |                              | 60                                 |                          |             |           |
| <b>Other Materials:</b>                                        |                              | CEMENTED                           |                          |             |           |
| <b>Mat3:</b>                                                   |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                        |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                    |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                    |                              | .31                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                           |                              | 1004327560                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 2                                  |                          |             |           |
| <b>Color:</b>                                                  |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                          |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                                   |                              | 01                                 |                          |             |           |
| <b>Most Common Material:</b>                                   |                              | FILL                               |                          |             |           |
| <b>Mat2:</b>                                                   |                              | 28                                 |                          |             |           |
| <b>Other Materials:</b>                                        |                              | SAND                               |                          |             |           |
| <b>Mat3:</b>                                                   |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                        |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                                    |                              | .31                                |                          |             |           |
| <b>Formation End Depth:</b>                                    |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <br><b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1004327571                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                                |                              | 2.44                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1004327570                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                                |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1004327572                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | 2.44                               |                          |             |           |
| <b>Plug To:</b>                                                |                              | 6.1                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <br><b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                                 |                              | 1004327569                         |                          |             |           |
| <b>Method Construction Code:</b>                               |                              | D                                  |                          |             |           |
| <b>Method Construction:</b>                                    |                              | Direct Push                        |                          |             |           |
| <b>Other Method Construction:</b>                              |                              |                                    |                          |             |           |
| <br><b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                                |                              | 1004327558                         |                          |             |           |
| <b>Casing No:</b>                                              |                              | 0                                  |                          |             |           |



| Map Key                                    | Number of<br>Records     | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB              |
|--------------------------------------------|--------------------------|----------------------------|------------------|--------------------|-----------------|
| <b>Comment:</b><br><b>Alt Name:</b>        |                          |                            |                  |                    |                 |
| <b><u>Construction Record - Casing</u></b> |                          |                            |                  |                    |                 |
| Casing ID:                                 |                          | 1004327565                 |                  |                    |                 |
| Layer:                                     |                          | 1                          |                  |                    |                 |
| Material:                                  |                          | 5                          |                  |                    |                 |
| Open Hole or Material:                     |                          | PLASTIC                    |                  |                    |                 |
| Depth From:                                |                          | 0                          |                  |                    |                 |
| Depth To:                                  |                          | 3.1                        |                  |                    |                 |
| Casing Diameter:                           |                          | 4.03                       |                  |                    |                 |
| Casing Diameter UOM:                       |                          | cm                         |                  |                    |                 |
| Casing Depth UOM:                          |                          | m                          |                  |                    |                 |
| <b><u>Construction Record - Screen</u></b> |                          |                            |                  |                    |                 |
| Screen ID:                                 |                          | 1004327566                 |                  |                    |                 |
| Layer:                                     |                          | 1                          |                  |                    |                 |
| Slot:                                      |                          | 10                         |                  |                    |                 |
| Screen Top Depth:                          |                          | 3.1                        |                  |                    |                 |
| Screen End Depth:                          |                          | 6.1                        |                  |                    |                 |
| Screen Material:                           |                          | 5                          |                  |                    |                 |
| Screen Depth UOM:                          |                          | m                          |                  |                    |                 |
| Screen Diameter UOM:                       |                          | cm                         |                  |                    |                 |
| Screen Diameter:                           |                          | 4.82                       |                  |                    |                 |
| <b><u>Water Details</u></b>                |                          |                            |                  |                    |                 |
| Water ID:                                  |                          | 1004327564                 |                  |                    |                 |
| Layer:                                     |                          |                            |                  |                    |                 |
| Kind Code:                                 |                          |                            |                  |                    |                 |
| Kind:                                      |                          |                            |                  |                    |                 |
| Water Found Depth:                         |                          |                            |                  |                    |                 |
| Water Found Depth UOM:                     |                          | m                          |                  |                    |                 |
| <b><u>Hole Diameter</u></b>                |                          |                            |                  |                    |                 |
| Hole ID:                                   |                          | 1004327563                 |                  |                    |                 |
| Diameter:                                  |                          | 8.25                       |                  |                    |                 |
| Depth From:                                |                          | 0                          |                  |                    |                 |
| Depth To:                                  |                          | 6.1                        |                  |                    |                 |
| Hole Depth UOM:                            |                          | m                          |                  |                    |                 |
| Hole Diameter UOM:                         |                          | cm                         |                  |                    |                 |
| <hr/>                                      |                          |                            |                  |                    |                 |
| <a href="#">48</a>                         | 1 of 1                   | WSW/211.9                  | 66.3 / 4.68      | Ottawa ON          | WWIS            |
| Well ID:                                   | 7201656                  |                            |                  | Data Entry Status: |                 |
| Construction Date:                         |                          |                            |                  | Data Src:          |                 |
| Primary Water Use:                         | Monitoring and Test Hole |                            |                  | Date Received:     | 5/15/2013       |
| Sec. Water Use:                            |                          |                            |                  | Selected Flag:     | Yes             |
| Final Well Status:                         | Test Hole                |                            |                  | Abandonment Rec:   |                 |
| Water Type:                                |                          |                            |                  | Contractor:        | 7241            |
| Casing Material:                           |                          |                            |                  | Form Version:      | 7               |
| Audit No:                                  | Z168582                  |                            |                  | Owner:             |                 |
| Tag:                                       | A145285                  |                            |                  | Street Name:       | 1 ROBINSON AVE  |
| Construction Method:                       |                          |                            |                  | County:            | OTTAWA-CARLETON |
| Elevation (m):                             |                          |                            |                  | Municipality:      | OTTAWA CITY     |
| Elevation Reliability:                     |                          |                            |                  | Site Info:         |                 |
| Depth to Bedrock:                          |                          |                            |                  | Lot:               |                 |
| Well Depth:                                |                          |                            |                  | Concession:        |                 |

| Map Key                                                                                                   | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                               | DB                             |
|-----------------------------------------------------------------------------------------------------------|----------------------|----------------------------|------------------|------------------------------------------------------------------------------------|--------------------------------|
| Overburden/Bedrock:<br>Pump Rate:<br>Static Water Level:<br>Flowing (Y/N):<br>Flow Rate:<br>Clear/Cloudy: |                      |                            |                  | Concession Name:<br>Easting NAD83:<br>Northing NAD83:<br>Zone:<br>UTM Reliability: |                                |
| <u>Bore Hole Information</u>                                                                              |                      |                            |                  |                                                                                    |                                |
| Bore Hole ID:                                                                                             | 1004301544           |                            |                  | Elevation:                                                                         | 61.43                          |
| DP2BR:                                                                                                    |                      |                            |                  | Elevrc:                                                                            |                                |
| Spatial Status:                                                                                           |                      |                            |                  | Zone:                                                                              | 18                             |
| Code OB:                                                                                                  |                      |                            |                  | East83:                                                                            | 447569                         |
| Code OB Desc:                                                                                             |                      |                            |                  | Org CS:                                                                            | UTM83                          |
| Open Hole:                                                                                                |                      |                            |                  | North83:                                                                           | 5029574                        |
| Cluster Kind:                                                                                             |                      |                            |                  | UTMRC:                                                                             | 4                              |
| Date Completed:                                                                                           | 12-APR-13            |                            |                  | UTMRC Desc:                                                                        | margin of error : 30 m - 100 m |
| Remarks:                                                                                                  |                      |                            |                  | Location Method:                                                                   | wwr                            |
| Elevrc Desc:                                                                                              |                      |                            |                  |                                                                                    |                                |
| Location Source Date:                                                                                     |                      |                            |                  |                                                                                    |                                |
| Improvement Location Source:                                                                              |                      |                            |                  |                                                                                    |                                |
| Improvement Location Method:                                                                              |                      |                            |                  |                                                                                    |                                |
| Source Revision Comment:                                                                                  |                      |                            |                  |                                                                                    |                                |
| Supplier Comment:                                                                                         |                      |                            |                  |                                                                                    |                                |
| <u>Overburden and Bedrock</u>                                                                             |                      |                            |                  |                                                                                    |                                |
| <u>Materials Interval</u>                                                                                 |                      |                            |                  |                                                                                    |                                |
| Formation ID:                                                                                             | 1004843103           |                            |                  |                                                                                    |                                |
| Layer:                                                                                                    | 3                    |                            |                  |                                                                                    |                                |
| Color:                                                                                                    | 6                    |                            |                  |                                                                                    |                                |
| General Color:                                                                                            | BROWN                |                            |                  |                                                                                    |                                |
| Mat1:                                                                                                     | 34                   |                            |                  |                                                                                    |                                |
| Most Common Material:                                                                                     | TILL                 |                            |                  |                                                                                    |                                |
| Mat2:                                                                                                     |                      |                            |                  |                                                                                    |                                |
| Other Materials:                                                                                          |                      |                            |                  |                                                                                    |                                |
| Mat3:                                                                                                     | 73                   |                            |                  |                                                                                    |                                |
| Other Materials:                                                                                          | HARD                 |                            |                  |                                                                                    |                                |
| Formation Top Depth:                                                                                      | 6.71                 |                            |                  |                                                                                    |                                |
| Formation End Depth:                                                                                      | 7.62                 |                            |                  |                                                                                    |                                |
| Formation End Depth UOM:                                                                                  | m                    |                            |                  |                                                                                    |                                |
| Formation ID:                                                                                             | 1004843101           |                            |                  |                                                                                    |                                |
| Layer:                                                                                                    | 1                    |                            |                  |                                                                                    |                                |
| Color:                                                                                                    | 6                    |                            |                  |                                                                                    |                                |
| General Color:                                                                                            | BROWN                |                            |                  |                                                                                    |                                |
| Mat1:                                                                                                     | 10                   |                            |                  |                                                                                    |                                |
| Most Common Material:                                                                                     | COARSE SAND          |                            |                  |                                                                                    |                                |
| Mat2:                                                                                                     |                      |                            |                  |                                                                                    |                                |
| Other Materials:                                                                                          |                      |                            |                  |                                                                                    |                                |
| Mat3:                                                                                                     | 77                   |                            |                  |                                                                                    |                                |
| Other Materials:                                                                                          | LOOSE                |                            |                  |                                                                                    |                                |
| Formation Top Depth:                                                                                      | 0                    |                            |                  |                                                                                    |                                |
| Formation End Depth:                                                                                      | 3.1                  |                            |                  |                                                                                    |                                |
| Formation End Depth UOM:                                                                                  | m                    |                            |                  |                                                                                    |                                |
| Formation ID:                                                                                             | 1004843102           |                            |                  |                                                                                    |                                |
| Layer:                                                                                                    | 2                    |                            |                  |                                                                                    |                                |
| Color:                                                                                                    | 6                    |                            |                  |                                                                                    |                                |
| General Color:                                                                                            | BROWN                |                            |                  |                                                                                    |                                |
| Mat1:                                                                                                     | 08                   |                            |                  |                                                                                    |                                |
| Most Common Material:                                                                                     | FINE SAND            |                            |                  |                                                                                    |                                |
| Mat2:                                                                                                     |                      |                            |                  |                                                                                    |                                |
| Other Materials:                                                                                          |                      |                            |                  |                                                                                    |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.71                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843112                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 4.27                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 7.62                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843111                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | 4.27                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1004843110                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              | 6                                  |                          |             |           |
| <b>Method Construction:</b>                                |                              | Boring                             |                          |             |           |
| <b>Other Method Construction:</b>                          |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                            |                              | 1004843100                         |                          |             |           |
| <b>Casing No:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                            |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                           |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                          |                              | 1004843106                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                           |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                              |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                         |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                           |                              | 4.57                               |                          |             |           |
| <b>Casing Diameter:</b>                                    |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>                 |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                          |                              | 1004843107                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                   |                              | 4.57                               |                          |             |           |
| <b>Screen End Depth:</b>                                   |                              | 7.62                               |                          |             |           |
| <b>Screen Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                                    |                              | 6.03                               |                          |             |           |
| <b><u>Water Details</u></b>                                |                              |                                    |                          |             |           |

| Map Key                           | Number of Records        | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB                             |
|-----------------------------------|--------------------------|----------------------------|------------------|--------------------|--------------------------------|
| <hr/>                             |                          |                            |                  |                    |                                |
| Water ID:                         |                          | 1004843105                 |                  |                    |                                |
| Layer:                            |                          |                            |                  |                    |                                |
| Kind Code:                        |                          |                            |                  |                    |                                |
| Kind:                             |                          |                            |                  |                    |                                |
| Water Found Depth:                |                          |                            |                  |                    |                                |
| Water Found Depth UOM:            | m                        |                            |                  |                    |                                |
| <br><u>Hole Diameter</u>          |                          |                            |                  |                    |                                |
| Hole ID:                          |                          | 1004843104                 |                  |                    |                                |
| Diameter:                         |                          | 10.92                      |                  |                    |                                |
| Depth From:                       |                          | 0                          |                  |                    |                                |
| Depth To:                         |                          | 7.62                       |                  |                    |                                |
| Hole Depth UOM:                   | m                        |                            |                  |                    |                                |
| Hole Diameter UOM:                | cm                       |                            |                  |                    |                                |
| <hr/>                             |                          |                            |                  |                    |                                |
| <a href="#">49</a>                | 1 of 1                   | W/216.4                    | 66.9 / 5.22      | Ottawa ON          | WWIS                           |
| Well ID:                          | 7201659                  |                            |                  |                    |                                |
| Construction Date:                |                          |                            |                  | Data Entry Status: |                                |
| Primary Water Use:                | Monitoring and Test Hole |                            |                  | Data Src:          |                                |
| Sec. Water Use:                   |                          |                            |                  | Date Received:     | 5/15/2013                      |
| Final Well Status:                | Test Hole                |                            |                  | Selected Flag:     | Yes                            |
| Water Type:                       |                          |                            |                  | Abandonment Rec:   |                                |
| Casing Material:                  |                          |                            |                  | Contractor:        | 7241                           |
| Audit No:                         | Z168583                  |                            |                  | Form Version:      | 7                              |
| Tag:                              | A145287                  |                            |                  | Owner:             |                                |
| Construction Method:              |                          |                            |                  | Street Name:       | 1 ROBINSON RD                  |
| Elevation (m):                    |                          |                            |                  | County:            | OTTAWA-CARLETON                |
| Elevation Reliability:            |                          |                            |                  | Municipality:      | NEPEAN TOWNSHIP                |
| Depth to Bedrock:                 |                          |                            |                  | Site Info:         |                                |
| Well Depth:                       |                          |                            |                  | Lot:               |                                |
| Overburden/Bedrock:               |                          |                            |                  | Concession:        |                                |
| Pump Rate:                        |                          |                            |                  | Concession Name:   |                                |
| Static Water Level:               |                          |                            |                  | Easting NAD83:     |                                |
| Flowing (Y/N):                    |                          |                            |                  | Northing NAD83:    |                                |
| Flow Rate:                        |                          |                            |                  | Zone:              |                                |
| Clear/Cloudy:                     |                          |                            |                  | UTM Reliability:   |                                |
| <br><u>Bore Hole Information</u>  |                          |                            |                  |                    |                                |
| Bore Hole ID:                     | 1004301569               |                            |                  | Elevation:         | 61.99                          |
| DP2BR:                            |                          |                            |                  | Elevrc:            |                                |
| Spatial Status:                   |                          |                            |                  | Zone:              | 18                             |
| Code OB:                          |                          |                            |                  | East83:            | 447559                         |
| Code OB Desc:                     |                          |                            |                  | Org CS:            | UTM83                          |
| Open Hole:                        |                          |                            |                  | North83:           | 5029609                        |
| Cluster Kind:                     |                          |                            |                  | UTMRC:             | 4                              |
| Date Completed:                   | 12-APR-13                |                            |                  | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                          |                          |                            |                  | Location Method:   | wwr                            |
| Elevrc Desc:                      |                          |                            |                  |                    |                                |
| Location Source Date:             |                          |                            |                  |                    |                                |
| Improvement Location Source:      |                          |                            |                  |                    |                                |
| Improvement Location Method:      |                          |                            |                  |                    |                                |
| Source Revision Comment:          |                          |                            |                  |                    |                                |
| Supplier Comment:                 |                          |                            |                  |                    |                                |
| <br><u>Overburden and Bedrock</u> |                          |                            |                  |                    |                                |
| <u>Materials Interval</u>         |                          |                            |                  |                    |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Formation ID:</b>                                       |                              | 1004843142                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | COARSE SAND                        |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004843143                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 08                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | FINE SAND                          |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.71                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004843144                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 34                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | TILL                               |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 6.71                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 7.62                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843152                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | 4.27                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843153                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 4.27                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 7.62                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1004843151                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              | 6                                  |                          |             |           |
| <b>Method Construction:</b>                                |                              | Boring                             |                          |             |           |
| <b>Other Method Construction:</b>                          |                              |                                    |                          |             |           |

| Map Key                                    | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB        |
|--------------------------------------------|----------------------|----------------------------|------------------|--------------------|-----------|
| <b><u>Pipe Information</u></b>             |                      |                            |                  |                    |           |
| Pipe ID:                                   |                      | 1004843141                 |                  |                    |           |
| Casing No:                                 |                      | 0                          |                  |                    |           |
| Comment:                                   |                      |                            |                  |                    |           |
| Alt Name:                                  |                      |                            |                  |                    |           |
| <b><u>Construction Record - Casing</u></b> |                      |                            |                  |                    |           |
| Casing ID:                                 |                      | 1004843147                 |                  |                    |           |
| Layer:                                     |                      | 1                          |                  |                    |           |
| Material:                                  |                      | 5                          |                  |                    |           |
| Open Hole or Material:                     |                      | PLASTIC                    |                  |                    |           |
| Depth From:                                |                      | 0                          |                  |                    |           |
| Depth To:                                  |                      | 4.57                       |                  |                    |           |
| Casing Diameter:                           |                      | 5.2                        |                  |                    |           |
| Casing Diameter UOM:                       |                      | cm                         |                  |                    |           |
| Casing Depth UOM:                          |                      | m                          |                  |                    |           |
| <b><u>Construction Record - Screen</u></b> |                      |                            |                  |                    |           |
| Screen ID:                                 |                      | 1004843148                 |                  |                    |           |
| Layer:                                     |                      | 1                          |                  |                    |           |
| Slot:                                      |                      | 10                         |                  |                    |           |
| Screen Top Depth:                          |                      | 4.57                       |                  |                    |           |
| Screen End Depth:                          |                      | 7.62                       |                  |                    |           |
| Screen Material:                           |                      | 5                          |                  |                    |           |
| Screen Depth UOM:                          |                      | m                          |                  |                    |           |
| Screen Diameter UOM:                       |                      | cm                         |                  |                    |           |
| Screen Diameter:                           |                      | 6.03                       |                  |                    |           |
| <b><u>Water Details</u></b>                |                      |                            |                  |                    |           |
| Water ID:                                  |                      | 1004843146                 |                  |                    |           |
| Layer:                                     |                      |                            |                  |                    |           |
| Kind Code:                                 |                      |                            |                  |                    |           |
| Kind:                                      |                      |                            |                  |                    |           |
| Water Found Depth:                         |                      |                            |                  |                    |           |
| Water Found Depth UOM:                     |                      | m                          |                  |                    |           |
| <b><u>Hole Diameter</u></b>                |                      |                            |                  |                    |           |
| Hole ID:                                   |                      | 1004843145                 |                  |                    |           |
| Diameter:                                  |                      | 10.92                      |                  |                    |           |
| Depth From:                                |                      | 0                          |                  |                    |           |
| Depth To:                                  |                      | 7.62                       |                  |                    |           |
| Hole Depth UOM:                            |                      | m                          |                  |                    |           |
| Hole Diameter UOM:                         |                      | cm                         |                  |                    |           |
| <a href="#">50</a>                         | 1 of 1               | W/219.4                    | 66.9 / 5.22      | ON                 | WWIS      |
| Well ID:                                   | 7251492              |                            |                  | Data Entry Status: |           |
| Construction Date:                         |                      |                            |                  | Data Src:          |           |
| Primary Water Use:                         |                      |                            |                  | Date Received:     | 11/4/2015 |
| Sec. Water Use:                            |                      |                            |                  | Selected Flag:     | Yes       |
| Final Well Status:                         | 0                    |                            |                  | Abandonment Rec:   | Yes       |
| Water Type:                                |                      |                            |                  | Contractor:        | 6894      |
| Casing Material:                           |                      |                            |                  | Form Version:      | 7         |
| Audit No:                                  | Z82653               |                            |                  | Owner:             |           |



| Map Key                                                                                                                                                                                                                                                                                                                                                                                                  | Number of<br>Records               | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                                                                                                                                                                                             | DB                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Tag:</b><br><b>Construction Method:</b><br><b>Elevation (m):</b><br><b>Elevation Reliability:</b><br><b>Depth to Bedrock:</b><br><b>Well Depth:</b><br><b>Overburden/Bedrock:</b><br><b>Pump Rate:</b><br><b>Static Water Level:</b><br><b>Flowing (Y/N):</b><br><b>Flow Rate:</b><br><b>Clear/Cloudy:</b>                                                                                            | A145285                            |                            |                  | <b>Street Name:</b><br><b>County:</b><br><b>Municipality:</b><br><b>Site Info:</b><br><b>Lot:</b><br><b>Concession:</b><br><b>Concession Name:</b><br><b>Easting NAD83:</b><br><b>Northing NAD83:</b><br><b>Zone:</b><br><b>UTM Reliability:</b> | 1 ROBINSON ROAD<br>OTTAWA-CARLETON<br>NEPEAN TOWNSHIP                                       |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                      |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Bore Hole ID:</b><br><b>DP2BR:</b><br><b>Spatial Status:</b><br><b>Code OB:</b><br><b>Code OB Desc:</b><br><b>Open Hole:</b><br><b>Cluster Kind:</b><br><b>Date Completed:</b><br><b>Remarks:</b><br><b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b> | 1005782111                         |                            |                  | <b>Elevation:</b><br><b>Elevrc:</b><br><b>Zone:</b><br><b>East83:</b><br><b>Org CS:</b><br><b>North83:</b><br><b>UTMRC:</b><br><b>UTMRC Desc:</b><br><b>Location Method:</b>                                                                     | 61.83<br><br>18<br>447556<br>UTM83<br>5029608<br>4<br>margin of error : 30 m - 100 m<br>wwr |
| <b><u>Annular Space/Abandonment</u></b>                                                                                                                                                                                                                                                                                                                                                                  |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Sealing Record</u></b>                                                                                                                                                                                                                                                                                                                                                                             |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Plug ID:</b><br><b>Layer:</b><br><b>Plug From:</b><br><b>Plug To:</b><br><b>Plug Depth UOM:</b>                                                                                                                                                                                                                                                                                                       | 1005807014<br>1<br>0<br>7.38<br>ft |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Method of Construction &amp; Well</u></b>                                                                                                                                                                                                                                                                                                                                                          |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Use</u></b>                                                                                                                                                                                                                                                                                                                                                                                        |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Method Construction ID:</b><br><b>Method Construction Code:</b><br><b>Method Construction:</b><br><b>Other Method Construction:</b>                                                                                                                                                                                                                                                                   | 1005807013                         |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Pipe Information</u></b>                                                                                                                                                                                                                                                                                                                                                                           |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Pipe ID:</b><br><b>Casing No:</b><br><b>Comment:</b><br><b>Alt Name:</b>                                                                                                                                                                                                                                                                                                                              | 1005807007<br>0                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Construction Record - Casing</u></b>                                                                                                                                                                                                                                                                                                                                                               |                                    |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Casing ID:</b><br><b>Layer:</b><br><b>Material:</b><br><b>Open Hole or Material:</b><br><b>Depth From:</b>                                                                                                                                                                                                                                                                                            | 1005807011                         |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site      | DB   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|------------------|-----------|------|
| <b>Depth To:</b><br><b>Casing Diameter:</b><br><b>Casing Diameter UOM:</b> inch<br><b>Casing Depth UOM:</b> ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                      |                            |                  |           |      |
| <b><u>Construction Record - Screen</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |                            |                  |           |      |
| <b>Screen ID:</b> 1005807012<br><b>Layer:</b><br><b>Slot:</b><br><b>Screen Top Depth:</b><br><b>Screen End Depth:</b><br><b>Screen Material:</b><br><b>Screen Depth UOM:</b> ft<br><b>Screen Diameter UOM:</b> inch<br><b>Screen Diameter:</b>                                                                                                                                                                                                                                                                                                                                      |                      |                            |                  |           |      |
| <b><u>Water Details</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                            |                  |           |      |
| <b>Water ID:</b> 1005807010<br><b>Layer:</b><br><b>Kind Code:</b><br><b>Kind:</b><br><b>Water Found Depth:</b><br><b>Water Found Depth UOM:</b> ft                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                            |                  |           |      |
| <b><u>Hole Diameter</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                            |                  |           |      |
| <b>Hole ID:</b> 1005807009<br><b>Diameter:</b><br><b>Depth From:</b><br><b>Depth To:</b><br><b>Hole Depth UOM:</b> ft<br><b>Hole Diameter UOM:</b> inch                                                                                                                                                                                                                                                                                                                                                                                                                             |                      |                            |                  |           |      |
| <a href="#">51</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 of 1               | ESE/219.6                  | 61.1 / -0.53     | Ottawa ON | WWIS |
| <b>Well ID:</b> 7181835<br><b>Construction Date:</b><br><b>Primary Water Use:</b> Monitoring and Test Hole<br><b>Sec. Water Use:</b> 0<br><b>Final Well Status:</b> Test Hole<br><b>Water Type:</b><br><b>Casing Material:</b><br><b>Audit No:</b> Z146399<br><b>Tag:</b> A125598<br><b>Construction Method:</b><br><b>Elevation (m):</b><br><b>Elevation Reliability:</b><br><b>Depth to Bedrock:</b><br><b>Well Depth:</b><br><b>Overburden/Bedrock:</b><br><b>Pump Rate:</b><br><b>Static Water Level:</b><br><b>Flowing (Y/N):</b><br><b>Flow Rate:</b><br><b>Clear/Cloudy:</b> |                      |                            |                  |           |      |
| <b>Data Entry Status:</b><br><b>Data Src:</b><br><b>Date Received:</b> 5/30/2012<br><b>Selected Flag:</b> Yes<br><b>Abandonment Rec:</b><br><b>Contractor:</b> 7241<br><b>Form Version:</b> 7<br><b>Owner:</b><br><b>Street Name:</b> 29 HURDMAN ST<br><b>County:</b> OTTAWA-CARLETON<br><b>Municipality:</b> NEPEAN TOWNSHIP<br><b>Site Info:</b><br><b>Lot:</b><br><b>Concession:</b><br><b>Concession Name:</b><br><b>Easting NAD83:</b><br><b>Northing NAD83:</b><br><b>Zone:</b><br><b>UTM Reliability:</b>                                                                    |                      |                            |                  |           |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                            |                  |           |      |
| <b>Bore Hole ID:</b> 1003830484<br><b>Elevation:</b> 61.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |                            |                  |           |      |

| Map Key                              | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                    | DB                             |
|--------------------------------------|----------------------|----------------------------|------------------|-------------------------|--------------------------------|
| <b>DP2BR:</b>                        |                      |                            |                  | <b>Elevrc:</b>          |                                |
| <b>Spatial Status:</b>               |                      |                            |                  | <b>Zone:</b>            | 18                             |
| <b>Code OB:</b>                      |                      |                            |                  | <b>East83:</b>          | 447975                         |
| <b>Code OB Desc:</b>                 |                      |                            |                  | <b>Org CS:</b>          | UTM83                          |
| <b>Open Hole:</b>                    |                      |                            |                  | <b>North83:</b>         | 5029534                        |
| <b>Cluster Kind:</b>                 |                      |                            |                  | <b>UTMRC:</b>           | 4                              |
| <b>Date Completed:</b>               | 26-APR-12            |                            |                  | <b>UTMRC Desc:</b>      | margin of error : 30 m - 100 m |
| <b>Remarks:</b>                      |                      |                            |                  | <b>Location Method:</b> | wwr                            |
| <b>Elevrc Desc:</b>                  |                      |                            |                  |                         |                                |
| <b>Location Source Date:</b>         |                      |                            |                  |                         |                                |
| <b>Improvement Location Source:</b>  |                      |                            |                  |                         |                                |
| <b>Improvement Location Method:</b>  |                      |                            |                  |                         |                                |
| <b>Source Revision Comment:</b>      |                      |                            |                  |                         |                                |
| <b>Supplier Comment:</b>             |                      |                            |                  |                         |                                |
| <b><u>Overburden and Bedrock</u></b> |                      |                            |                  |                         |                                |
| <b><u>Materials Interval</u></b>     |                      |                            |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1004327544                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 1                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 8                          |                  |                         |                                |
| <b>General Color:</b>                |                      | BLACK                      |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 11                         |                  |                         |                                |
| <b>Most Common Material:</b>         |                      | GRAVEL                     |                  |                         |                                |
| <b>Mat2:</b>                         |                      | 60                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | CEMENTED                   |                  |                         |                                |
| <b>Mat3:</b>                         |                      | 73                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | HARD                       |                  |                         |                                |
| <b>Formation Top Depth:</b>          |                      | 0                          |                  |                         |                                |
| <b>Formation End Depth:</b>          |                      | .31                        |                  |                         |                                |
| <b>Formation End Depth UOM:</b>      |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1004327545                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 2                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 6                          |                  |                         |                                |
| <b>General Color:</b>                |                      | BROWN                      |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 34                         |                  |                         |                                |
| <b>Most Common Material:</b>         |                      | TILL                       |                  |                         |                                |
| <b>Mat2:</b>                         |                      | 28                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | SAND                       |                  |                         |                                |
| <b>Mat3:</b>                         |                      | 77                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | LOOSE                      |                  |                         |                                |
| <b>Formation Top Depth:</b>          |                      | .31                        |                  |                         |                                |
| <b>Formation End Depth:</b>          |                      | 3.1                        |                  |                         |                                |
| <b>Formation End Depth UOM:</b>      |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1004327546                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 3                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 6                          |                  |                         |                                |
| <b>General Color:</b>                |                      | BROWN                      |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 10                         |                  |                         |                                |
| <b>Most Common Material:</b>         |                      | COARSE SAND                |                  |                         |                                |
| <b>Mat2:</b>                         |                      | 11                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | GRAVEL                     |                  |                         |                                |
| <b>Mat3:</b>                         |                      | 74                         |                  |                         |                                |
| <b>Other Materials:</b>              |                      | LAYERED                    |                  |                         |                                |
| <b>Formation Top Depth:</b>          |                      | 3.1                        |                  |                         |                                |
| <b>Formation End Depth:</b>          |                      | 4.57                       |                  |                         |                                |
| <b>Formation End Depth UOM:</b>      |                      | m                          |                  |                         |                                |
| <b>Formation ID:</b>                 |                      | 1004327547                 |                  |                         |                                |
| <b>Layer:</b>                        |                      | 4                          |                  |                         |                                |
| <b>Color:</b>                        |                      | 2                          |                  |                         |                                |
| <b>General Color:</b>                |                      | GREY                       |                  |                         |                                |
| <b>Mat1:</b>                         |                      | 05                         |                  |                         |                                |

| <b>Map Key</b>                                                 | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|----------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <hr/>                                                          |                              |                                    |                          |             |           |
| <b>Most Common Material:</b>                                   |                              | CLAY                               |                          |             |           |
| <b>Mat2:</b>                                                   |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                        |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                                   |                              | 91                                 |                          |             |           |
| <b>Other Materials:</b>                                        |                              | WATER-BEARING                      |                          |             |           |
| <b>Formation Top Depth:</b>                                    |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth:</b>                                    |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <br><b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1004327557                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | 2.44                               |                          |             |           |
| <b>Plug To:</b>                                                |                              | 6.1                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1004327555                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                                |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                                |                              | 1004327556                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                              |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                                |                              | 2.44                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                         |                              | m                                  |                          |             |           |
| <br><b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                                 |                              | 1004327554                         |                          |             |           |
| <b>Method Construction Code:</b>                               |                              | D                                  |                          |             |           |
| <b>Method Construction:</b>                                    |                              | Direct Push                        |                          |             |           |
| <b>Other Method Construction:</b>                              |                              |                                    |                          |             |           |
| <br><b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                                |                              | 1004327543                         |                          |             |           |
| <b>Casing No:</b>                                              |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                                |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                               |                              |                                    |                          |             |           |
| <br><b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                              |                              | 1004327550                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                               |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                                  |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                             |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                               |                              | 3.1                                |                          |             |           |
| <b>Casing Diameter:</b>                                        |                              | 4.03                               |                          |             |           |
| <b>Casing Diameter UOM:</b>                                    |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                       |                              | m                                  |                          |             |           |
| <br><b><u>Construction Record - Screen</u></b>                 |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                              |                              | 1004327551                         |                          |             |           |
| <b>Layer:</b>                                                  |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                                   |                              | 10                                 |                          |             |           |

| Map Key                             | Number of Records        | Direction/<br>Distance (m) | Elev/Diff<br>(m)    | Site                      | DB                          |
|-------------------------------------|--------------------------|----------------------------|---------------------|---------------------------|-----------------------------|
| Screen Top Depth:                   |                          | 3.1                        |                     |                           |                             |
| Screen End Depth:                   |                          | 6.1                        |                     |                           |                             |
| Screen Material:                    |                          | 5                          |                     |                           |                             |
| Screen Depth UOM:                   |                          | m                          |                     |                           |                             |
| Screen Diameter UOM:                |                          | cm                         |                     |                           |                             |
| Screen Diameter:                    |                          | 4.82                       |                     |                           |                             |
| <b><u>Water Details</u></b>         |                          |                            |                     |                           |                             |
| Water ID:                           |                          | 1004327549                 |                     |                           |                             |
| Layer:                              |                          |                            |                     |                           |                             |
| Kind Code:                          |                          |                            |                     |                           |                             |
| Kind:                               |                          |                            |                     |                           |                             |
| Water Found Depth:                  |                          |                            |                     |                           |                             |
| Water Found Depth UOM:              |                          | m                          |                     |                           |                             |
| <b><u>Hole Diameter</u></b>         |                          |                            |                     |                           |                             |
| Hole ID:                            |                          | 1004327548                 |                     |                           |                             |
| Diameter:                           |                          | 8.25                       |                     |                           |                             |
| Depth From:                         |                          | 0                          |                     |                           |                             |
| Depth To:                           |                          | 6.1                        |                     |                           |                             |
| Hole Depth UOM:                     |                          | m                          |                     |                           |                             |
| Hole Diameter UOM:                  |                          | cm                         |                     |                           |                             |
| <b>52</b>                           | <b>1 of 1</b>            | <b>ESE/220.0</b>           | <b>61.1 / -0.53</b> | <b>Ottawa ON</b>          | <b>WWIS</b>                 |
| Well ID:                            | 7181834                  |                            |                     | <b>Data Entry Status:</b> |                             |
| Construction Date:                  |                          |                            |                     | <b>Data Src:</b>          |                             |
| Primary Water Use:                  | Monitoring and Test Hole |                            |                     | <b>Date Received:</b>     | 5/30/2012                   |
| Sec. Water Use:                     | 0                        |                            |                     | <b>Selected Flag:</b>     | Yes                         |
| Final Well Status:                  | Test Hole                |                            |                     | <b>Abandonment Rec:</b>   |                             |
| Water Type:                         |                          |                            |                     | <b>Contractor:</b>        | 7241                        |
| Casing Material:                    |                          |                            |                     | <b>Form Version:</b>      | 7                           |
| Audit No:                           | Z146400                  |                            |                     | <b>Owner:</b>             |                             |
| Tag:                                | A125597                  |                            |                     | <b>Street Name:</b>       | 29 HURDMAN ST               |
| Construction Method:                |                          |                            |                     | <b>County:</b>            | OTTAWA-CARLETON             |
| Elevation (m):                      |                          |                            |                     | <b>Municipality:</b>      | OTTAWA CITY                 |
| Elevation Reliability:              |                          |                            |                     | <b>Site Info:</b>         |                             |
| Depth to Bedrock:                   |                          |                            |                     | <b>Lot:</b>               |                             |
| Well Depth:                         |                          |                            |                     | <b>Concession:</b>        |                             |
| Overburden/Bedrock:                 |                          |                            |                     | <b>Concession Name:</b>   |                             |
| Pump Rate:                          |                          |                            |                     | <b>Easting NAD83:</b>     |                             |
| Static Water Level:                 |                          |                            |                     | <b>Northing NAD83:</b>    |                             |
| Flowing (Y/N):                      |                          |                            |                     | <b>Zone:</b>              |                             |
| Flow Rate:                          |                          |                            |                     | <b>UTM Reliability:</b>   |                             |
| Clear/Cloudy:                       |                          |                            |                     |                           |                             |
| <b><u>Bore Hole Information</u></b> |                          |                            |                     |                           |                             |
| Bore Hole ID:                       | 1003830481               |                            |                     | <b>Elevation:</b>         | 61.19                       |
| DP2BR:                              |                          |                            |                     | <b>Elevrc:</b>            |                             |
| Spatial Status:                     |                          |                            |                     | <b>Zone:</b>              | 18                          |
| Code OB:                            |                          |                            |                     | <b>East83:</b>            | 447974                      |
| Code OB Desc:                       |                          |                            |                     | <b>Org CS:</b>            | UTM83                       |
| Open Hole:                          |                          |                            |                     | <b>North83:</b>           | 5029531                     |
| Cluster Kind:                       |                          |                            |                     | <b>UTMRC:</b>             | 3                           |
| Date Completed:                     | 26-APR-12                |                            |                     | <b>UTMRC Desc:</b>        | margin of error : 10 - 30 m |
| Remarks:                            |                          |                            |                     | <b>Location Method:</b>   | wwr                         |
| Elevrc Desc:                        |                          |                            |                     |                           |                             |
| Location Source Date:               |                          |                            |                     |                           |                             |

| Map Key                                                                                                                                   | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b> |                      |                            |                  |      |    |
| <b><u>Overburden and Bedrock</u></b>                                                                                                      |                      |                            |                  |      |    |
| <b><u>Materials Interval</u></b>                                                                                                          |                      |                            |                  |      |    |
| <b>Formation ID:</b>                                                                                                                      |                      | 1004327532                 |                  |      |    |
| <b>Layer:</b>                                                                                                                             |                      | 4                          |                  |      |    |
| <b>Color:</b>                                                                                                                             |                      | 2                          |                  |      |    |
| <b>General Color:</b>                                                                                                                     |                      | GREY                       |                  |      |    |
| <b>Mat1:</b>                                                                                                                              |                      | 05                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                              |                      | CLAY                       |                  |      |    |
| <b>Mat2:</b>                                                                                                                              |                      | 06                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | SILT                       |                  |      |    |
| <b>Mat3:</b>                                                                                                                              |                      | 85                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | SOFT                       |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                               |                      | 4.57                       |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                               |                      | 6.1                        |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                           |                      | m                          |                  |      |    |
| <b>Formation ID:</b>                                                                                                                      |                      | 1004327530                 |                  |      |    |
| <b>Layer:</b>                                                                                                                             |                      | 2                          |                  |      |    |
| <b>Color:</b>                                                                                                                             |                      | 6                          |                  |      |    |
| <b>General Color:</b>                                                                                                                     |                      | BROWN                      |                  |      |    |
| <b>Mat1:</b>                                                                                                                              |                      | 28                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                              |                      | SAND                       |                  |      |    |
| <b>Mat2:</b>                                                                                                                              |                      | 11                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | GRAVEL                     |                  |      |    |
| <b>Mat3:</b>                                                                                                                              |                      | 73                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | HARD                       |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                               |                      | .31                        |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                               |                      | 1.5                        |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                           |                      | m                          |                  |      |    |
| <b>Formation ID:</b>                                                                                                                      |                      | 1004327531                 |                  |      |    |
| <b>Layer:</b>                                                                                                                             |                      | 3                          |                  |      |    |
| <b>Color:</b>                                                                                                                             |                      | 6                          |                  |      |    |
| <b>General Color:</b>                                                                                                                     |                      | BROWN                      |                  |      |    |
| <b>Mat1:</b>                                                                                                                              |                      | 28                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                              |                      | SAND                       |                  |      |    |
| <b>Mat2:</b>                                                                                                                              |                      | 11                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | GRAVEL                     |                  |      |    |
| <b>Mat3:</b>                                                                                                                              |                      | 74                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | LAYERED                    |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                               |                      | 1.5                        |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                               |                      | 4.57                       |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                           |                      | m                          |                  |      |    |
| <b>Formation ID:</b>                                                                                                                      |                      | 1004327529                 |                  |      |    |
| <b>Layer:</b>                                                                                                                             |                      | 1                          |                  |      |    |
| <b>Color:</b>                                                                                                                             |                      | 8                          |                  |      |    |
| <b>General Color:</b>                                                                                                                     |                      | BLACK                      |                  |      |    |
| <b>Mat1:</b>                                                                                                                              |                      | 11                         |                  |      |    |
| <b>Most Common Material:</b>                                                                                                              |                      | GRAVEL                     |                  |      |    |
| <b>Mat2:</b>                                                                                                                              |                      | 60                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | CEMENTED                   |                  |      |    |
| <b>Mat3:</b>                                                                                                                              |                      | 73                         |                  |      |    |
| <b>Other Materials:</b>                                                                                                                   |                      | HARD                       |                  |      |    |
| <b>Formation Top Depth:</b>                                                                                                               |                      | 0                          |                  |      |    |
| <b>Formation End Depth:</b>                                                                                                               |                      | .31                        |                  |      |    |
| <b>Formation End Depth UOM:</b>                                                                                                           |                      | m                          |                  |      |    |



| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327542                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 2.44                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 6.1                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327541                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 2.44                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327540                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1004327539                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              | 6                                  |                          |             |           |
| <b>Method Construction:</b>                                |                              | Boring                             |                          |             |           |
| <b>Other Method Construction:</b>                          |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                            |                              | 1004327528                         |                          |             |           |
| <b>Casing No:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                            |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                           |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>                 |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                          |                              | 1004327535                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                           |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                              |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                         |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                           |                              | 3.1                                |                          |             |           |
| <b>Casing Diameter:</b>                                    |                              | 4.03                               |                          |             |           |
| <b>Casing Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>                 |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                          |                              | 1004327536                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                   |                              | 3.1                                |                          |             |           |
| <b>Screen End Depth:</b>                                   |                              | 6.1                                |                          |             |           |
| <b>Screen Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                   |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                                |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                                    |                              | 4.82                               |                          |             |           |
| <b><u>Water Details</u></b>                                |                              |                                    |                          |             |           |

| Map Key                                             | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB                             |
|-----------------------------------------------------|-------------------|----------------------------|------------------|--------------------|--------------------------------|
| <hr/>                                               |                   |                            |                  |                    |                                |
| Water ID:                                           |                   | 1004327534                 |                  |                    |                                |
| Layer:                                              |                   |                            |                  |                    |                                |
| Kind Code:                                          |                   |                            |                  |                    |                                |
| Kind:                                               |                   |                            |                  |                    |                                |
| Water Found Depth:                                  |                   |                            |                  |                    |                                |
| Water Found Depth UOM:                              | m                 |                            |                  |                    |                                |
| <br><u>Hole Diameter</u>                            |                   |                            |                  |                    |                                |
| Hole ID:                                            |                   | 1004327533                 |                  |                    |                                |
| Diameter:                                           |                   | 10.92                      |                  |                    |                                |
| Depth From:                                         |                   | 0                          |                  |                    |                                |
| Depth To:                                           |                   | 6.1                        |                  |                    |                                |
| Hole Depth UOM:                                     | m                 |                            |                  |                    |                                |
| Hole Diameter UOM:                                  | cm                |                            |                  |                    |                                |
| <hr/>                                               |                   |                            |                  |                    |                                |
| <a href="#">53</a>                                  | 1 of 1            | WSW/220.8                  | 65.9 / 4.28      | OTTAWA ON          | WWIS                           |
| Well ID:                                            | 7211118           |                            |                  | Data Entry Status: |                                |
| Construction Date:                                  |                   |                            |                  | Data Src:          |                                |
| Primary Water Use:                                  |                   |                            |                  | Date Received:     | 11/14/2013                     |
| Sec. Water Use:                                     |                   |                            |                  | Selected Flag:     | Yes                            |
| Final Well Status:                                  | Abandoned-Other   |                            |                  | Abandonment Rec:   | Yes                            |
| Water Type:                                         |                   |                            |                  | Contractor:        | 6894                           |
| Casing Material:                                    |                   |                            |                  | Form Version:      | 7                              |
| Audit No:                                           | Z096875           |                            |                  | Owner:             |                                |
| Tag:                                                | A152323           |                            |                  | Street Name:       | 1 ROBINSON                     |
| Construction Method:                                |                   |                            |                  | County:            | OTTAWA-CARLETON                |
| Elevation (m):                                      |                   |                            |                  | Municipality:      | OTTAWA CITY                    |
| Elevation Reliability:                              |                   |                            |                  | Site Info:         |                                |
| Depth to Bedrock:                                   |                   |                            |                  | Lot:               |                                |
| Well Depth:                                         |                   |                            |                  | Concession:        |                                |
| Overburden/Bedrock:                                 |                   |                            |                  | Concession Name:   |                                |
| Pump Rate:                                          |                   |                            |                  | Easting NAD83:     |                                |
| Static Water Level:                                 |                   |                            |                  | Northing NAD83:    |                                |
| Flowing (Y/N):                                      |                   |                            |                  | Zone:              |                                |
| Flow Rate:                                          |                   |                            |                  | UTM Reliability:   |                                |
| Clear/Cloudy:                                       |                   |                            |                  |                    |                                |
| <br><u>Bore Hole Information</u>                    |                   |                            |                  |                    |                                |
| Bore Hole ID:                                       | 1004633168        |                            |                  | Elevation:         | 61.15                          |
| DP2BR:                                              |                   |                            |                  | Elevrc:            |                                |
| Spatial Status:                                     |                   |                            |                  | Zone:              | 18                             |
| Code OB:                                            |                   |                            |                  | East83:            | 447568                         |
| Code OB Desc:                                       |                   |                            |                  | Org CS:            | UTM83                          |
| Open Hole:                                          |                   |                            |                  | North83:           | 5029547                        |
| Cluster Kind:                                       |                   |                            |                  | UTMRC:             | 4                              |
| Date Completed:                                     |                   |                            |                  | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                                            |                   |                            |                  | Location Method:   | wwr                            |
| Elevrc Desc:                                        |                   |                            |                  |                    |                                |
| Location Source Date:                               |                   |                            |                  |                    |                                |
| Improvement Location Source:                        |                   |                            |                  |                    |                                |
| Improvement Location Method:                        |                   |                            |                  |                    |                                |
| Source Revision Comment:                            |                   |                            |                  |                    |                                |
| Supplier Comment:                                   |                   |                            |                  |                    |                                |
| <br><u>Annular Space/Abandonment Sealing Record</u> |                   |                            |                  |                    |                                |
| Plug ID:                                            | 1004895877        |                            |                  |                    |                                |

| Map Key                                             | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|-----------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| Layer:                                              |                      | 1                          |                  |      |    |
| Plug From:                                          |                      | 0                          |                  |      |    |
| Plug To:                                            |                      | 7.65                       |                  |      |    |
| Plug Depth UOM:                                     |                      | ft                         |                  |      |    |
| <b><u>Method of Construction &amp; Well Use</u></b> |                      |                            |                  |      |    |
| Method Construction ID:                             |                      | 1004895876                 |                  |      |    |
| Method Construction Code:                           |                      |                            |                  |      |    |
| Method Construction:                                |                      |                            |                  |      |    |
| Other Method Construction:                          |                      |                            |                  |      |    |
| <b><u>Pipe Information</u></b>                      |                      |                            |                  |      |    |
| Pipe ID:                                            |                      | 1004895870                 |                  |      |    |
| Casing No:                                          |                      | 0                          |                  |      |    |
| Comment:                                            |                      |                            |                  |      |    |
| Alt Name:                                           |                      |                            |                  |      |    |
| <b><u>Construction Record - Casing</u></b>          |                      |                            |                  |      |    |
| Casing ID:                                          |                      | 1004895874                 |                  |      |    |
| Layer:                                              |                      |                            |                  |      |    |
| Material:                                           |                      |                            |                  |      |    |
| Open Hole or Material:                              |                      |                            |                  |      |    |
| Depth From:                                         |                      |                            |                  |      |    |
| Depth To:                                           |                      |                            |                  |      |    |
| Casing Diameter:                                    |                      |                            |                  |      |    |
| Casing Diameter UOM:                                |                      | inch                       |                  |      |    |
| Casing Depth UOM:                                   |                      | ft                         |                  |      |    |
| <b><u>Construction Record - Screen</u></b>          |                      |                            |                  |      |    |
| Screen ID:                                          |                      | 1004895875                 |                  |      |    |
| Layer:                                              |                      |                            |                  |      |    |
| Slot:                                               |                      |                            |                  |      |    |
| Screen Top Depth:                                   |                      |                            |                  |      |    |
| Screen End Depth:                                   |                      |                            |                  |      |    |
| Screen Material:                                    |                      |                            |                  |      |    |
| Screen Depth UOM:                                   |                      | ft                         |                  |      |    |
| Screen Diameter UOM:                                |                      | inch                       |                  |      |    |
| Screen Diameter:                                    |                      |                            |                  |      |    |
| <b><u>Water Details</u></b>                         |                      |                            |                  |      |    |
| Water ID:                                           |                      | 1004895873                 |                  |      |    |
| Layer:                                              |                      | 1                          |                  |      |    |
| Kind Code:                                          |                      | 8                          |                  |      |    |
| Kind:                                               |                      | Untested                   |                  |      |    |
| Water Found Depth:                                  |                      | 6.05                       |                  |      |    |
| Water Found Depth UOM:                              |                      | ft                         |                  |      |    |
| <b><u>Hole Diameter</u></b>                         |                      |                            |                  |      |    |
| Hole ID:                                            |                      | 1004895872                 |                  |      |    |
| Diameter:                                           |                      |                            |                  |      |    |
| Depth From:                                         |                      |                            |                  |      |    |
| Depth To:                                           |                      |                            |                  |      |    |
| Hole Depth UOM:                                     |                      | ft                         |                  |      |    |
| Hole Diameter UOM:                                  |                      | inch                       |                  |      |    |

| Map Key                       | Number of<br>Records | Direction/<br>Distance (m)        | Elev/Diff<br>(m) | Site                                                           | DB   |
|-------------------------------|----------------------|-----------------------------------|------------------|----------------------------------------------------------------|------|
| <a href="#">54</a>            | 1 of 1               | E/221.9                           | 60.5 / -1.19     | CANADIAN TIRE PIT STOP<br>85 ROBINSON AVE<br>OTTAWA ON K1N 8N8 | RST  |
| Headcode:                     |                      | 921430                            |                  |                                                                |      |
| Headcode Desc:                |                      | Oil Changes & Lubrication Service |                  |                                                                |      |
| Phone:                        |                      | 6138298944                        |                  |                                                                |      |
| List Name:                    |                      |                                   |                  |                                                                |      |
| Description:                  |                      |                                   |                  |                                                                |      |
| <a href="#">55</a>            | 1 of 1               | SSW/224.1                         | 62.9 / 1.22      | Ottawa ON                                                      | WWIS |
| Well ID:                      |                      | 7191060                           |                  | Data Entry Status:                                             |      |
| Construction Date:            |                      |                                   |                  | Data Src:                                                      |      |
| Primary Water Use:            |                      | Monitoring and Test Hole          |                  | Date Received: 11/9/2012                                       |      |
| Sec. Water Use:               |                      | 0                                 |                  | Selected Flag: Yes                                             |      |
| Final Well Status:            |                      | Test Hole                         |                  | Abandonment Rec:                                               |      |
| Water Type:                   |                      |                                   |                  | Contractor: 7241                                               |      |
| Casing Material:              |                      |                                   |                  | Form Version: 7                                                |      |
| Audit No:                     |                      | Z156925                           |                  | Owner:                                                         |      |
| Tag:                          |                      | A135013                           |                  | Street Name: 200 LEES AVE                                      |      |
| Construction Method:          |                      |                                   |                  | County: OTTAWA-CARLETON                                        |      |
| Elevation (m):                |                      |                                   |                  | Municipality: OTTAWA CITY                                      |      |
| Elevation Reliability:        |                      |                                   |                  | Site Info:                                                     |      |
| Depth to Bedrock:             |                      |                                   |                  | Lot:                                                           |      |
| Well Depth:                   |                      |                                   |                  | Concession:                                                    |      |
| Overburden/Bedrock:           |                      |                                   |                  | Concession Name:                                               |      |
| Pump Rate:                    |                      |                                   |                  | Easting NAD83:                                                 |      |
| Static Water Level:           |                      |                                   |                  | Northing NAD83:                                                |      |
| Flowing (Y/N):                |                      |                                   |                  | Zone:                                                          |      |
| Flow Rate:                    |                      |                                   |                  | UTM Reliability:                                               |      |
| Clear/Cloudy:                 |                      |                                   |                  |                                                                |      |
| <u>Bore Hole Information</u>  |                      |                                   |                  |                                                                |      |
| Bore Hole ID:                 |                      | 1004200164                        |                  | Elevation: 61.59                                               |      |
| DP2BR:                        |                      |                                   |                  | Elevrc:                                                        |      |
| Spatial Status:               |                      |                                   |                  | Zone: 18                                                       |      |
| Code OB:                      |                      |                                   |                  | East83: 447683                                                 |      |
| Code OB Desc:                 |                      |                                   |                  | Org CS: UTM83                                                  |      |
| Open Hole:                    |                      |                                   |                  | North83: 5029420                                               |      |
| Cluster Kind:                 |                      |                                   |                  | UTMRC: 4                                                       |      |
| Date Completed:               |                      | 01-OCT-12                         |                  | UTMRC Desc: margin of error : 30 m - 100 m                     |      |
| Remarks:                      |                      |                                   |                  | Location Method: wwr                                           |      |
| Elevrc Desc:                  |                      |                                   |                  |                                                                |      |
| Location Source Date:         |                      |                                   |                  |                                                                |      |
| Improvement Location Source:  |                      |                                   |                  |                                                                |      |
| Improvement Location Method:  |                      |                                   |                  |                                                                |      |
| Source Revision Comment:      |                      |                                   |                  |                                                                |      |
| Supplier Comment:             |                      |                                   |                  |                                                                |      |
| <u>Overburden and Bedrock</u> |                      |                                   |                  |                                                                |      |
| <u>Materials Interval</u>     |                      |                                   |                  |                                                                |      |
| Formation ID:                 |                      | 1004489392                        |                  |                                                                |      |
| Layer:                        |                      | 2                                 |                  |                                                                |      |
| Color:                        |                      | 6                                 |                  |                                                                |      |
| General Color:                |                      | BROWN                             |                  |                                                                |      |
| Mat1:                         |                      | 01                                |                  |                                                                |      |
| Most Common Material:         |                      | FILL                              |                  |                                                                |      |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Mat2:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Mat3:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | .61                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004489391                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 02                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | TOPSOIL                            |                          |             |           |
| <b>Mat2:</b>                                               |                              | 01                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | FILL                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 85                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SOFT                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .61                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004489393                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 05                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | CLAY                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 34                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | TILL                               |                          |             |           |
| <b>Mat3:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004489394                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 4                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SILT                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 05                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | CLAY                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 9.14                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004489402                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004489403                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 5.79                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |

| <b>Map Key</b>                                      | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-----------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug ID:</b>                                     |                              | 1004489404                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                   |                              | 5.79                               |                          |             |           |
| <b>Plug To:</b>                                     |                              | 9.14                               |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                      |                              | 1004489401                         |                          |             |           |
| <b>Method Construction Code:</b>                    |                              | 2                                  |                          |             |           |
| <b>Method Construction:</b>                         |                              | Rotary (Convent.)                  |                          |             |           |
| <b>Other Method Construction:</b>                   |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                      |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                     |                              | 1004489390                         |                          |             |           |
| <b>Casing No:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                     |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                    |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>          |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                   |                              | 1004489397                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                       |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                  |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                    |                              | 6.1                                |                          |             |           |
| <b>Casing Diameter:</b>                             |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>          |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                   |                              | 1004489398                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                        |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                            |                              | 6.1                                |                          |             |           |
| <b>Screen End Depth:</b>                            |                              | 9.14                               |                          |             |           |
| <b>Screen Material:</b>                             |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                             |                              | 6.03                               |                          |             |           |
| <b><u>Water Details</u></b>                         |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                    |                              | 1004489396                         |                          |             |           |
| <b>Layer:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                   |                              |                                    |                          |             |           |
| <b>Kind:</b>                                        |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                           |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                       |                              | m                                  |                          |             |           |
| <b><u>Hole Diameter</u></b>                         |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                     |                              | 1004489395                         |                          |             |           |
| <b>Diameter:</b>                                    |                              | 10.92                              |                          |             |           |
| <b>Depth From:</b>                                  |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                    |                              | 9.14                               |                          |             |           |
| <b>Hole Depth UOM:</b>                              |                              | m                                  |                          |             |           |



| Map Key                                     | Number of<br>Records | Direction/<br>Distance (m)                 | Elev/Diff<br>(m) | Site      | DB   |
|---------------------------------------------|----------------------|--------------------------------------------|------------------|-----------|------|
| Hole Diameter UOM:                          |                      | cm                                         |                  |           |      |
| <a href="#">56</a>                          | 1 of 2               | ESE/225.9                                  | 61.1 / -0.53     | Ottawa ON | WWIS |
| Well ID: 7181833                            |                      | Data Entry Status:                         |                  |           |      |
| Construction Date:                          |                      | Data Src:                                  |                  |           |      |
| Primary Water Use: Monitoring and Test Hole |                      | Date Received: 5/30/2012                   |                  |           |      |
| Sec. Water Use: 0                           |                      | Selected Flag: Yes                         |                  |           |      |
| Final Well Status: Test Hole                |                      | Abandonment Rec:                           |                  |           |      |
| Water Type:                                 |                      | Contractor: 7241                           |                  |           |      |
| Casing Material:                            |                      | Form Version: 7                            |                  |           |      |
| Audit No: Z146401                           |                      | Owner:                                     |                  |           |      |
| Tag: A125596                                |                      | Street Name: 29 HURDMAN ST                 |                  |           |      |
| Construction Method:                        |                      | County: OTTAWA-CARLETON                    |                  |           |      |
| Elevation (m):                              |                      | Municipality: OTTAWA CITY                  |                  |           |      |
| Elevation Reliability:                      |                      | Site Info:                                 |                  |           |      |
| Depth to Bedrock:                           |                      | Lot:                                       |                  |           |      |
| Well Depth:                                 |                      | Concession:                                |                  |           |      |
| Overburden/Bedrock:                         |                      | Concession Name:                           |                  |           |      |
| Pump Rate:                                  |                      | Easting NAD83:                             |                  |           |      |
| Static Water Level:                         |                      | Northing NAD83:                            |                  |           |      |
| Flowing (Y/N):                              |                      | Zone:                                      |                  |           |      |
| Flow Rate:                                  |                      | UTM Reliability:                           |                  |           |      |
| Clear/Cloudy:                               |                      |                                            |                  |           |      |
| <b><u>Bore Hole Information</u></b>         |                      |                                            |                  |           |      |
| Bore Hole ID: 1003830466                    |                      | Elevation: 61.06                           |                  |           |      |
| DP2BR:                                      |                      | Elevrc:                                    |                  |           |      |
| Spatial Status:                             |                      | Zone: 18                                   |                  |           |      |
| Code OB:                                    |                      | East83: 447980                             |                  |           |      |
| Code OB Desc:                               |                      | Org CS: UTM83                              |                  |           |      |
| Open Hole:                                  |                      | North83: 5029531                           |                  |           |      |
| Cluster Kind:                               |                      | UTMRC: 4                                   |                  |           |      |
| Date Completed: 26-APR-12                   |                      | UTMRC Desc: margin of error : 30 m - 100 m |                  |           |      |
| Remarks:                                    |                      | Location Method: wwr                       |                  |           |      |
| Elevrc Desc:                                |                      |                                            |                  |           |      |
| Location Source Date:                       |                      |                                            |                  |           |      |
| Improvement Location Source:                |                      |                                            |                  |           |      |
| Improvement Location Method:                |                      |                                            |                  |           |      |
| Source Revision Comment:                    |                      |                                            |                  |           |      |
| Supplier Comment:                           |                      |                                            |                  |           |      |
| <b><u>Overburden and Bedrock</u></b>        |                      |                                            |                  |           |      |
| <b><u>Materials Interval</u></b>            |                      |                                            |                  |           |      |
| Formation ID: 1004327513                    |                      |                                            |                  |           |      |
| Layer: 2                                    |                      |                                            |                  |           |      |
| Color: 6                                    |                      |                                            |                  |           |      |
| General Color: BROWN                        |                      |                                            |                  |           |      |
| Mat1: 28                                    |                      |                                            |                  |           |      |
| Most Common Material: SAND                  |                      |                                            |                  |           |      |
| Mat2: 11                                    |                      |                                            |                  |           |      |
| Other Materials: GRAVEL                     |                      |                                            |                  |           |      |
| Mat3: 73                                    |                      |                                            |                  |           |      |
| Other Materials: HARD                       |                      |                                            |                  |           |      |
| Formation Top Depth: .31                    |                      |                                            |                  |           |      |
| Formation End Depth: 1.5                    |                      |                                            |                  |           |      |
| Formation End Depth UOM: m                  |                      |                                            |                  |           |      |
| Formation ID: 1004327514                    |                      |                                            |                  |           |      |
| Laver: 3                                    |                      |                                            |                  |           |      |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 10                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | COARSE SAND                        |                          |             |           |
| <b>Mat2:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                               |                              | 74                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LAYERED                            |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 1.5                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.35                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004327512                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 8                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BLACK                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | GRAVEL                             |                          |             |           |
| <b>Mat2:</b>                                               |                              | 60                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | CEMENTED                           |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004327516                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 5                                  |                          |             |           |
| <b>Color:</b>                                              |                              |                                    |                          |             |           |
| <b>General Color:</b>                                      |                              |                                    |                          |             |           |
| <b>Mat1:</b>                                               |                              |                                    |                          |             |           |
| <b>Most Common Material:</b>                               |                              |                                    |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 5.03                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              |                                    |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004327515                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 4                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 05                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | CLAY                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 91                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | WATER-BEARING                      |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.35                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 5.03                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327527                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 1.37                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 5.03                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327525                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |

| <b>Map Key</b>                                      | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-----------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug From:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                     |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                     |                              | 1004327526                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                   |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                     |                              | 1.37                               |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                      |                              | 1004327524                         |                          |             |           |
| <b>Method Construction Code:</b>                    |                              | D                                  |                          |             |           |
| <b>Method Construction:</b>                         |                              | Direct Push                        |                          |             |           |
| <b>Other Method Construction:</b>                   |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                      |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                     |                              | 1004327511                         |                          |             |           |
| <b>Casing No:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                     |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                    |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>          |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                   |                              | 1004327520                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                       |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                  |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                    |                              | 1.98                               |                          |             |           |
| <b>Casing Diameter:</b>                             |                              | 3.45                               |                          |             |           |
| <b>Casing Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>          |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                   |                              | 1004327521                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                        |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                            |                              | 1.98                               |                          |             |           |
| <b>Screen End Depth:</b>                            |                              | 5.03                               |                          |             |           |
| <b>Screen Material:</b>                             |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                             |                              | 4.21                               |                          |             |           |
| <b><u>Water Details</u></b>                         |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                    |                              | 1004327519                         |                          |             |           |
| <b>Layer:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                   |                              |                                    |                          |             |           |
| <b>Kind:</b>                                        |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                           |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                       |                              | m                                  |                          |             |           |
| <b><u>Hole Diameter</u></b>                         |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                     |                              | 1004327518                         |                          |             |           |

| Map Key                              | Number of Records        | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB                             |
|--------------------------------------|--------------------------|----------------------------|------------------|--------------------|--------------------------------|
| Diameter:                            |                          | 5.71                       |                  |                    |                                |
| Depth From:                          |                          | 3.1                        |                  |                    |                                |
| Depth To:                            |                          | 5.03                       |                  |                    |                                |
| Hole Depth UOM:                      |                          | m                          |                  |                    |                                |
| Hole Diameter UOM:                   |                          | cm                         |                  |                    |                                |
| Hole ID:                             |                          | 1004327517                 |                  |                    |                                |
| Diameter:                            |                          | 10.92                      |                  |                    |                                |
| Depth From:                          |                          | 0                          |                  |                    |                                |
| Depth To:                            |                          | 3.1                        |                  |                    |                                |
| Hole Depth UOM:                      |                          | m                          |                  |                    |                                |
| Hole Diameter UOM:                   |                          | cm                         |                  |                    |                                |
| <a href="#">56</a>                   | 2 of 2                   | ESE/225.9                  | 61.1 / -0.53     | Ottawa ON          | WWIS                           |
| Well ID:                             | 7181837                  |                            |                  | Data Entry Status: |                                |
| Construction Date:                   |                          |                            |                  | Data Src:          |                                |
| Primary Water Use:                   | Monitoring and Test Hole |                            |                  | Date Received:     | 5/30/2012                      |
| Sec. Water Use:                      | 0                        |                            |                  | Selected Flag:     | Yes                            |
| Final Well Status:                   | Test Hole                |                            |                  | Abandonment Rec:   |                                |
| Water Type:                          |                          |                            |                  | Contractor:        | 7241                           |
| Casing Material:                     |                          |                            |                  | Form Version:      | 7                              |
| Audit No:                            | Z146397                  |                            |                  | Owner:             |                                |
| Tag:                                 | A125600                  |                            |                  | Street Name:       | 29 HURDMAN RD                  |
| Construction Method:                 |                          |                            |                  | County:            | OTTAWA-CARLETON                |
| Elevation (m):                       |                          |                            |                  | Municipality:      | NEPEAN TOWNSHIP                |
| Elevation Reliability:               |                          |                            |                  | Site Info:         |                                |
| Depth to Bedrock:                    |                          |                            |                  | Lot:               |                                |
| Well Depth:                          |                          |                            |                  | Concession:        |                                |
| Overburden/Bedrock:                  |                          |                            |                  | Concession Name:   |                                |
| Pump Rate:                           |                          |                            |                  | Easting NAD83:     |                                |
| Static Water Level:                  |                          |                            |                  | Northing NAD83:    |                                |
| Flowing (Y/N):                       |                          |                            |                  | Zone:              |                                |
| Flow Rate:                           |                          |                            |                  | UTM Reliability:   |                                |
| Clear/Cloudy:                        |                          |                            |                  |                    |                                |
| <b><u>Bore Hole Information</u></b>  |                          |                            |                  |                    |                                |
| Bore Hole ID:                        | 1003830490               |                            |                  | Elevation:         | 61.04                          |
| DP2BR:                               |                          |                            |                  | Elevrc:            |                                |
| Spatial Status:                      |                          |                            |                  | Zone:              | 18                             |
| Code OB:                             |                          |                            |                  | East83:            | 447981                         |
| Code OB Desc:                        |                          |                            |                  | Org CS:            | UTM83                          |
| Open Hole:                           |                          |                            |                  | North83:           | 5029531                        |
| Cluster Kind:                        |                          |                            |                  | UTMRC:             | 4                              |
| Date Completed:                      | 26-APR-12                |                            |                  | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                             |                          |                            |                  | Location Method:   | wwr                            |
| Elevrc Desc:                         |                          |                            |                  |                    |                                |
| Location Source Date:                |                          |                            |                  |                    |                                |
| Improvement Location Source:         |                          |                            |                  |                    |                                |
| Improvement Location Method:         |                          |                            |                  |                    |                                |
| Source Revision Comment:             |                          |                            |                  |                    |                                |
| Supplier Comment:                    |                          |                            |                  |                    |                                |
| <b><u>Overburden and Bedrock</u></b> |                          |                            |                  |                    |                                |
| <b><u>Materials Interval</u></b>     |                          |                            |                  |                    |                                |
| Formation ID:                        | 1004327575               |                            |                  |                    |                                |
| Layer:                               | 2                        |                            |                  |                    |                                |
| Color:                               | 6                        |                            |                  |                    |                                |
| General Color:                       | BROWN                    |                            |                  |                    |                                |
| Mat1:                                | 01                       |                            |                  |                    |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Most Common Material:</b>                               |                              | FILL                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SAND                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004327576                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                               |                              | 74                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LAYERED                            |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004327574                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 8                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BLACK                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | GRAVEL                             |                          |             |           |
| <b>Mat2:</b>                                               |                              | 60                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | CEMENTED                           |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004327577                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 4                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 05                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | CLAY                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                               |                              | 91                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | WATER-BEARING                      |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327587                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 2.44                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 6.1                                |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004327586                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                            |                              | 2.44                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |

| Map Key                                                 | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|---------------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <hr/>                                                   |                      |                            |                  |      |    |
| <b>Plug ID:</b>                                         |                      | 1004327585                 |                  |      |    |
| <b>Layer:</b>                                           |                      | 1                          |                  |      |    |
| <b>Plug From:</b>                                       |                      | 0                          |                  |      |    |
| <b>Plug To:</b>                                         |                      | .31                        |                  |      |    |
| <b>Plug Depth UOM:</b>                                  |                      | m                          |                  |      |    |
| <br><b><u>Method of Construction &amp; Well Use</u></b> |                      |                            |                  |      |    |
| <b>Method Construction ID:</b>                          |                      | 1004327584                 |                  |      |    |
| <b>Method Construction Code:</b>                        |                      | D                          |                  |      |    |
| <b>Method Construction:</b>                             |                      | Direct Push                |                  |      |    |
| <b>Other Method Construction:</b>                       |                      |                            |                  |      |    |
| <br><b><u>Pipe Information</u></b>                      |                      |                            |                  |      |    |
| <b>Pipe ID:</b>                                         |                      | 1004327573                 |                  |      |    |
| <b>Casing No:</b>                                       |                      | 0                          |                  |      |    |
| <b>Comment:</b>                                         |                      |                            |                  |      |    |
| <b>Alt Name:</b>                                        |                      |                            |                  |      |    |
| <br><b><u>Construction Record - Casing</u></b>          |                      |                            |                  |      |    |
| <b>Casing ID:</b>                                       |                      | 1004327580                 |                  |      |    |
| <b>Layer:</b>                                           |                      | 1                          |                  |      |    |
| <b>Material:</b>                                        |                      | 5                          |                  |      |    |
| <b>Open Hole or Material:</b>                           |                      | PLASTIC                    |                  |      |    |
| <b>Depth From:</b>                                      |                      | 0                          |                  |      |    |
| <b>Depth To:</b>                                        |                      | 3.1                        |                  |      |    |
| <b>Casing Diameter:</b>                                 |                      | 4.03                       |                  |      |    |
| <b>Casing Diameter UOM:</b>                             |                      | cm                         |                  |      |    |
| <b>Casing Depth UOM:</b>                                |                      | m                          |                  |      |    |
| <br><b><u>Construction Record - Screen</u></b>          |                      |                            |                  |      |    |
| <b>Screen ID:</b>                                       |                      | 1004327581                 |                  |      |    |
| <b>Layer:</b>                                           |                      | 1                          |                  |      |    |
| <b>Slot:</b>                                            |                      | 10                         |                  |      |    |
| <b>Screen Top Depth:</b>                                |                      | 3.1                        |                  |      |    |
| <b>Screen End Depth:</b>                                |                      | 6.1                        |                  |      |    |
| <b>Screen Material:</b>                                 |                      | 5                          |                  |      |    |
| <b>Screen Depth UOM:</b>                                |                      | m                          |                  |      |    |
| <b>Screen Diameter UOM:</b>                             |                      | cm                         |                  |      |    |
| <b>Screen Diameter:</b>                                 |                      | 4.82                       |                  |      |    |
| <br><b><u>Water Details</u></b>                         |                      |                            |                  |      |    |
| <b>Water ID:</b>                                        |                      | 1004327579                 |                  |      |    |
| <b>Layer:</b>                                           |                      |                            |                  |      |    |
| <b>Kind Code:</b>                                       |                      |                            |                  |      |    |
| <b>Kind:</b>                                            |                      |                            |                  |      |    |
| <b>Water Found Depth:</b>                               |                      |                            |                  |      |    |
| <b>Water Found Depth UOM:</b>                           |                      | m                          |                  |      |    |
| <br><b><u>Hole Diameter</u></b>                         |                      |                            |                  |      |    |
| <b>Hole ID:</b>                                         |                      | 1004327578                 |                  |      |    |
| <b>Diameter:</b>                                        |                      | 8.25                       |                  |      |    |
| <b>Depth From:</b>                                      |                      | 0                          |                  |      |    |
| <b>Depth To:</b>                                        |                      | 6.1                        |                  |      |    |

| Map Key                  | Number of<br>Records               | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                  | DB         |
|--------------------------|------------------------------------|----------------------------|------------------|-------------------------------------------------------|------------|
| Hole Depth UOM:          |                                    | m                          |                  |                                                       |            |
| Hole Diameter UOM:       |                                    | cm                         |                  |                                                       |            |
| <a href="#">57</a>       | 1 of 16                            | E/228.1                    | 59.9 / -1.78     | 29 Hurdman Road<br>Ottawa ON                          | EHS        |
| Order ID:                | 171097                             |                            |                  | Date Received:                                        | 1/11/2010  |
| Order No:                | 20100111005                        |                            |                  | Lot/Building Size:                                    |            |
| Customer ID:             | 77170                              |                            |                  | Municipality:                                         |            |
| Company ID:              | 97                                 |                            |                  | Client Prov/State:                                    | ON         |
| Status:                  | C                                  |                            |                  | Search Radius (km):                                   | 0.25       |
| Report Code:             | 3CAN                               |                            |                  | Large Radius:                                         | 2          |
| Report Type:             | Standard Report                    |                            |                  | X:                                                    | -75.666097 |
| Report Date:             | 1/19/2010                          |                            |                  | Y:                                                    | 45.417297  |
| Report Requested by:     | Trow Associates Inc.               |                            |                  |                                                       |            |
| Nearest Intersection:    |                                    |                            |                  |                                                       |            |
| Previous Site Name:      |                                    |                            |                  |                                                       |            |
| Additional Info Ordered: |                                    |                            |                  |                                                       |            |
| <a href="#">57</a>       | 2 of 16                            | E/228.1                    | 59.9 / -1.78     | 29 Hurdman Rd<br>Ottawa ON K1N8N7                     | EHS        |
| Order ID:                | 502068                             |                            |                  | Date Received:                                        | 27-FEB-17  |
| Order No:                | 20170227059                        |                            |                  | Lot/Building Size:                                    |            |
| Customer ID:             | 133388                             |                            |                  | Municipality:                                         | Ottawa     |
| Company ID:              | 247                                |                            |                  | Client Prov/State:                                    | ON         |
| Status:                  | C                                  |                            |                  | Search Radius (km):                                   | .25        |
| Report Code:             | 3CAN                               |                            |                  | Large Radius:                                         | .3         |
| Report Type:             | Standard Report                    |                            |                  | X:                                                    | -75.665101 |
| Report Date:             | 06-MAR-17                          |                            |                  | Y:                                                    | 45.417548  |
| Report Requested by:     | Arcadis Canada Inc.                |                            |                  |                                                       |            |
| Nearest Intersection:    |                                    |                            |                  |                                                       |            |
| Previous Site Name:      |                                    |                            |                  |                                                       |            |
| Additional Info Ordered: | Fire Insur. Maps and/or Site Plans |                            |                  |                                                       |            |
| <a href="#">57</a>       | 3 of 16                            | E/228.1                    | 59.9 / -1.78     | OTTAWA, CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON       | GEN        |
| Generator No.:           | ON0136222                          |                            |                  | PO Box No.:                                           |            |
| Status:                  |                                    |                            |                  | Country:                                              |            |
| Approval Years:          | 97,98                              |                            |                  | Choice of Contact:                                    |            |
| Contam. Facility:        |                                    |                            |                  | Co Admin:                                             |            |
| MHSW Facility:           |                                    |                            |                  | Phone No. Admin:                                      |            |
| SIC Code:                | 8373                               |                            |                  |                                                       |            |
| SIC Description:         | ENVIRON. ADMIN.                    |                            |                  |                                                       |            |
| --Details--              |                                    |                            |                  |                                                       |            |
| Waste Code:              | 221                                |                            |                  |                                                       |            |
| Waste Description:       | LIGHT FUELS                        |                            |                  |                                                       |            |
| Waste Code:              | 251                                |                            |                  |                                                       |            |
| Waste Description:       | OIL SKIMMINGS & SLUDGES            |                            |                  |                                                       |            |
| Waste Code:              | 252                                |                            |                  |                                                       |            |
| Waste Description:       | WASTE OILS & LUBRICANTS            |                            |                  |                                                       |            |
| <a href="#">57</a>       | 4 of 16                            | E/228.1                    | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD | GEN        |



| Map Key            | Number of Records                                        | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                               | DB  |
|--------------------|----------------------------------------------------------|----------------------------|------------------|--------------------------------------------------------------------|-----|
| <hr/>              |                                                          |                            |                  |                                                                    |     |
| OTTAWA ON          |                                                          |                            |                  |                                                                    |     |
| Generator No.:     | ON0136222                                                |                            |                  | PO Box No.:                                                        |     |
| Status:            |                                                          |                            |                  | Country:                                                           |     |
| Approval Years:    | 99,00,01,02,03,04,05,06,07,08                            |                            |                  | Choice of Contact:                                                 |     |
| Contam. Facility:  |                                                          |                            |                  | Co Admin:                                                          |     |
| MHSW Facility:     |                                                          |                            |                  | Phone No. Admin:                                                   |     |
| SIC Code:          | 8373                                                     |                            |                  |                                                                    |     |
| SIC Description:   | ENVIRON. ADMIN.                                          |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| --Details--        |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 221                                                      |                            |                  |                                                                    |     |
| Waste Description: | LIGHT FUELS                                              |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 251                                                      |                            |                  |                                                                    |     |
| Waste Description: | OIL SKIMMINGS & SLUDGES                                  |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 252                                                      |                            |                  |                                                                    |     |
| Waste Description: | WASTE OILS & LUBRICANTS                                  |                            |                  |                                                                    |     |
| <hr/>              |                                                          |                            |                  |                                                                    |     |
| <a href="#">57</a> | 5 of 16                                                  | E/228.1                    | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON | GEN |
| Generator No.:     | ON0136222                                                |                            |                  | PO Box No.:                                                        |     |
| Status:            |                                                          |                            |                  | Country:                                                           |     |
| Approval Years:    | 2009                                                     |                            |                  | Choice of Contact:                                                 |     |
| Contam. Facility:  |                                                          |                            |                  | Co Admin:                                                          |     |
| MHSW Facility:     |                                                          |                            |                  | Phone No. Admin:                                                   |     |
| SIC Code:          | 913910                                                   |                            |                  |                                                                    |     |
| SIC Description:   | Other Local Municipal and Regional Public Administration |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| --Details--        |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 251                                                      |                            |                  |                                                                    |     |
| Waste Description: | OIL SKIMMINGS & SLUDGES                                  |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 252                                                      |                            |                  |                                                                    |     |
| Waste Description: | WASTE OILS & LUBRICANTS                                  |                            |                  |                                                                    |     |
| <hr/>              |                                                          |                            |                  |                                                                    |     |
| <a href="#">57</a> | 6 of 16                                                  | E/228.1                    | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON | GEN |
| Generator No.:     | ON0136222                                                |                            |                  | PO Box No.:                                                        |     |
| Status:            |                                                          |                            |                  | Country:                                                           |     |
| Approval Years:    | 2010                                                     |                            |                  | Choice of Contact:                                                 |     |
| Contam. Facility:  |                                                          |                            |                  | Co Admin:                                                          |     |
| MHSW Facility:     |                                                          |                            |                  | Phone No. Admin:                                                   |     |
| SIC Code:          | 913910                                                   |                            |                  |                                                                    |     |
| SIC Description:   | Other Local Municipal and Regional Public Administration |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| --Details--        |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 251                                                      |                            |                  |                                                                    |     |
| Waste Description: | OIL SKIMMINGS & SLUDGES                                  |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 252                                                      |                            |                  |                                                                    |     |
| Waste Description: | WASTE OILS & LUBRICANTS                                  |                            |                  |                                                                    |     |
| <br>               |                                                          |                            |                  |                                                                    |     |
| Waste Code:        | 145                                                      |                            |                  |                                                                    |     |

| Map Key            | Number of<br>Records | Direction/<br>Distance (m)                               | Elev/Diff<br>(m)   | Site                                                               | DB  |
|--------------------|----------------------|----------------------------------------------------------|--------------------|--------------------------------------------------------------------|-----|
| Waste Description: |                      | PAINT/PIGMENT/COATING RESIDUES                           |                    |                                                                    |     |
| <a href="#">57</a> | 7 of 16              | E/228.1                                                  | 59.9 / -1.78       | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON | GEN |
| Generator No.:     |                      | ON0136222                                                | PO Box No.:        |                                                                    |     |
| Status:            |                      |                                                          | Country:           |                                                                    |     |
| Approval Years:    |                      | 2011                                                     | Choice of Contact: |                                                                    |     |
| Contam. Facility:  |                      |                                                          | Co Admin:          |                                                                    |     |
| MHSW Facility:     |                      |                                                          | Phone No. Admin:   |                                                                    |     |
| SIC Code:          |                      | 913910                                                   |                    |                                                                    |     |
| SIC Description:   |                      | Other Local Municipal and Regional Public Administration |                    |                                                                    |     |
| --Details--        |                      |                                                          |                    |                                                                    |     |
| Waste Code:        |                      | 251                                                      |                    |                                                                    |     |
| Waste Description: |                      | OIL SKIMMINGS & SLUDGES                                  |                    |                                                                    |     |
| Waste Code:        |                      | 145                                                      |                    |                                                                    |     |
| Waste Description: |                      | PAINT/PIGMENT/COATING RESIDUES                           |                    |                                                                    |     |
| Waste Code:        |                      | 252                                                      |                    |                                                                    |     |
| Waste Description: |                      | WASTE OILS & LUBRICANTS                                  |                    |                                                                    |     |
| <a href="#">57</a> | 8 of 16              | E/228.1                                                  | 59.9 / -1.78       | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON | GEN |
| Generator No.:     |                      | ON0136222                                                | PO Box No.:        |                                                                    |     |
| Status:            |                      |                                                          | Country:           |                                                                    |     |
| Approval Years:    |                      | 2012                                                     | Choice of Contact: |                                                                    |     |
| Contam. Facility:  |                      |                                                          | Co Admin:          |                                                                    |     |
| MHSW Facility:     |                      |                                                          | Phone No. Admin:   |                                                                    |     |
| SIC Code:          |                      | 913910                                                   |                    |                                                                    |     |
| SIC Description:   |                      | Other Local Municipal and Regional Public Administration |                    |                                                                    |     |
| --Details--        |                      |                                                          |                    |                                                                    |     |
| Waste Code:        |                      | 252                                                      |                    |                                                                    |     |
| Waste Description: |                      | WASTE OILS & LUBRICANTS                                  |                    |                                                                    |     |
| Waste Code:        |                      | 145                                                      |                    |                                                                    |     |
| Waste Description: |                      | PAINT/PIGMENT/COATING RESIDUES                           |                    |                                                                    |     |
| Waste Code:        |                      | 251                                                      |                    |                                                                    |     |
| Waste Description: |                      | OIL SKIMMINGS & SLUDGES                                  |                    |                                                                    |     |
| <a href="#">57</a> | 9 of 16              | E/228.1                                                  | 59.9 / -1.78       | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON | GEN |
| Generator No.:     |                      | ON0136222                                                | PO Box No.:        |                                                                    |     |
| Status:            |                      |                                                          | Country:           |                                                                    |     |
| Approval Years:    |                      | 2013                                                     | Choice of Contact: |                                                                    |     |
| Contam. Facility:  |                      |                                                          | Co Admin:          |                                                                    |     |
| MHSW Facility:     |                      |                                                          | Phone No. Admin:   |                                                                    |     |
| SIC Code:          |                      | 913910                                                   |                    |                                                                    |     |
| SIC Description:   |                      |                                                          |                    |                                                                    |     |

| Map Key            | Number of Records | Direction/<br>Distance (m)     | Elev/Diff<br>(m) | Site                                                                       | DB                     |
|--------------------|-------------------|--------------------------------|------------------|----------------------------------------------------------------------------|------------------------|
| <b>--Details--</b> |                   |                                |                  |                                                                            |                        |
| Waste Code:        |                   | 252                            |                  |                                                                            |                        |
| Waste Description: |                   | WASTE OILS & LUBRICANTS        |                  |                                                                            |                        |
| Waste Code:        |                   | 145                            |                  |                                                                            |                        |
| Waste Description: |                   | PAINT/PIGMENT/COATING RESIDUES |                  |                                                                            |                        |
| Waste Code:        |                   | 251                            |                  |                                                                            |                        |
| Waste Description: |                   | OIL SKIMMINGS & SLUDGES        |                  |                                                                            |                        |
| <a href="#">57</a> | 10 of 16          | E/228.1                        | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | GEN                    |
| Generator No.:     | ON0136222         |                                |                  | PO Box No.:                                                                |                        |
| Status:            |                   |                                |                  | Country:                                                                   | Canada                 |
| Approval Years:    | 2016              |                                |                  | Choice of Contact:                                                         | CO_OFFICIAL            |
| Contam. Facility:  | No                |                                |                  | Co Admin:                                                                  | RANDY VILLENEUVE       |
| MHSW Facility:     | No                |                                |                  | Phone No. Admin:                                                           | 613-580-2424 Ext.12085 |
| SIC Code:          | 913910            |                                |                  |                                                                            |                        |
| SIC Description:   | 913910            |                                |                  |                                                                            |                        |
| <b>--Details--</b> |                   |                                |                  |                                                                            |                        |
| Waste Code:        |                   | 145                            |                  |                                                                            |                        |
| Waste Description: |                   | PAINT/PIGMENT/COATING RESIDUES |                  |                                                                            |                        |
| Waste Code:        |                   | 251                            |                  |                                                                            |                        |
| Waste Description: |                   | OIL SKIMMINGS & SLUDGES        |                  |                                                                            |                        |
| Waste Code:        |                   | 252                            |                  |                                                                            |                        |
| Waste Description: |                   | WASTE OILS & LUBRICANTS        |                  |                                                                            |                        |
| <a href="#">57</a> | 11 of 16          | E/228.1                        | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | GEN                    |
| Generator No.:     | ON0136222         |                                |                  | PO Box No.:                                                                |                        |
| Status:            |                   |                                |                  | Country:                                                                   | Canada                 |
| Approval Years:    | 2015              |                                |                  | Choice of Contact:                                                         | CO_OFFICIAL            |
| Contam. Facility:  | No                |                                |                  | Co Admin:                                                                  | RANDY VILLENEUVE       |
| MHSW Facility:     | No                |                                |                  | Phone No. Admin:                                                           | 613-580-2424 Ext.12085 |
| SIC Code:          | 913910            |                                |                  |                                                                            |                        |
| SIC Description:   | 913910            |                                |                  |                                                                            |                        |
| <b>--Details--</b> |                   |                                |                  |                                                                            |                        |
| Waste Code:        |                   | 251                            |                  |                                                                            |                        |
| Waste Description: |                   | OIL SKIMMINGS & SLUDGES        |                  |                                                                            |                        |
| Waste Code:        |                   | 252                            |                  |                                                                            |                        |
| Waste Description: |                   | WASTE OILS & LUBRICANTS        |                  |                                                                            |                        |
| Waste Code:        |                   | 145                            |                  |                                                                            |                        |
| Waste Description: |                   | PAINT/PIGMENT/COATING RESIDUES |                  |                                                                            |                        |
| <a href="#">57</a> | 12 of 16          | E/228.1                        | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | GEN                    |
| Generator No.:     | ON0136222         |                                |                  | PO Box No.:                                                                |                        |

| Map Key                         | Number of<br>Records | Direction/<br>Distance (m)                           | Elev/Diff<br>(m) | Site                                                                       | DB                     |
|---------------------------------|----------------------|------------------------------------------------------|------------------|----------------------------------------------------------------------------|------------------------|
| <hr/>                           |                      |                                                      |                  |                                                                            |                        |
| <b>Status:</b>                  |                      |                                                      |                  | <b>Country:</b>                                                            | Canada                 |
| <b>Approval Years:</b>          |                      | 2014                                                 |                  | <b>Choice of Contact:</b>                                                  | CO_OFFICIAL            |
| <b>Contam. Facility:</b>        |                      | No                                                   |                  | <b>Co Admin:</b>                                                           | RANDY VILLENEUVE       |
| <b>MHSW Facility:</b>           |                      | No                                                   |                  | <b>Phone No. Admin:</b>                                                    | 613-580-2424 Ext.12085 |
| <b>SIC Code:</b>                |                      | 913910                                               |                  |                                                                            |                        |
| <b>SIC Description:</b>         |                      | 913910                                               |                  |                                                                            |                        |
| <br>                            |                      |                                                      |                  |                                                                            |                        |
| <b>--Details--</b>              |                      |                                                      |                  |                                                                            |                        |
| <b>Waste Code:</b>              |                      | 145                                                  |                  |                                                                            |                        |
| <b>Waste Description:</b>       |                      | PAINT/PIGMENT/COATING RESIDUES                       |                  |                                                                            |                        |
| <br>                            |                      |                                                      |                  |                                                                            |                        |
| <b>Waste Code:</b>              |                      | 252                                                  |                  |                                                                            |                        |
| <b>Waste Description:</b>       |                      | WASTE OILS & LUBRICANTS                              |                  |                                                                            |                        |
| <br>                            |                      |                                                      |                  |                                                                            |                        |
| <b>Waste Code:</b>              |                      | 251                                                  |                  |                                                                            |                        |
| <b>Waste Description:</b>       |                      | OIL SKIMMINGS & SLUDGES                              |                  |                                                                            |                        |
| <hr/>                           |                      |                                                      |                  |                                                                            |                        |
| <a href="#">57</a>              | 13 of 16             | E/228.1                                              | 59.9 / -1.78     | OTTAWA, CORPORATION OF THE CITY OF<br>29 HURDMAN ROAD<br>OTTAWA ON K1G-5X5 | GEN                    |
| <b>Generator No.:</b>           |                      | ON0136222                                            |                  | <b>PO Box No.:</b>                                                         |                        |
| <b>Status:</b>                  |                      | Registered                                           |                  | <b>Country:</b>                                                            | Canada                 |
| <b>Approval Years:</b>          |                      | As of Dec 2017                                       |                  | <b>Choice of Contact:</b>                                                  |                        |
| <b>Contam. Facility:</b>        |                      |                                                      |                  | <b>Co Admin:</b>                                                           |                        |
| <b>MHSW Facility:</b>           |                      |                                                      |                  | <b>Phone No. Admin:</b>                                                    |                        |
| <b>SIC Code:</b>                |                      |                                                      |                  |                                                                            |                        |
| <b>SIC Description:</b>         |                      |                                                      |                  |                                                                            |                        |
| <br>                            |                      |                                                      |                  |                                                                            |                        |
| <b>--Details--</b>              |                      |                                                      |                  |                                                                            |                        |
| <b>Waste Code:</b>              |                      | 145 L                                                |                  |                                                                            |                        |
| <b>Waste Description:</b>       |                      | Wastes from the use of pigments, coatings and paints |                  |                                                                            |                        |
| <br>                            |                      |                                                      |                  |                                                                            |                        |
| <b>Waste Code:</b>              |                      | 251 L                                                |                  |                                                                            |                        |
| <b>Waste Description:</b>       |                      | Waste oils/sludges (petroleum based)                 |                  |                                                                            |                        |
| <br>                            |                      |                                                      |                  |                                                                            |                        |
| <b>Waste Code:</b>              |                      | 252 L                                                |                  |                                                                            |                        |
| <b>Waste Description:</b>       |                      | Waste crankcase oils and lubricants                  |                  |                                                                            |                        |
| <hr/>                           |                      |                                                      |                  |                                                                            |                        |
| <a href="#">57</a>              | 14 of 16             | E/228.1                                              | 59.9 / -1.78     | 29 Hurdman Road, Ottawa<br>ON                                              | INC                    |
| <b>Incident No:</b>             |                      | 611458                                               |                  |                                                                            |                        |
| <b>Incident ID:</b>             |                      | 2768080                                              |                  |                                                                            |                        |
| <b>Attribute Category:</b>      |                      | FS-Perform L1 Incident Insp                          |                  |                                                                            |                        |
| <b>Status Code:</b>             |                      | Causal Analysis Complete                             |                  |                                                                            |                        |
| <b>Incident Location:</b>       |                      | 29 Hurdman Road, Ottawa - Discovery of Product       |                  |                                                                            |                        |
| <b>Drainage System:</b>         |                      | Unknown                                              |                  |                                                                            |                        |
| <b>Sub Surface Contam.:</b>     |                      | Yes, 4 feet deep at least.                           |                  |                                                                            |                        |
| <b>Aff. Prop. Use Water:</b>    |                      | No                                                   |                  |                                                                            |                        |
| <b>Contam. Migrated:</b>        |                      | Unknown                                              |                  |                                                                            |                        |
| <b>Contact Natural Env.:</b>    |                      | Yes                                                  |                  |                                                                            |                        |
| <b>Near Body of Water:</b>      |                      | No                                                   |                  |                                                                            |                        |
| <b>Approx. Quant. Rel.:</b>     |                      | Unknown                                              |                  |                                                                            |                        |
| <b>Equipment Model:</b>         |                      |                                                      |                  |                                                                            |                        |
| <b>Serial No:</b>               |                      |                                                      |                  |                                                                            |                        |
| <b>Residential App. Type:</b>   |                      |                                                      |                  |                                                                            |                        |
| <b>Commercial App. Type:</b>    |                      |                                                      |                  |                                                                            |                        |
| <b>Industrial App. Type:</b>    |                      |                                                      |                  |                                                                            |                        |
| <b>Institutional App. Type:</b> |                      |                                                      |                  |                                                                            |                        |
| <b>Venting Type:</b>            |                      |                                                      |                  |                                                                            |                        |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|------|----|
| <b>Vent Connector Mater:</b><br><b>Vent Chimney Mater:</b><br><b>Pipeline Type:</b><br><b>Pipeline Involved:</b><br><b>Pipe Material:</b><br><b>Depth Ground Cover:</b><br><b>Regulator Location:</b><br><b>Regulator Type:</b><br><b>Operation Pressure:</b><br><b>Liquid Prop Make:</b><br><b>Liquid Prop Model:</b><br><b>Liquid Prop Serial No:</b><br><b>Equipment Type:</b><br><b>Cylinder Capacity:</b><br><b>Cylinder Capac. Units:</b><br><b>Cylinder Material Type:</b><br><b>Tank Capacity:</b><br><b>Fuels Occurrence Type:</b> Leak<br><b>Fuel Type Involved:</b> Fuel Oil<br><b>Date of Occurrence:</b> 2011/06/13 00:00:00<br><b>Time of Occurrence:</b> 12:00:00<br><b>Occur Insp Start Date:</b> 2011/06/14 00:00:00<br><b>Any Health Impact:</b> No<br><b>Any Environmental Impact:</b> Yes<br><b>Was Service Interrupted:</b> No<br><b>Was Property Damaged:</b> No<br><b>Operation Type Involved:</b> Industrial / Manufacturing Facility<br><b>Enforcement Policy:</b> NULL<br><b>Prc Escalation Required:</b> NULL<br><b>Task No:</b> 3379857<br><b>Notes:</b><br><b>Occurrence Narrative:</b> Client discovered a UST during excavation work on city property.<br><b>Tank Material Type:</b><br><b>Tank Storage Type:</b><br><b>Tank Location Type:</b><br><b>Pump Flow Rate Capac:</b><br><b>Liquid Prop Notes:</b> |                   |                            |                  |      |    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |         |              |                                                |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|--------------|------------------------------------------------|-----|
| <a href="#">57</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 15 of 16 | E/228.1 | 59.9 / -1.78 | City of Ottawa<br>29 Hurdman Road<br>Ottawa ON | SPL |
| <b>Ref No:</b> 2465-7QRPHH<br><b>Site No:</b><br><b>Incident Dt:</b><br><b>Year:</b><br><b>Incident Cause:</b> Container Leak (Fuel Tank Barrels)<br><b>Incident Event:</b><br><b>Contaminant Code:</b><br><b>Contaminant Name:</b> DIESEL FUEL<br><b>Contaminant Limit 1:</b><br><b>Contam Limit Freq 1:</b><br><b>Contaminant UN No 1:</b><br><b>Contaminant Qty:</b> 136 L<br><b>Environment Impact:</b> Not Anticipated<br><b>Nature of Impact:</b><br><b>Receiving Medium:</b><br><b>Receiving Env:</b><br><b>Health/Env Conseq:</b><br><b>MOE Response:</b> Planned Field Response<br><b>Dt MOE Arvl on Scn:</b><br><b>MOE Reported Dt:</b> 4/3/2009<br><b>Dt Document Closed:</b><br><b>SAC Action Class:</b> Watercourse Spills |          |         |              |                                                |     |
| <b>Discharger Report:</b><br><b>Material Group:</b><br><b>Client Type:</b><br><b>Sector Type:</b> Other<br><b>Source Type:</b><br><b>Nearest Watercourse:</b><br><b>Site Name:</b> Roads Department Yard<UNOFFICIAL><br><b>Site Address:</b><br><b>Site District Office:</b><br><b>Site County/District:</b><br><b>Site Postal Code:</b><br><b>Site Region:</b><br><b>Site Municipality:</b> Ottawa<br><b>Site Lot:</b><br><b>Site Conc:</b><br><b>Northing:</b><br><b>Easting:</b><br><b>Site Geo Ref Accu:</b><br><b>Site Geo Ref Meth:</b><br><b>Site Map Datum:</b>                                                                                                                                                                 |          |         |              |                                                |     |

| Map Key                  | Number of<br>Records | Direction/<br>Distance (m)                           | Elev/Diff<br>(m) | Site                                                     | DB   |
|--------------------------|----------------------|------------------------------------------------------|------------------|----------------------------------------------------------|------|
| Incident Reason:         |                      | Spill                                                |                  |                                                          |      |
| Incident Summary:        |                      | City of Ottawa: 136L diesel to CB, cntd, clning      |                  |                                                          |      |
|                          |                      |                                                      |                  |                                                          |      |
| <a href="#">57</a>       | 16 of 16             | E/228.1                                              | 59.9 / -1.78     | City of Ottawa<br>29 Hurdman Avenue<br>Ottawa ON K1N 8N7 | SPL  |
| Ref No:                  |                      | 2115-8HSJCT                                          |                  | Discharger Report:                                       |      |
| Site No:                 |                      |                                                      |                  | Material Group:                                          |      |
| Incident Dt:             |                      | 6/13/2011                                            |                  | Client Type:                                             |      |
| Year:                    |                      |                                                      |                  | Sector Type:                                             |      |
| Incident Cause:          |                      | Tank (Underground) Leak                              |                  | Other                                                    |      |
| Incident Event:          |                      |                                                      |                  | Source Type:                                             |      |
| Contaminant Code:        |                      | 15                                                   |                  | Nearest Watercourse:                                     |      |
| Contaminant Name:        |                      | OIL (PETROLEUM BASED, NOT SPECIFIED)                 |                  | Site Name:                                               |      |
| Contaminant Limit 1:     |                      |                                                      |                  | Municipal Works Yard<UNOFFICIAL>                         |      |
| Contam Limit Freq 1:     |                      |                                                      |                  | Site Address:                                            |      |
| Contaminant UN No 1:     |                      |                                                      |                  | 29 Hurdman Avenue                                        |      |
| Contaminant Qty:         |                      | 0 other - see incident description                   |                  | Site District Office:                                    |      |
| Environment Impact:      |                      | Not Anticipated                                      |                  | Site County/District:                                    |      |
| Nature of Impact:        |                      | Other Impact(s); Soil Contamination                  |                  | Site Postal Code:                                        |      |
| Receiving Medium:        |                      |                                                      |                  | Site Region:                                             |      |
| Receiving Env:           |                      |                                                      |                  | Site Municipality:                                       |      |
| Health/Env Conseq:       |                      |                                                      |                  | Ottawa                                                   |      |
| MOE Response:            |                      | Referral to others                                   |                  | Site Lot:                                                |      |
| Dt MOE Arvl on Scn:      |                      |                                                      |                  | Site Conc:                                               |      |
| MOE Reported Dt:         |                      | 6/13/2011                                            |                  | Nothing:                                                 |      |
| Dt Document Closed:      |                      |                                                      |                  | Easting:                                                 |      |
| SAC Action Class:        |                      | TSSA - Fuel Safety Branch                            |                  | Site Geo Ref Accu:                                       |      |
| Incident Reason:         |                      | Corrosion - All forms of internal/external corrosion |                  | Site Geo Ref Meth:                                       |      |
| Incident Summary:        |                      | TSSA: UST discovery, leak                            |                  | Site Map Datum:                                          |      |
|                          |                      |                                                      |                  |                                                          |      |
| <a href="#">58</a>       | 1 of 1               | SW/230.2                                             | 64.9 / 3.25      | ON                                                       | BORE |
| Borehole ID:             |                      | 803265                                               |                  | Type:                                                    |      |
| Use:                     |                      | Geotechnical/Geological Investigation                |                  | Borehole                                                 |      |
| Drill Method::           |                      | Hollow stem auger                                    |                  | Status::                                                 |      |
| Easting::                |                      | 447599.75                                            |                  | UTM Zone::                                               |      |
| Location Accuracy::      |                      |                                                      |                  | 18                                                       |      |
| Elev. Reliability Note:: |                      |                                                      |                  | Northing::                                               |      |
| Total Depth m::          |                      | 9.1                                                  |                  | 5029474.89                                               |      |
| Township::               |                      |                                                      |                  | Orig. Ground Elev m::                                    |      |
| Lot::                    |                      |                                                      |                  | 59.9                                                     |      |
| Completion Date::        |                      | 11-MAY-1986                                          |                  | DEM Ground Elev m::                                      |      |
| Primary Water Use::      |                      |                                                      |                  | 60.8                                                     |      |
|                          |                      |                                                      |                  | Primary Name::                                           |      |
|                          |                      |                                                      |                  | BH.86-13                                                 |      |
|                          |                      |                                                      |                  | Concession::                                             |      |
|                          |                      |                                                      |                  | Municipality:                                            |      |
|                          |                      |                                                      |                  | Static Water Level::                                     |      |
|                          |                      |                                                      |                  | -999.9                                                   |      |
|                          |                      |                                                      |                  | Sec. Water Use::                                         |      |
|                          |                      |                                                      |                  |                                                          |      |
| --Details--              |                      |                                                      |                  |                                                          |      |
| Stratum ID:              |                      | 218575657                                            |                  | Top Depth(m):                                            |      |
| Bottom Depth(m):         |                      | 0.1                                                  |                  | 0.0                                                      |      |
|                          |                      |                                                      |                  | Stratum Desc:                                            |      |
|                          |                      |                                                      |                  | Asphalt                                                  |      |
| Stratum ID:              |                      | 218575658                                            |                  | Top Depth(m):                                            |      |
| Bottom Depth(m):         |                      | 1.0                                                  |                  | 0.1                                                      |      |
|                          |                      |                                                      |                  | Stratum Desc:                                            |      |
|                          |                      |                                                      |                  | Crushed Stone 50 mm minus                                |      |
| Stratum ID:              |                      | 218575659                                            |                  | Top Depth(m):                                            |      |
| Bottom Depth(m):         |                      | 3.0                                                  |                  | 1.0                                                      |      |
|                          |                      |                                                      |                  | Stratum Desc:                                            |      |
|                          |                      |                                                      |                  | Sand                                                     |      |
| Stratum ID:              |                      | 218575660                                            |                  | Top Depth(m):                                            |      |
| Bottom Depth(m):         |                      | 4.6                                                  |                  | 3.0                                                      |      |
|                          |                      |                                                      |                  | Stratum Desc:                                            |      |
|                          |                      |                                                      |                  | Brown Compact Sand                                       |      |
| Stratum ID:              |                      | 218575661                                            |                  | Top Depth(m):                                            |      |
|                          |                      |                                                      |                  | 4.6                                                      |      |

| Map Key          | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site          | DB                                      |
|------------------|-------------------|----------------------------|------------------|---------------|-----------------------------------------|
| Bottom Depth(m): | 6.1               |                            |                  | Stratum Desc: | Dark Brown to Black Compact Sand        |
| Stratum ID:      | 218575662         |                            |                  | Top Depth(m): | 6.1                                     |
| Bottom Depth(m): | 7.0               |                            |                  | Stratum Desc: | Grey Compact Sand Trace: Si             |
| Stratum ID:      | 218575663         |                            |                  | Top Depth(m): | 7.0                                     |
| Bottom Depth(m): | 7.5               |                            |                  | Stratum Desc: | Grey Very Dense Silt - Sand             |
| Stratum ID:      | 218575664         |                            |                  | Top Depth(m): | 7.5                                     |
| Bottom Depth(m): | 9.1               |                            |                  | Stratum Desc: | Grey Very Dense Sand With: Gr Trace: Si |

[59](#)

1 of 1

SW/230.7

64.9 / 3.25

Ottawa ON

WWIS

Well ID: 7191091  
 Construction Date:  
 Primary Water Use: Monitoring and Test Hole  
 Sec. Water Use: 0  
 Final Well Status: Observation Wells  
 Water Type:  
 Casing Material:  
 Audit No: Z156921  
 Tag: A135005  
 Construction Method:  
 Elevation (m):  
 Elevation Reliability:  
 Depth to Bedrock:  
 Well Depth:  
 Overburden/Bedrock:  
 Pump Rate:  
 Static Water Level:  
 Flowing (Y/N):  
 Flow Rate:  
 Clear/Cloudy:

Data Entry Status:  
 Data Src:  
 Date Received: 11/9/2012  
 Selected Flag: Yes  
 Abandonment Rec:  
 Contractor: 7241  
 Form Version: 7  
 Owner:  
 Street Name: 191 LEES AVE  
 County: OTTAWA-CARLETON  
 Municipality: OTTAWA CITY  
 Site Info:  
 Lot:  
 Concession:  
 Concession Name:  
 Easting NAD83:  
 Northing NAD83:  
 Zone:  
 UTM Reliability:

#### Bore Hole Information

Bore Hole ID: 1004200408  
 DP2BR:  
 Spatial Status:  
 Code OB:  
 Code OB Desc:  
 Open Hole:  
 Cluster Kind:  
 Date Completed: 25-SEP-12  
 Remarks:  
 Elevrc Desc:  
 Location Source Date:  
 Improvement Location Source:  
 Improvement Location Method:  
 Source Revision Comment:  
 Supplier Comment:

Elevation: 60.13  
 Elevrc:  
 Zone: 18  
 East83: 447591  
 Org CS: UTM83  
 North83: 5029485  
 UTMRC: 4  
 UTMRC Desc: margin of error : 30 m - 100 m  
 Location Method: wwr

#### Overburden and Bedrock Materials Interval

Formation ID: 1004490070  
 Layer: 2  
 Color: 6  
 General Color: BROWN  
 Mat1: 28  
 Most Common Material: SAND



| <b>Map Key</b>                                  | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Mat2:</b>                                    |                              | 01                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | FILL                               |                          |             |           |
| <b>Mat3:</b>                                    |                              | 85                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | SOFT                               |                          |             |           |
| <b>Formation Top Depth:</b>                     |                              | .31                                |                          |             |           |
| <b>Formation End Depth:</b>                     |                              | 2.44                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                 |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                            |                              | 1004490071                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                   |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                           |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                    |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                    |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                    |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                    |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                     |                              | 2.44                               |                          |             |           |
| <b>Formation End Depth:</b>                     |                              | 4.88                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                 |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                            |                              | 1004490069                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                   |                              | 8                                  |                          |             |           |
| <b>General Color:</b>                           |                              | BLACK                              |                          |             |           |
| <b>Mat1:</b>                                    |                              | 11                                 |                          |             |           |
| <b>Most Common Material:</b>                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat2:</b>                                    |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                         |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                    |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                     |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                     |                              | .31                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                 |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment</u></b>         |                              |                                    |                          |             |           |
| <b><u>Sealing Record</u></b>                    |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                 |                              | 1004490079                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                               |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                 |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                          |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                 |                              | 1004490080                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                               |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                 |                              | 3.1                                |                          |             |           |
| <b>Plug Depth UOM:</b>                          |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                 |                              | 1004490081                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                               |                              | 3.1                                |                          |             |           |
| <b>Plug To:</b>                                 |                              | 4.88                               |                          |             |           |
| <b>Plug Depth UOM:</b>                          |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well</u></b> |                              |                                    |                          |             |           |
| <b><u>Use</u></b>                               |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                  |                              | 1004490078                         |                          |             |           |
| <b>Method Construction Code:</b>                |                              | D                                  |                          |             |           |
| <b>Method Construction:</b>                     |                              | Direct Push                        |                          |             |           |
| <b>Other Method Construction:</b>               |                              |                                    |                          |             |           |

| Map Key                                    | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|--------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b><u>Pipe Information</u></b>             |                      |                            |                  |      |    |
| Pipe ID:                                   |                      | 1004490068                 |                  |      |    |
| Casing No:                                 |                      | 0                          |                  |      |    |
| Comment:                                   |                      |                            |                  |      |    |
| Alt Name:                                  |                      |                            |                  |      |    |
| <b><u>Construction Record - Casing</u></b> |                      |                            |                  |      |    |
| Casing ID:                                 |                      | 1004490074                 |                  |      |    |
| Layer:                                     |                      | 1                          |                  |      |    |
| Material:                                  |                      | 5                          |                  |      |    |
| Open Hole or Material:                     |                      | PLASTIC                    |                  |      |    |
| Depth From:                                |                      | 0                          |                  |      |    |
| Depth To:                                  |                      | 3.35                       |                  |      |    |
| Casing Diameter:                           |                      | 4.03                       |                  |      |    |
| Casing Diameter UOM:                       |                      | cm                         |                  |      |    |
| Casing Depth UOM:                          |                      | m                          |                  |      |    |
| <b><u>Construction Record - Screen</u></b> |                      |                            |                  |      |    |
| Screen ID:                                 |                      | 1004490075                 |                  |      |    |
| Layer:                                     |                      | 1                          |                  |      |    |
| Slot:                                      |                      | 10                         |                  |      |    |
| Screen Top Depth:                          |                      | 3.35                       |                  |      |    |
| Screen End Depth:                          |                      | 4.88                       |                  |      |    |
| Screen Material:                           |                      | 5                          |                  |      |    |
| Screen Depth UOM:                          |                      | m                          |                  |      |    |
| Screen Diameter UOM:                       |                      | cm                         |                  |      |    |
| Screen Diameter:                           |                      | 4.82                       |                  |      |    |
| <b><u>Water Details</u></b>                |                      |                            |                  |      |    |
| Water ID:                                  |                      | 1004490073                 |                  |      |    |
| Layer:                                     |                      |                            |                  |      |    |
| Kind Code:                                 |                      |                            |                  |      |    |
| Kind:                                      |                      |                            |                  |      |    |
| Water Found Depth:                         |                      |                            |                  |      |    |
| Water Found Depth UOM:                     |                      | m                          |                  |      |    |
| <b><u>Hole Diameter</u></b>                |                      |                            |                  |      |    |
| Hole ID:                                   |                      | 1004490072                 |                  |      |    |
| Diameter:                                  |                      | 8.25                       |                  |      |    |
| Depth From:                                |                      | 0                          |                  |      |    |
| Depth To:                                  |                      | 4.88                       |                  |      |    |
| Hole Depth UOM:                            |                      | m                          |                  |      |    |
| Hole Diameter UOM:                         |                      | cm                         |                  |      |    |

|                    |                          |         |             |                    |           |
|--------------------|--------------------------|---------|-------------|--------------------|-----------|
| <a href="#">60</a> | 1 of 1                   | W/232.4 | 66.9 / 5.22 | Ottawa ON          | WWIS      |
| Well ID:           | 7201661                  |         |             | Data Entry Status: |           |
| Construction Date: |                          |         |             | Data Src:          |           |
| Primary Water Use: | Monitoring and Test Hole |         |             | Date Received:     | 5/15/2013 |
| Sec. Water Use:    |                          |         |             | Selected Flag:     | Yes       |
| Final Well Status: | Abandoned-Other          |         |             | Abandonment Rec:   |           |
| Water Type:        |                          |         |             | Contractor:        | 7241      |
| Casing Material:   |                          |         |             | Form Version:      | 7         |
| Audit No:          | Z168577                  |         |             | Owner:             |           |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                  | Number of Records                                   | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                                                                                                                                                                                             | DB                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Tag:</b><br><b>Construction Method:</b><br><b>Elevation (m):</b><br><b>Elevation Reliability:</b><br><b>Depth to Bedrock:</b><br><b>Well Depth:</b><br><b>Overburden/Bedrock:</b><br><b>Pump Rate:</b><br><b>Static Water Level:</b><br><b>Flowing (Y/N):</b><br><b>Flow Rate:</b><br><b>Clear/Cloudy:</b>                                                                                            | A136982                                             |                            |                  | <b>Street Name:</b><br><b>County:</b><br><b>Municipality:</b><br><b>Site Info:</b><br><b>Lot:</b><br><b>Concession:</b><br><b>Concession Name:</b><br><b>Easting NAD83:</b><br><b>Northing NAD83:</b><br><b>Zone:</b><br><b>UTM Reliability:</b> | 1 ROBINSON AVE<br>OTTAWA-CARLETON<br>NEPEAN TOWNSHIP                                        |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                      |                                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Bore Hole ID:</b><br><b>DP2BR:</b><br><b>Spatial Status:</b><br><b>Code OB:</b><br><b>Code OB Desc:</b><br><b>Open Hole:</b><br><b>Cluster Kind:</b><br><b>Date Completed:</b><br><b>Remarks:</b><br><b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b> | 1004301575<br><br><br><br><br><br><br><br>15-APR-13 |                            |                  | <b>Elevation:</b><br><b>Elevrc:</b><br><b>Zone:</b><br><b>East83:</b><br><b>Org CS:</b><br><b>North83:</b><br><b>UTMRC:</b><br><b>UTMRC Desc:</b><br><b>Location Method:</b>                                                                     | 61.25<br><br>18<br>447546<br>UTM83<br>5029584<br>4<br>margin of error : 30 m - 100 m<br>wwr |
| <b><u>Annular Space/Abandonment</u></b>                                                                                                                                                                                                                                                                                                                                                                  |                                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Sealing Record</u></b>                                                                                                                                                                                                                                                                                                                                                                             |                                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Plug ID:</b><br><b>Layer:</b><br><b>Plug From:</b><br><b>Plug To:</b><br><b>Plug Depth UOM:</b>                                                                                                                                                                                                                                                                                                       | 1004843175<br>1<br>0<br><br>m                       |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Method of Construction &amp; Well Use</u></b>                                                                                                                                                                                                                                                                                                                                                      |                                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Method Construction ID:</b><br><b>Method Construction Code:</b><br><b>Method Construction:</b><br><b>Other Method Construction:</b>                                                                                                                                                                                                                                                                   | 1004843174<br>B<br>Other Method<br>HAND PULLED      |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Pipe Information</u></b>                                                                                                                                                                                                                                                                                                                                                                           |                                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Pipe ID:</b><br><b>Casing No:</b><br><b>Comment:</b><br><b>Alt Name:</b>                                                                                                                                                                                                                                                                                                                              | 1004843166<br>0                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b><u>Construction Record - Casing</u></b>                                                                                                                                                                                                                                                                                                                                                               |                                                     |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |
| <b>Casing ID:</b><br><b>Layer:</b><br><b>Material:</b><br><b>Open Hole or Material:</b><br><b>Depth From:</b>                                                                                                                                                                                                                                                                                            | 1004843170<br>1<br>5<br>PLASTIC<br>0                |                            |                  |                                                                                                                                                                                                                                                  |                                                                                             |

| Map Key                                 | Number of Records        | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB              |
|-----------------------------------------|--------------------------|----------------------------|------------------|--------------------|-----------------|
| <hr/>                                   |                          |                            |                  |                    |                 |
| Depth To:                               |                          | 2.74                       |                  |                    |                 |
| Casing Diameter:                        |                          | 5.2                        |                  |                    |                 |
| Casing Diameter UOM:                    |                          | cm                         |                  |                    |                 |
| Casing Depth UOM:                       |                          | m                          |                  |                    |                 |
| <br><u>Construction Record - Screen</u> |                          |                            |                  |                    |                 |
| Screen ID:                              |                          | 1004843171                 |                  |                    |                 |
| Layer:                                  |                          | 1                          |                  |                    |                 |
| Slot:                                   |                          | 10                         |                  |                    |                 |
| Screen Top Depth:                       |                          | 2.74                       |                  |                    |                 |
| Screen End Depth:                       |                          | 5.79                       |                  |                    |                 |
| Screen Material:                        |                          | 5                          |                  |                    |                 |
| Screen Depth UOM:                       |                          | m                          |                  |                    |                 |
| Screen Diameter UOM:                    |                          | cm                         |                  |                    |                 |
| Screen Diameter:                        |                          | 6.03                       |                  |                    |                 |
| <br><u>Water Details</u>                |                          |                            |                  |                    |                 |
| Water ID:                               |                          | 1004843169                 |                  |                    |                 |
| Layer:                                  |                          |                            |                  |                    |                 |
| Kind Code:                              |                          |                            |                  |                    |                 |
| Kind:                                   |                          |                            |                  |                    |                 |
| Water Found Depth:                      |                          |                            |                  |                    |                 |
| Water Found Depth UOM:                  |                          | m                          |                  |                    |                 |
| <br><u>Hole Diameter</u>                |                          |                            |                  |                    |                 |
| Hole ID:                                |                          | 1004843168                 |                  |                    |                 |
| Diameter:                               |                          | 6.03                       |                  |                    |                 |
| Depth From:                             |                          | 0                          |                  |                    |                 |
| Depth To:                               |                          | 5.79                       |                  |                    |                 |
| Hole Depth UOM:                         |                          | m                          |                  |                    |                 |
| Hole Diameter UOM:                      |                          | cm                         |                  |                    |                 |
| <hr/>                                   |                          |                            |                  |                    |                 |
| <a href="#">61</a>                      | 1 of 2                   | W/232.5                    | 66.9 / 5.22      | Ottawa ON          | WWIS            |
| Well ID:                                | 7201660                  |                            |                  | Data Entry Status: |                 |
| Construction Date:                      |                          |                            |                  | Data Src:          |                 |
| Primary Water Use:                      | Monitoring and Test Hole |                            |                  | Date Received:     | 5/15/2013       |
| Sec. Water Use:                         |                          |                            |                  | Selected Flag:     | Yes             |
| Final Well Status:                      | Abandoned-Other          |                            |                  | Abandonment Rec:   |                 |
| Water Type:                             |                          |                            |                  | Contractor:        | 7241            |
| Casing Material:                        |                          |                            |                  | Form Version:      | 7               |
| Audit No:                               | Z168579                  |                            |                  | Owner:             |                 |
| Tag:                                    | A136980                  |                            |                  | Street Name:       | 1 ROBINSON AVE  |
| Construction Method:                    |                          |                            |                  | County:            | OTTAWA-CARLETON |
| Elevation (m):                          |                          |                            |                  | Municipality:      | NEPEAN TOWNSHIP |
| Elevation Reliability:                  |                          |                            |                  | Site Info:         |                 |
| Depth to Bedrock:                       |                          |                            |                  | Lot:               |                 |
| Well Depth:                             |                          |                            |                  | Concession:        |                 |
| Overburden/Bedrock:                     |                          |                            |                  | Concession Name:   |                 |
| Pump Rate:                              |                          |                            |                  | Easting NAD83:     |                 |
| Static Water Level:                     |                          |                            |                  | Northing NAD83:    |                 |
| Flowing (Y/N):                          |                          |                            |                  | Zone:              |                 |
| Flow Rate:                              |                          |                            |                  | UTM Reliability:   |                 |
| Clear/Cloudy:                           |                          |                            |                  |                    |                 |
| <br><u>Bore Hole Information</u>        |                          |                            |                  |                    |                 |
| Bore Hole ID:                           | 1004301572               |                            |                  | Elevation:         | 61.25           |

| Map Key                                         | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                    | DB                             |
|-------------------------------------------------|----------------------|----------------------------|------------------|-------------------------|--------------------------------|
| <hr/>                                           |                      |                            |                  |                         |                                |
| <b>DP2BR:</b>                                   |                      |                            |                  | <b>Elevrc:</b>          |                                |
| <b>Spatial Status:</b>                          |                      |                            |                  | <b>Zone:</b>            | 18                             |
| <b>Code OB:</b>                                 |                      |                            |                  | <b>East83:</b>          | 447545                         |
| <b>Code OB Desc:</b>                            |                      |                            |                  | <b>Org CS:</b>          | UTM83                          |
| <b>Open Hole:</b>                               |                      |                            |                  | <b>North83:</b>         | 5029589                        |
| <b>Cluster Kind:</b>                            |                      |                            |                  | <b>UTMRC:</b>           | 4                              |
| <b>Date Completed:</b>                          | 12-APR-13            |                            |                  | <b>UTMRC Desc:</b>      | margin of error : 30 m - 100 m |
| <b>Remarks:</b>                                 |                      |                            |                  | <b>Location Method:</b> | wwr                            |
| <b>Elevrc Desc:</b>                             |                      |                            |                  |                         |                                |
| <b>Location Source Date:</b>                    |                      |                            |                  |                         |                                |
| <b>Improvement Location Source:</b>             |                      |                            |                  |                         |                                |
| <b>Improvement Location Method:</b>             |                      |                            |                  |                         |                                |
| <b>Source Revision Comment:</b>                 |                      |                            |                  |                         |                                |
| <b>Supplier Comment:</b>                        |                      |                            |                  |                         |                                |
| <br>                                            |                      |                            |                  |                         |                                |
| <b><u>Annular Space/Abandonment</u></b>         |                      |                            |                  |                         |                                |
| <b><u>Sealing Record</u></b>                    |                      |                            |                  |                         |                                |
| <b>Plug ID:</b>                                 |                      | 1004843163                 |                  |                         |                                |
| <b>Layer:</b>                                   |                      | 1                          |                  |                         |                                |
| <b>Plug From:</b>                               |                      | 0                          |                  |                         |                                |
| <b>Plug To:</b>                                 |                      | .31                        |                  |                         |                                |
| <b>Plug Depth UOM:</b>                          |                      | m                          |                  |                         |                                |
| <b>Plug ID:</b>                                 |                      | 1004843165                 |                  |                         |                                |
| <b>Layer:</b>                                   |                      | 3                          |                  |                         |                                |
| <b>Plug From:</b>                               |                      | 1.83                       |                  |                         |                                |
| <b>Plug To:</b>                                 |                      | 7.92                       |                  |                         |                                |
| <b>Plug Depth UOM:</b>                          |                      | m                          |                  |                         |                                |
| <b>Plug ID:</b>                                 |                      | 1004843164                 |                  |                         |                                |
| <b>Layer:</b>                                   |                      | 2                          |                  |                         |                                |
| <b>Plug From:</b>                               |                      | .31                        |                  |                         |                                |
| <b>Plug To:</b>                                 |                      | 1.83                       |                  |                         |                                |
| <b>Plug Depth UOM:</b>                          |                      | m                          |                  |                         |                                |
| <br>                                            |                      |                            |                  |                         |                                |
| <b><u>Method of Construction &amp; Well</u></b> |                      |                            |                  |                         |                                |
| <b><u>Use</u></b>                               |                      |                            |                  |                         |                                |
| <b>Method Construction ID:</b>                  |                      | 1004843162                 |                  |                         |                                |
| <b>Method Construction Code:</b>                |                      |                            |                  |                         |                                |
| <b>Method Construction:</b>                     |                      |                            |                  |                         |                                |
| <b>Other Method Construction:</b>               |                      |                            |                  |                         |                                |
| <br>                                            |                      |                            |                  |                         |                                |
| <b><u>Pipe Information</u></b>                  |                      |                            |                  |                         |                                |
| <b>Pipe ID:</b>                                 |                      | 1004843154                 |                  |                         |                                |
| <b>Casing No:</b>                               |                      | 0                          |                  |                         |                                |
| <b>Comment:</b>                                 |                      |                            |                  |                         |                                |
| <b>Alt Name:</b>                                |                      |                            |                  |                         |                                |
| <br>                                            |                      |                            |                  |                         |                                |
| <b><u>Construction Record - Casing</u></b>      |                      |                            |                  |                         |                                |
| <b>Casing ID:</b>                               |                      | 1004843158                 |                  |                         |                                |
| <b>Layer:</b>                                   |                      | 1                          |                  |                         |                                |
| <b>Material:</b>                                |                      | 5                          |                  |                         |                                |
| <b>Open Hole or Material:</b>                   |                      | PLASTIC                    |                  |                         |                                |
| <b>Depth From:</b>                              |                      | 0                          |                  |                         |                                |
| <b>Depth To:</b>                                |                      |                            |                  |                         |                                |
| <b>Casing Diameter:</b>                         |                      | 5.2                        |                  |                         |                                |
| <b>Casing Diameter UOM:</b>                     |                      | cm                         |                  |                         |                                |
| <b>Casing Depth UOM:</b>                        |                      | m                          |                  |                         |                                |

| Map Key                                    | Number of<br>Records     | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB              |
|--------------------------------------------|--------------------------|----------------------------|------------------|--------------------|-----------------|
| <b><u>Construction Record - Screen</u></b> |                          |                            |                  |                    |                 |
| Screen ID:                                 |                          | 1004843159                 |                  |                    |                 |
| Layer:                                     |                          | 1                          |                  |                    |                 |
| Slot:                                      |                          |                            |                  |                    |                 |
| Screen Top Depth:                          |                          |                            |                  |                    |                 |
| Screen End Depth:                          |                          |                            |                  |                    |                 |
| Screen Material:                           |                          |                            |                  |                    |                 |
| Screen Depth UOM:                          |                          | m                          |                  |                    |                 |
| Screen Diameter UOM:                       |                          | cm                         |                  |                    |                 |
| Screen Diameter:                           |                          | 6.03                       |                  |                    |                 |
| <b><u>Water Details</u></b>                |                          |                            |                  |                    |                 |
| Water ID:                                  |                          | 1004843157                 |                  |                    |                 |
| Layer:                                     |                          |                            |                  |                    |                 |
| Kind Code:                                 |                          |                            |                  |                    |                 |
| Kind:                                      |                          |                            |                  |                    |                 |
| Water Found Depth:                         |                          |                            |                  |                    |                 |
| Water Found Depth UOM:                     |                          | m                          |                  |                    |                 |
| <b><u>Hole Diameter</u></b>                |                          |                            |                  |                    |                 |
| Hole ID:                                   |                          | 1004843156                 |                  |                    |                 |
| Diameter:                                  |                          | 11.43                      |                  |                    |                 |
| Depth From:                                |                          | 0                          |                  |                    |                 |
| Depth To:                                  |                          | 1.83                       |                  |                    |                 |
| Hole Depth UOM:                            |                          | m                          |                  |                    |                 |
| Hole Diameter UOM:                         |                          | cm                         |                  |                    |                 |
| <hr/>                                      |                          |                            |                  |                    |                 |
| <a href="#">61</a>                         | 2 of 2                   | W/232.5                    | 66.9 / 5.22      | Ottawa ON          | WWIS            |
| Well ID:                                   | 7201662                  |                            |                  | Data Entry Status: |                 |
| Construction Date:                         |                          |                            |                  | Data Src:          |                 |
| Primary Water Use:                         | Monitoring and Test Hole |                            |                  | Date Received:     | 5/15/2013       |
| Sec. Water Use:                            |                          |                            |                  | Selected Flag:     | Yes             |
| Final Well Status:                         | Abandoned-Other          |                            |                  | Abandonment Rec:   |                 |
| Water Type:                                |                          |                            |                  | Contractor:        | 7241            |
| Casing Material:                           |                          |                            |                  | Form Version:      | 7               |
| Audit No:                                  | Z168578                  |                            |                  | Owner:             |                 |
| Tag:                                       | A136984                  |                            |                  | Street Name:       | 1 ROBINSON AVE  |
| Construction Method:                       |                          |                            |                  | County:            | OTTAWA-CARLETON |
| Elevation (m):                             |                          |                            |                  | Municipality:      | NEPEAN TOWNSHIP |
| Elevation Reliability:                     |                          |                            |                  | Site Info:         |                 |
| Depth to Bedrock:                          |                          |                            |                  | Lot:               |                 |
| Well Depth:                                |                          |                            |                  | Concession:        |                 |
| Overburden/Bedrock:                        |                          |                            |                  | Concession Name:   |                 |
| Pump Rate:                                 |                          |                            |                  | Easting NAD83:     |                 |
| Static Water Level:                        |                          |                            |                  | Northing NAD83:    |                 |
| Flowing (Y/N):                             |                          |                            |                  | Zone:              |                 |
| Flow Rate:                                 |                          |                            |                  | UTM Reliability:   |                 |
| Clear/Cloudy:                              |                          |                            |                  |                    |                 |
| <b><u>Bore Hole Information</u></b>        |                          |                            |                  |                    |                 |
| Bore Hole ID:                              | 1004301613               |                            |                  | Elevation:         | 61.25           |
| DP2BR:                                     |                          |                            |                  | Elevrc:            |                 |
| Spatial Status:                            |                          |                            |                  | Zone:              | 18              |
| Code OB:                                   |                          |                            |                  | East83:            | 447545          |
| Code OB Desc:                              |                          |                            |                  | Org CS:            | UTM83           |

| Map Key                                  | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site             | DB                             |
|------------------------------------------|----------------------|----------------------------|------------------|------------------|--------------------------------|
| <hr/>                                    |                      |                            |                  |                  |                                |
| Open Hole:                               |                      |                            |                  | North83:         | 5029589                        |
| Cluster Kind:                            |                      |                            |                  | UTMRC:           | 4                              |
| Date Completed:                          | 15-APR-13            |                            |                  | UTMRC Desc:      | margin of error : 30 m - 100 m |
| Remarks:                                 |                      |                            |                  | Location Method: | wwr                            |
| Elevrc Desc:                             |                      |                            |                  |                  |                                |
| Location Source Date:                    |                      |                            |                  |                  |                                |
| Improvement Location Source:             |                      |                            |                  |                  |                                |
| Improvement Location Method:             |                      |                            |                  |                  |                                |
| Source Revision Comment:                 |                      |                            |                  |                  |                                |
| Supplier Comment:                        |                      |                            |                  |                  |                                |
| <br>                                     |                      |                            |                  |                  |                                |
| <u>Annular Space/Abandonment</u>         |                      |                            |                  |                  |                                |
| <u>Sealing Record</u>                    |                      |                            |                  |                  |                                |
| Plug ID:                                 |                      | 1004843187                 |                  |                  |                                |
| Layer:                                   |                      | 2                          |                  |                  |                                |
| Plug From:                               |                      | 1.83                       |                  |                  |                                |
| Plug To:                                 |                      | 6.1                        |                  |                  |                                |
| Plug Depth UOM:                          |                      | m                          |                  |                  |                                |
| Plug ID:                                 |                      | 1004843186                 |                  |                  |                                |
| Layer:                                   |                      | 1                          |                  |                  |                                |
| Plug From:                               |                      | 0                          |                  |                  |                                |
| Plug To:                                 |                      | 1.83                       |                  |                  |                                |
| Plug Depth UOM:                          |                      | m                          |                  |                  |                                |
| <br>                                     |                      |                            |                  |                  |                                |
| <u>Method of Construction &amp; Well</u> |                      |                            |                  |                  |                                |
| <u>Use</u>                               |                      |                            |                  |                  |                                |
| Method Construction ID:                  |                      | 1004843185                 |                  |                  |                                |
| Method Construction Code:                |                      | 2                          |                  |                  |                                |
| Method Construction:                     |                      | Rotary (Convent.)          |                  |                  |                                |
| Other Method Construction:               |                      |                            |                  |                  |                                |
| <br>                                     |                      |                            |                  |                  |                                |
| <u>Pipe Information</u>                  |                      |                            |                  |                  |                                |
| Pipe ID:                                 |                      | 1004843176                 |                  |                  |                                |
| Casing No:                               |                      | 0                          |                  |                  |                                |
| Comment:                                 |                      |                            |                  |                  |                                |
| Alt Name:                                |                      |                            |                  |                  |                                |
| <br>                                     |                      |                            |                  |                  |                                |
| <u>Construction Record - Casing</u>      |                      |                            |                  |                  |                                |
| Casing ID:                               |                      | 1004843181                 |                  |                  |                                |
| Layer:                                   |                      | 1                          |                  |                  |                                |
| Material:                                |                      | 5                          |                  |                  |                                |
| Open Hole or Material:                   |                      | PLASTIC                    |                  |                  |                                |
| Depth From:                              |                      | 0                          |                  |                  |                                |
| Depth To:                                |                      |                            |                  |                  |                                |
| Casing Diameter:                         |                      | 5.2                        |                  |                  |                                |
| Casing Diameter UOM:                     |                      | cm                         |                  |                  |                                |
| Casing Depth UOM:                        |                      | m                          |                  |                  |                                |
| <br>                                     |                      |                            |                  |                  |                                |
| <u>Construction Record - Screen</u>      |                      |                            |                  |                  |                                |
| Screen ID:                               |                      | 1004843182                 |                  |                  |                                |
| Layer:                                   |                      | 1                          |                  |                  |                                |
| Slot:                                    |                      |                            |                  |                  |                                |
| Screen Top Depth:                        |                      |                            |                  |                  |                                |
| Screen End Depth:                        |                      |                            |                  |                  |                                |
| Screen Material:                         |                      | 5                          |                  |                  |                                |
| Screen Depth UOM:                        |                      | m                          |                  |                  |                                |



| Map Key                             | Number of Records | Direction/<br>Distance (m)     | Elev/Diff<br>(m) | Site      | DB   |
|-------------------------------------|-------------------|--------------------------------|------------------|-----------|------|
| Screen Diameter UOM:                |                   | cm                             |                  |           |      |
| Screen Diameter:                    |                   | 6.03                           |                  |           |      |
| <b><u>Water Details</u></b>         |                   |                                |                  |           |      |
| Water ID:                           |                   | 1004843180                     |                  |           |      |
| Layer:                              |                   |                                |                  |           |      |
| Kind Code:                          |                   |                                |                  |           |      |
| Kind:                               |                   |                                |                  |           |      |
| Water Found Depth:                  |                   |                                |                  |           |      |
| Water Found Depth UOM:              |                   | m                              |                  |           |      |
| <b><u>Hole Diameter</u></b>         |                   |                                |                  |           |      |
| Hole ID:                            |                   | 1004843179                     |                  |           |      |
| Diameter:                           |                   | 5.2                            |                  |           |      |
| Depth From:                         |                   | 1.83                           |                  |           |      |
| Depth To:                           |                   | 6.1                            |                  |           |      |
| Hole Depth UOM:                     |                   | m                              |                  |           |      |
| Hole Diameter UOM:                  |                   | cm                             |                  |           |      |
| Hole ID:                            |                   | 1004843178                     |                  |           |      |
| Diameter:                           |                   | 10.92                          |                  |           |      |
| Depth From:                         |                   | 0                              |                  |           |      |
| Depth To:                           |                   | 1.83                           |                  |           |      |
| Hole Depth UOM:                     |                   | m                              |                  |           |      |
| Hole Diameter UOM:                  |                   | cm                             |                  |           |      |
| <a href="#">62</a>                  | 1 of 1            | SSE/233.1                      | 61.9 / 0.22      | Ottawa ON | WWIS |
| Well ID:                            |                   | 7180694                        |                  |           |      |
| Construction Date:                  |                   |                                |                  |           |      |
| Primary Water Use:                  |                   | Monitoring and Test Hole       |                  |           |      |
| Sec. Water Use:                     |                   | 0                              |                  |           |      |
| Final Well Status:                  |                   | Abandoned-Other                |                  |           |      |
| Water Type:                         |                   |                                |                  |           |      |
| Casing Material:                    |                   |                                |                  |           |      |
| Audit No:                           |                   | Z146457                        |                  |           |      |
| Tag:                                |                   |                                |                  |           |      |
| Construction Method:                |                   |                                |                  |           |      |
| Elevation (m):                      |                   |                                |                  |           |      |
| Elevation Reliability:              |                   |                                |                  |           |      |
| Depth to Bedrock:                   |                   |                                |                  |           |      |
| Well Depth:                         |                   |                                |                  |           |      |
| Overburden/Bedrock:                 |                   |                                |                  |           |      |
| Pump Rate:                          |                   |                                |                  |           |      |
| Static Water Level:                 |                   |                                |                  |           |      |
| Flowing (Y/N):                      |                   |                                |                  |           |      |
| Flow Rate:                          |                   |                                |                  |           |      |
| Clear/Cloudy:                       |                   |                                |                  |           |      |
| Data Entry Status:                  |                   |                                |                  |           |      |
| Data Src:                           |                   |                                |                  |           |      |
| Date Received:                      |                   | 5/10/2012                      |                  |           |      |
| Selected Flag:                      |                   | Yes                            |                  |           |      |
| Abandonment Rec:                    |                   |                                |                  |           |      |
| Contractor:                         |                   | 7241                           |                  |           |      |
| Form Version:                       |                   | 7                              |                  |           |      |
| Owner:                              |                   |                                |                  |           |      |
| Street Name:                        |                   | 200 LEES AVE                   |                  |           |      |
| County:                             |                   | OTTAWA-CARLETON                |                  |           |      |
| Municipality:                       |                   | NEPEAN TOWNSHIP                |                  |           |      |
| Site Info:                          |                   |                                |                  |           |      |
| Lot:                                |                   |                                |                  |           |      |
| Concession:                         |                   |                                |                  |           |      |
| Concession Name:                    |                   |                                |                  |           |      |
| Easting NAD83:                      |                   |                                |                  |           |      |
| Northing NAD83:                     |                   |                                |                  |           |      |
| Zone:                               |                   |                                |                  |           |      |
| UTM Reliability:                    |                   |                                |                  |           |      |
| <b><u>Bore Hole Information</u></b> |                   |                                |                  |           |      |
| Bore Hole ID:                       |                   | 1003760653                     |                  |           |      |
| DP2BR:                              |                   |                                |                  |           |      |
| Spatial Status:                     |                   |                                |                  |           |      |
| Code OB:                            |                   |                                |                  |           |      |
| Code OB Desc:                       |                   |                                |                  |           |      |
| Open Hole:                          |                   |                                |                  |           |      |
| Cluster Kind:                       |                   |                                |                  |           |      |
| Date Completed:                     |                   | 24-FEB-12                      |                  |           |      |
| Elevation:                          |                   | 61.94                          |                  |           |      |
| Elevrc:                             |                   |                                |                  |           |      |
| Zone:                               |                   | 18                             |                  |           |      |
| East83:                             |                   | 447885                         |                  |           |      |
| Org CS:                             |                   | UTM83                          |                  |           |      |
| North83:                            |                   | 5029419                        |                  |           |      |
| UTMRC:                              |                   | 4                              |                  |           |      |
| UTMRC Desc:                         |                   | margin of error : 30 m - 100 m |                  |           |      |

| Map Key                                  | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m)     | Site | DB |
|------------------------------------------|----------------------|----------------------------|----------------------|------|----|
| Remarks:                                 |                      |                            | Location Method: WWR |      |    |
| Elevrc Desc:                             |                      |                            |                      |      |    |
| Location Source Date:                    |                      |                            |                      |      |    |
| Improvement Location Source:             |                      |                            |                      |      |    |
| Improvement Location Method:             |                      |                            |                      |      |    |
| Source Revision Comment:                 |                      |                            |                      |      |    |
| Supplier Comment:                        |                      |                            |                      |      |    |
| <u>Annular Space/Abandonment</u>         |                      |                            |                      |      |    |
| <u>Sealing Record</u>                    |                      |                            |                      |      |    |
| Plug ID:                                 |                      | 1004303978                 |                      |      |    |
| Layer:                                   |                      | 2                          |                      |      |    |
| Plug From:                               |                      | .31                        |                      |      |    |
| Plug To:                                 |                      | 8.5                        |                      |      |    |
| Plug Depth UOM:                          |                      | m                          |                      |      |    |
| Plug ID:                                 |                      | 1004303977                 |                      |      |    |
| Layer:                                   |                      | 1                          |                      |      |    |
| Plug From:                               |                      | 0                          |                      |      |    |
| Plug To:                                 |                      | .31                        |                      |      |    |
| Plug Depth UOM:                          |                      | m                          |                      |      |    |
| <u>Method of Construction &amp; Well</u> |                      |                            |                      |      |    |
| <u>Use</u>                               |                      |                            |                      |      |    |
| Method Construction ID:                  |                      | 1004303976                 |                      |      |    |
| Method Construction Code:                |                      | 6                          |                      |      |    |
| Method Construction:                     |                      | Boring                     |                      |      |    |
| Other Method Construction:               |                      |                            |                      |      |    |
| <u>Pipe Information</u>                  |                      |                            |                      |      |    |
| Pipe ID:                                 |                      | 1004303968                 |                      |      |    |
| Casing No:                               |                      | 0                          |                      |      |    |
| Comment:                                 |                      |                            |                      |      |    |
| Alt Name:                                |                      |                            |                      |      |    |
| <u>Construction Record - Casing</u>      |                      |                            |                      |      |    |
| Casing ID:                               |                      | 1004303972                 |                      |      |    |
| Layer:                                   |                      |                            |                      |      |    |
| Material:                                |                      |                            |                      |      |    |
| Open Hole or Material:                   |                      |                            |                      |      |    |
| Depth From:                              |                      |                            |                      |      |    |
| Depth To:                                |                      |                            |                      |      |    |
| Casing Diameter:                         |                      |                            |                      |      |    |
| Casing Diameter UOM:                     |                      | cm                         |                      |      |    |
| Casing Depth UOM:                        |                      | m                          |                      |      |    |
| <u>Construction Record - Screen</u>      |                      |                            |                      |      |    |
| Screen ID:                               |                      | 1004303973                 |                      |      |    |
| Layer:                                   |                      |                            |                      |      |    |
| Slot:                                    |                      |                            |                      |      |    |
| Screen Top Depth:                        |                      |                            |                      |      |    |
| Screen End Depth:                        |                      |                            |                      |      |    |
| Screen Material:                         |                      |                            |                      |      |    |
| Screen Depth UOM:                        |                      | m                          |                      |      |    |
| Screen Diameter UOM:                     |                      | cm                         |                      |      |    |
| Screen Diameter:                         |                      |                            |                      |      |    |

| Map Key                                 | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m)   | Site                      | DB                             |
|-----------------------------------------|-------------------|----------------------------|--------------------|---------------------------|--------------------------------|
| <b><u>Water Details</u></b>             |                   |                            |                    |                           |                                |
| Water ID:                               |                   | 1004303971                 |                    |                           |                                |
| Layer:                                  |                   |                            |                    |                           |                                |
| Kind Code:                              |                   |                            |                    |                           |                                |
| Kind:                                   |                   |                            |                    |                           |                                |
| Water Found Depth:                      |                   |                            |                    |                           |                                |
| Water Found Depth UOM:                  |                   | m                          |                    |                           |                                |
| <b><u>Hole Diameter</u></b>             |                   |                            |                    |                           |                                |
| Hole ID:                                |                   | 1004303970                 |                    |                           |                                |
| Diameter:                               |                   | 10.92                      |                    |                           |                                |
| Depth From:                             |                   | 0                          |                    |                           |                                |
| Depth To:                               |                   | 8.5                        |                    |                           |                                |
| Hole Depth UOM:                         |                   | m                          |                    |                           |                                |
| Hole Diameter UOM:                      |                   | cm                         |                    |                           |                                |
| <b><u>63</u></b>                        | <b>1 of 1</b>     | <b>SSW/237.2</b>           | <b>62.9 / 1.25</b> | <b>OTTAWA ON</b>          | <b>WWIS</b>                    |
| Well ID:                                | 7211119           |                            |                    | <b>Data Entry Status:</b> |                                |
| Construction Date:                      |                   |                            |                    | <b>Data Src:</b>          |                                |
| Primary Water Use:                      |                   |                            |                    | <b>Date Received:</b>     | 11/14/2013                     |
| Sec. Water Use:                         |                   |                            |                    | <b>Selected Flag:</b>     | Yes                            |
| Final Well Status:                      | Abandoned-Quality |                            |                    | <b>Abandonment Rec:</b>   | Yes                            |
| Water Type:                             |                   |                            |                    | <b>Contractor:</b>        | 6894                           |
| Casing Material:                        |                   |                            |                    | <b>Form Version:</b>      | 7                              |
| Audit No:                               | Z096864           |                            |                    | <b>Owner:</b>             |                                |
| Tag:                                    | A135013           |                            |                    | <b>Street Name:</b>       | 200 LEES AVE                   |
| Construction Method:                    |                   |                            |                    | <b>County:</b>            | OTTAWA-CARLETON                |
| Elevation (m):                          |                   |                            |                    | <b>Municipality:</b>      | NEPEAN TOWNSHIP                |
| Elevation Reliability:                  |                   |                            |                    | <b>Site Info:</b>         |                                |
| Depth to Bedrock:                       |                   |                            |                    | <b>Lot:</b>               |                                |
| Well Depth:                             |                   |                            |                    | <b>Concession:</b>        |                                |
| Overburden/Bedrock:                     |                   |                            |                    | <b>Concession Name:</b>   |                                |
| Pump Rate:                              |                   |                            |                    | <b>Easting NAD83:</b>     |                                |
| Static Water Level:                     |                   |                            |                    | <b>Northing NAD83:</b>    |                                |
| Flowing (Y/N):                          |                   |                            |                    | <b>Zone:</b>              |                                |
| Flow Rate:                              |                   |                            |                    | <b>UTM Reliability:</b>   |                                |
| Clear/Cloudy:                           |                   |                            |                    |                           |                                |
| <b><u>Bore Hole Information</u></b>     |                   |                            |                    |                           |                                |
| Bore Hole ID:                           | 1004633171        |                            |                    | <b>Elevation:</b>         | 62.06                          |
| DP2BR:                                  |                   |                            |                    | <b>Elevrc:</b>            |                                |
| Spatial Status:                         |                   |                            |                    | <b>Zone:</b>              | 18                             |
| Code OB:                                |                   |                            |                    | <b>East83:</b>            | 447695                         |
| Code OB Desc:                           |                   |                            |                    | <b>Org CS:</b>            | UTM83                          |
| Open Hole:                              |                   |                            |                    | <b>North83:</b>           | 5029401                        |
| Cluster Kind:                           |                   |                            |                    | <b>UTMRC:</b>             | 4                              |
| Date Completed:                         |                   |                            |                    | <b>UTMRC Desc:</b>        | margin of error : 30 m - 100 m |
| Remarks:                                |                   |                            |                    | <b>Location Method:</b>   | wwr                            |
| Elevrc Desc:                            |                   |                            |                    |                           |                                |
| Location Source Date:                   |                   |                            |                    |                           |                                |
| Improvement Location Source:            |                   |                            |                    |                           |                                |
| Improvement Location Method:            |                   |                            |                    |                           |                                |
| Source Revision Comment:                |                   |                            |                    |                           |                                |
| Supplier Comment:                       |                   |                            |                    |                           |                                |
| <b><u>Annular Space/Abandonment</u></b> |                   |                            |                    |                           |                                |
| <b><u>Sealing Record</u></b>            |                   |                            |                    |                           |                                |

| <b>Map Key</b>                                      | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-----------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug ID:</b>                                     |                              | 1004895896                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                     |                              | 30.9                               |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | ft                                 |                          |             |           |
| <b><u>Method of Construction &amp; Well Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                      |                              | 1004895895                         |                          |             |           |
| <b>Method Construction Code:</b>                    |                              |                                    |                          |             |           |
| <b>Method Construction:</b>                         |                              |                                    |                          |             |           |
| <b>Other Method Construction:</b>                   |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                      |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                     |                              | 1004895889                         |                          |             |           |
| <b>Casing No:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                     |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                    |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>          |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                   |                              | 1004895893                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                       |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                  |                              |                                    |                          |             |           |
| <b>Depth To:</b>                                    |                              |                                    |                          |             |           |
| <b>Casing Diameter:</b>                             |                              | 2                                  |                          |             |           |
| <b>Casing Diameter UOM:</b>                         |                              | inch                               |                          |             |           |
| <b>Casing Depth UOM:</b>                            |                              | ft                                 |                          |             |           |
| <b><u>Construction Record - Screen</u></b>          |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                   |                              | 1004895894                         |                          |             |           |
| <b>Layer:</b>                                       |                              |                                    |                          |             |           |
| <b>Slot:</b>                                        |                              |                                    |                          |             |           |
| <b>Screen Top Depth:</b>                            |                              |                                    |                          |             |           |
| <b>Screen End Depth:</b>                            |                              |                                    |                          |             |           |
| <b>Screen Material:</b>                             |                              |                                    |                          |             |           |
| <b>Screen Depth UOM:</b>                            |                              | ft                                 |                          |             |           |
| <b>Screen Diameter UOM:</b>                         |                              | inch                               |                          |             |           |
| <b>Screen Diameter:</b>                             |                              |                                    |                          |             |           |
| <b><u>Water Details</u></b>                         |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                    |                              | 1004895892                         |                          |             |           |
| <b>Layer:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                   |                              |                                    |                          |             |           |
| <b>Kind:</b>                                        |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                           |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                       |                              | ft                                 |                          |             |           |
| <b><u>Hole Diameter</u></b>                         |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                     |                              | 1004895891                         |                          |             |           |
| <b>Diameter:</b>                                    |                              |                                    |                          |             |           |
| <b>Depth From:</b>                                  |                              |                                    |                          |             |           |
| <b>Depth To:</b>                                    |                              |                                    |                          |             |           |

| Map Key                             | Number of Records | Direction/<br>Distance (m)            | Elev/Diff<br>(m) | Site                  | DB                                                                  |
|-------------------------------------|-------------------|---------------------------------------|------------------|-----------------------|---------------------------------------------------------------------|
| Hole Depth UOM:                     |                   | ft                                    |                  |                       |                                                                     |
| Hole Diameter UOM:                  |                   | inch                                  |                  |                       |                                                                     |
| <a href="#">64</a>                  | 1 of 1            | SW/239.2                              | 64.9 / 3.25      | ON                    | BORE                                                                |
| Borehole ID:                        |                   | 803260                                |                  | Type:                 | Borehole                                                            |
| Use:                                |                   | Geotechnical/Geological Investigation |                  | Status::              |                                                                     |
| Drill Method::                      |                   | Hollow stem auger                     |                  | UTM Zone::            | 18                                                                  |
| Easting::                           |                   | 447580.92                             |                  | Northing::            | 5029484.24                                                          |
| Location Accuracy::                 |                   |                                       |                  | Orig. Ground Elev m:: | 59.7                                                                |
| Elev. Reliability Note::            |                   |                                       |                  | DEM Ground Elev m::   | 60.2                                                                |
| Total Depth m::                     |                   | 5.6                                   |                  | Primary Name::        | BH.86-11                                                            |
| Township::                          |                   |                                       |                  | Concession::          |                                                                     |
| Lot::                               |                   |                                       |                  | Municipality:         |                                                                     |
| Completion Date::                   |                   | 10-MAY-1986                           |                  | Static Water Level::  | 4.8                                                                 |
| Primary Water Use::                 |                   |                                       |                  | Sec. Water Use::      |                                                                     |
| <b>--Details--</b>                  |                   |                                       |                  |                       |                                                                     |
| Stratum ID:                         |                   | 218575629                             |                  | Top Depth(m):         | 0.2                                                                 |
| Bottom Depth(m):                    |                   | 3.8                                   |                  | Stratum Desc:         | Fill-Misc Sand With: Gr W Cob                                       |
| Stratum ID:                         |                   | 218575630                             |                  | Top Depth(m):         | 3.8                                                                 |
| Bottom Depth(m):                    |                   | 5.6                                   |                  | Stratum Desc:         | Grey Loose to Compact Fill-Misc Silty Clay With: Sa W Constr Debris |
| Stratum ID:                         |                   | 218575627                             |                  | Top Depth(m):         | 0.0                                                                 |
| Bottom Depth(m):                    |                   | 0.1                                   |                  | Stratum Desc:         | Asphalt                                                             |
| Stratum ID:                         |                   | 218575628                             |                  | Top Depth(m):         | 0.1                                                                 |
| Bottom Depth(m):                    |                   | 0.2                                   |                  | Stratum Desc:         | Crushed Stone                                                       |
| <a href="#">65</a>                  | 1 of 1            | WSW/242.1                             | 66.6 / 4.92      | Ottawa ON             | WWIS                                                                |
| Well ID:                            |                   | 7182966                               |                  | Data Entry Status:    |                                                                     |
| Construction Date:                  |                   |                                       |                  | Data Src:             |                                                                     |
| Primary Water Use:                  |                   |                                       |                  | Date Received:        | 6/19/2012                                                           |
| Sec. Water Use:                     |                   | Test Hole                             |                  | Selected Flag:        | Yes                                                                 |
| Final Well Status:                  |                   | Abandoned-Other                       |                  | Abandonment Rec:      |                                                                     |
| Water Type:                         |                   |                                       |                  | Contractor:           | 6964                                                                |
| Casing Material:                    |                   |                                       |                  | Form Version:         | 7                                                                   |
| Audit No:                           |                   | Z134687                               |                  | Owner:                |                                                                     |
| Tag:                                |                   |                                       |                  | Street Name:          | 1 ROBINSON AVE                                                      |
| Construction Method:                |                   |                                       |                  | County:               |                                                                     |
| Elevation (m):                      |                   |                                       |                  | Municipality:         |                                                                     |
| Elevation Reliability:              |                   |                                       |                  | Site Info:            |                                                                     |
| Depth to Bedrock:                   |                   |                                       |                  | Lot:                  |                                                                     |
| Well Depth:                         |                   |                                       |                  | Concession:           |                                                                     |
| Overburden/Bedrock:                 |                   |                                       |                  | Concession Name:      |                                                                     |
| Pump Rate:                          |                   |                                       |                  | Easting NAD83:        |                                                                     |
| Static Water Level:                 |                   |                                       |                  | Northing NAD83:       |                                                                     |
| Flowing (Y/N):                      |                   |                                       |                  | Zone:                 |                                                                     |
| Flow Rate:                          |                   |                                       |                  | UTM Reliability:      |                                                                     |
| Clear/Cloudy:                       |                   |                                       |                  |                       |                                                                     |
| <b><u>Bore Hole Information</u></b> |                   |                                       |                  |                       |                                                                     |
| Bore Hole ID:                       |                   | 1003941785                            |                  | Elevation:            |                                                                     |
| DP2BR:                              |                   |                                       |                  | Elevrc:               |                                                                     |
| Spatial Status:                     |                   |                                       |                  | Zone:                 |                                                                     |
| Code OB:                            |                   |                                       |                  | East83:               |                                                                     |

| Map Key                                                                                                                                                                                                                                                                                                                      | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                                                                                                  | DB    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------|-------|
| <b>Code OB Desc:</b><br><b>Open Hole:</b><br><b>Cluster Kind:</b><br><b>Date Completed:</b> 11-APR-12<br><b>Remarks:</b><br><b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b> |                      |                            |                  | <b>Org CS:</b><br><b>North83:</b><br><b>UTMRC:</b> 9<br><b>UTMRC Desc:</b> unknown UTM<br><b>Location Method:</b> wwr | UTM83 |
| <b><u>Overburden and Bedrock</u></b>                                                                                                                                                                                                                                                                                         |                      |                            |                  |                                                                                                                       |       |
| <b><u>Materials Interval</u></b>                                                                                                                                                                                                                                                                                             |                      |                            |                  |                                                                                                                       |       |
| <b>Formation ID:</b>                                                                                                                                                                                                                                                                                                         |                      | 1004376329                 |                  |                                                                                                                       |       |
| <b>Layer:</b>                                                                                                                                                                                                                                                                                                                |                      | 2                          |                  |                                                                                                                       |       |
| <b>Color:</b>                                                                                                                                                                                                                                                                                                                |                      | 8                          |                  |                                                                                                                       |       |
| <b>General Color:</b>                                                                                                                                                                                                                                                                                                        |                      | BLACK                      |                  |                                                                                                                       |       |
| <b>Mat1:</b>                                                                                                                                                                                                                                                                                                                 |                      | 04                         |                  |                                                                                                                       |       |
| <b>Most Common Material:</b>                                                                                                                                                                                                                                                                                                 |                      | PEAT                       |                  |                                                                                                                       |       |
| <b>Mat2:</b>                                                                                                                                                                                                                                                                                                                 |                      |                            |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      |                            |                  |                                                                                                                       |       |
| <b>Mat3:</b>                                                                                                                                                                                                                                                                                                                 |                      |                            |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      |                            |                  |                                                                                                                       |       |
| <b>Formation Top Depth:</b>                                                                                                                                                                                                                                                                                                  |                      | 2.4                        |                  |                                                                                                                       |       |
| <b>Formation End Depth:</b>                                                                                                                                                                                                                                                                                                  |                      | 2.7                        |                  |                                                                                                                       |       |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                                                                                                                                              |                      | m                          |                  |                                                                                                                       |       |
| <b>Formation ID:</b>                                                                                                                                                                                                                                                                                                         |                      | 1004376331                 |                  |                                                                                                                       |       |
| <b>Layer:</b>                                                                                                                                                                                                                                                                                                                |                      | 4                          |                  |                                                                                                                       |       |
| <b>Color:</b>                                                                                                                                                                                                                                                                                                                |                      | 8                          |                  |                                                                                                                       |       |
| <b>General Color:</b>                                                                                                                                                                                                                                                                                                        |                      | BLACK                      |                  |                                                                                                                       |       |
| <b>Mat1:</b>                                                                                                                                                                                                                                                                                                                 |                      | 06                         |                  |                                                                                                                       |       |
| <b>Most Common Material:</b>                                                                                                                                                                                                                                                                                                 |                      | SILT                       |                  |                                                                                                                       |       |
| <b>Mat2:</b>                                                                                                                                                                                                                                                                                                                 |                      | 34                         |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      | TILL                       |                  |                                                                                                                       |       |
| <b>Mat3:</b>                                                                                                                                                                                                                                                                                                                 |                      | 11                         |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      | GRAVEL                     |                  |                                                                                                                       |       |
| <b>Formation Top Depth:</b>                                                                                                                                                                                                                                                                                                  |                      | 3.3                        |                  |                                                                                                                       |       |
| <b>Formation End Depth:</b>                                                                                                                                                                                                                                                                                                  |                      | 4.2                        |                  |                                                                                                                       |       |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                                                                                                                                              |                      | m                          |                  |                                                                                                                       |       |
| <b>Formation ID:</b>                                                                                                                                                                                                                                                                                                         |                      | 1004376333                 |                  |                                                                                                                       |       |
| <b>Layer:</b>                                                                                                                                                                                                                                                                                                                |                      | 6                          |                  |                                                                                                                       |       |
| <b>Color:</b>                                                                                                                                                                                                                                                                                                                |                      | 2                          |                  |                                                                                                                       |       |
| <b>General Color:</b>                                                                                                                                                                                                                                                                                                        |                      | GREY                       |                  |                                                                                                                       |       |
| <b>Mat1:</b>                                                                                                                                                                                                                                                                                                                 |                      | 28                         |                  |                                                                                                                       |       |
| <b>Most Common Material:</b>                                                                                                                                                                                                                                                                                                 |                      | SAND                       |                  |                                                                                                                       |       |
| <b>Mat2:</b>                                                                                                                                                                                                                                                                                                                 |                      | 84                         |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      | SILTY                      |                  |                                                                                                                       |       |
| <b>Mat3:</b>                                                                                                                                                                                                                                                                                                                 |                      |                            |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      |                            |                  |                                                                                                                       |       |
| <b>Formation Top Depth:</b>                                                                                                                                                                                                                                                                                                  |                      | 7                          |                  |                                                                                                                       |       |
| <b>Formation End Depth:</b>                                                                                                                                                                                                                                                                                                  |                      | 7.3                        |                  |                                                                                                                       |       |
| <b>Formation End Depth UOM:</b>                                                                                                                                                                                                                                                                                              |                      | m                          |                  |                                                                                                                       |       |
| <b>Formation ID:</b>                                                                                                                                                                                                                                                                                                         |                      | 1004376332                 |                  |                                                                                                                       |       |
| <b>Layer:</b>                                                                                                                                                                                                                                                                                                                |                      | 5                          |                  |                                                                                                                       |       |
| <b>Color:</b>                                                                                                                                                                                                                                                                                                                |                      | 2                          |                  |                                                                                                                       |       |
| <b>General Color:</b>                                                                                                                                                                                                                                                                                                        |                      | GREY                       |                  |                                                                                                                       |       |
| <b>Mat1:</b>                                                                                                                                                                                                                                                                                                                 |                      | 28                         |                  |                                                                                                                       |       |
| <b>Most Common Material:</b>                                                                                                                                                                                                                                                                                                 |                      | SAND                       |                  |                                                                                                                       |       |
| <b>Mat2:</b>                                                                                                                                                                                                                                                                                                                 |                      | 11                         |                  |                                                                                                                       |       |
| <b>Other Materials:</b>                                                                                                                                                                                                                                                                                                      |                      | GRAVEL                     |                  |                                                                                                                       |       |

| <b>Map Key</b>                                  | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Mat3:</b>                                    |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                         |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                     |                              | 4.2                                |                          |             |           |
| <b>Formation End Depth:</b>                     |                              | 7                                  |                          |             |           |
| <b>Formation End Depth UOM:</b>                 |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                            |                              | 1004376330                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                   |                              |                                    |                          |             |           |
| <b>General Color:</b>                           |                              |                                    |                          |             |           |
| <b>Mat1:</b>                                    |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                    |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                    |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                    |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                         |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                     |                              | 2.7                                |                          |             |           |
| <b>Formation End Depth:</b>                     |                              | 3.3                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                 |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                            |                              | 1004376328                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                   |                              |                                    |                          |             |           |
| <b>General Color:</b>                           |                              |                                    |                          |             |           |
| <b>Mat1:</b>                                    |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                    |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                    |                              | 01                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | FILL                               |                          |             |           |
| <b>Mat3:</b>                                    |                              | 28                                 |                          |             |           |
| <b>Other Materials:</b>                         |                              | SAND                               |                          |             |           |
| <b>Formation Top Depth:</b>                     |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                     |                              | 2.4                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                 |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment</u></b>         |                              |                                    |                          |             |           |
| <b><u>Sealing Record</u></b>                    |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                 |                              | 1004376340                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                               |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                 |                              | .6                                 |                          |             |           |
| <b>Plug Depth UOM:</b>                          |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                 |                              | 1004376341                         |                          |             |           |
| <b>Layer:</b>                                   |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                               |                              | .6                                 |                          |             |           |
| <b>Plug To:</b>                                 |                              | 7.3                                |                          |             |           |
| <b>Plug Depth UOM:</b>                          |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well</u></b> |                              |                                    |                          |             |           |
| <b><u>Use</u></b>                               |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                  |                              | 1004376339                         |                          |             |           |
| <b>Method Construction Code:</b>                |                              |                                    |                          |             |           |
| <b>Method Construction:</b>                     |                              |                                    |                          |             |           |
| <b>Other Method Construction:</b>               |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                  |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                 |                              | 1004376327                         |                          |             |           |
| <b>Casing No:</b>                               |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                 |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                |                              |                                    |                          |             |           |



| Map Key                                    | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|--------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b><u>Construction Record - Casing</u></b> |                      |                            |                  |      |    |
| Casing ID:                                 |                      | 1004376336                 |                  |      |    |
| Layer:                                     |                      | 1                          |                  |      |    |
| Material:                                  |                      | 5                          |                  |      |    |
| Open Hole or Material:                     |                      | PLASTIC                    |                  |      |    |
| Depth From:                                |                      | 0                          |                  |      |    |
| Depth To:                                  |                      | 4.4                        |                  |      |    |
| Casing Diameter:                           |                      | 5.2                        |                  |      |    |
| Casing Diameter UOM:                       |                      | cm                         |                  |      |    |
| Casing Depth UOM:                          |                      | m                          |                  |      |    |
| <b><u>Construction Record - Screen</u></b> |                      |                            |                  |      |    |
| Screen ID:                                 |                      | 1004376337                 |                  |      |    |
| Layer:                                     |                      | 1                          |                  |      |    |
| Slot:                                      |                      | 10                         |                  |      |    |
| Screen Top Depth:                          |                      | 4.4                        |                  |      |    |
| Screen End Depth:                          |                      | 7.3                        |                  |      |    |
| Screen Material:                           |                      | 5                          |                  |      |    |
| Screen Depth UOM:                          |                      | m                          |                  |      |    |
| Screen Diameter UOM:                       |                      | cm                         |                  |      |    |
| Screen Diameter:                           |                      | 6                          |                  |      |    |
| <b><u>Water Details</u></b>                |                      |                            |                  |      |    |
| Water ID:                                  |                      | 1004376335                 |                  |      |    |
| Layer:                                     |                      | 1                          |                  |      |    |
| Kind Code:                                 |                      |                            |                  |      |    |
| Kind:                                      |                      |                            |                  |      |    |
| Water Found Depth:                         |                      | 5.8                        |                  |      |    |
| Water Found Depth UOM:                     |                      | m                          |                  |      |    |
| <b><u>Hole Diameter</u></b>                |                      |                            |                  |      |    |
| Hole ID:                                   |                      | 1004376334                 |                  |      |    |
| Diameter:                                  |                      |                            |                  |      |    |
| Depth From:                                |                      |                            |                  |      |    |
| Depth To:                                  |                      |                            |                  |      |    |
| Hole Depth UOM:                            |                      | m                          |                  |      |    |
| Hole Diameter UOM:                         |                      | cm                         |                  |      |    |

|                        |                          |                  |                    |                           |                 |
|------------------------|--------------------------|------------------|--------------------|---------------------------|-----------------|
| <b>66</b>              | <b>1 of 1</b>            | <b>WSW/246.0</b> | <b>65.9 / 4.27</b> | <b>Ottawa ON</b>          | <b>WWIS</b>     |
| Well ID:               | 7201658                  |                  |                    | <b>Data Entry Status:</b> |                 |
| Construction Date:     |                          |                  |                    | <b>Data Src:</b>          |                 |
| Primary Water Use:     | Monitoring and Test Hole |                  |                    | <b>Date Received:</b>     | 5/15/2013       |
| Sec. Water Use:        |                          |                  |                    | <b>Selected Flag:</b>     | Yes             |
| Final Well Status:     | Test Hole                |                  |                    | <b>Abandonment Rec:</b>   |                 |
| Water Type:            |                          |                  |                    | <b>Contractor:</b>        | 7241            |
| Casing Material:       |                          |                  |                    | <b>Form Version:</b>      | 7               |
| Audit No:              | Z168581                  |                  |                    | <b>Owner:</b>             |                 |
| Tag:                   | A145284                  |                  |                    | <b>Street Name:</b>       | 1 ROBINSON AVE  |
| Construction Method:   |                          |                  |                    | <b>County:</b>            | OTTAWA-CARLETON |
| Elevation (m):         |                          |                  |                    | <b>Municipality:</b>      | OTTAWA CITY     |
| Elevation Reliability: |                          |                  |                    | <b>Site Info:</b>         |                 |
| Depth to Bedrock:      |                          |                  |                    | <b>Lot:</b>               |                 |
| Well Depth:            |                          |                  |                    | <b>Concession:</b>        |                 |
| Overburden/Bedrock:    |                          |                  |                    | <b>Concession Name:</b>   |                 |
| Pump Rate:             |                          |                  |                    | <b>Easting NAD83:</b>     |                 |

| Map Key                                                              | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                                         | DB                             |
|----------------------------------------------------------------------|----------------------|----------------------------|------------------|----------------------------------------------|--------------------------------|
| Static Water Level:<br>Flowing (Y/N):<br>Flow Rate:<br>Clear/Cloudy: |                      |                            |                  | Northing NAD83:<br>Zone:<br>UTM Reliability: |                                |
| <b><u>Bore Hole Information</u></b>                                  |                      |                            |                  |                                              |                                |
| Bore Hole ID:                                                        | 1004301550           |                            |                  | Elevation:                                   | 60.66                          |
| DP2BR:                                                               |                      |                            |                  | Elevrc:                                      |                                |
| Spatial Status:                                                      |                      |                            |                  | Zone:                                        | 18                             |
| Code OB:                                                             |                      |                            |                  | East83:                                      | 447546                         |
| Code OB Desc:                                                        |                      |                            |                  | Org CS:                                      | UTM83                          |
| Open Hole:                                                           |                      |                            |                  | North83:                                     | 5029534                        |
| Cluster Kind:                                                        |                      |                            |                  | UTMRC:                                       | 4                              |
| Date Completed:                                                      | 12-APR-13            |                            |                  | UTMRC Desc:                                  | margin of error : 30 m - 100 m |
| Remarks:                                                             |                      |                            |                  | Location Method:                             | wwr                            |
| Elevrc Desc:                                                         |                      |                            |                  |                                              |                                |
| Location Source Date:                                                |                      |                            |                  |                                              |                                |
| Improvement Location Source:                                         |                      |                            |                  |                                              |                                |
| Improvement Location Method:                                         |                      |                            |                  |                                              |                                |
| Source Revision Comment:                                             |                      |                            |                  |                                              |                                |
| Supplier Comment:                                                    |                      |                            |                  |                                              |                                |
| <b><u>Overburden and Bedrock</u></b>                                 |                      |                            |                  |                                              |                                |
| <b><u>Materials Interval</u></b>                                     |                      |                            |                  |                                              |                                |
| Formation ID:                                                        | 1004843128           |                            |                  |                                              |                                |
| Layer:                                                               | 2                    |                            |                  |                                              |                                |
| Color:                                                               | 6                    |                            |                  |                                              |                                |
| General Color:                                                       | BROWN                |                            |                  |                                              |                                |
| Mat1:                                                                | 10                   |                            |                  |                                              |                                |
| Most Common Material:                                                | COARSE SAND          |                            |                  |                                              |                                |
| Mat2:                                                                |                      |                            |                  |                                              |                                |
| Other Materials:                                                     |                      |                            |                  |                                              |                                |
| Mat3:                                                                |                      |                            |                  |                                              |                                |
| Other Materials:                                                     |                      |                            |                  |                                              |                                |
| Formation Top Depth:                                                 | 1.22                 |                            |                  |                                              |                                |
| Formation End Depth:                                                 | 3.1                  |                            |                  |                                              |                                |
| Formation End Depth UOM:                                             | m                    |                            |                  |                                              |                                |
| Formation ID:                                                        | 1004843129           |                            |                  |                                              |                                |
| Layer:                                                               | 3                    |                            |                  |                                              |                                |
| Color:                                                               | 6                    |                            |                  |                                              |                                |
| General Color:                                                       | BROWN                |                            |                  |                                              |                                |
| Mat1:                                                                | 08                   |                            |                  |                                              |                                |
| Most Common Material:                                                | FINE SAND            |                            |                  |                                              |                                |
| Mat2:                                                                |                      |                            |                  |                                              |                                |
| Other Materials:                                                     |                      |                            |                  |                                              |                                |
| Mat3:                                                                |                      |                            |                  |                                              |                                |
| Other Materials:                                                     |                      |                            |                  |                                              |                                |
| Formation Top Depth:                                                 | 3.1                  |                            |                  |                                              |                                |
| Formation End Depth:                                                 | 3.66                 |                            |                  |                                              |                                |
| Formation End Depth UOM:                                             | m                    |                            |                  |                                              |                                |
| Formation ID:                                                        | 1004843131           |                            |                  |                                              |                                |
| Layer:                                                               | 5                    |                            |                  |                                              |                                |
| Color:                                                               | 6                    |                            |                  |                                              |                                |
| General Color:                                                       | BROWN                |                            |                  |                                              |                                |
| Mat1:                                                                | 34                   |                            |                  |                                              |                                |
| Most Common Material:                                                | TILL                 |                            |                  |                                              |                                |
| Mat2:                                                                |                      |                            |                  |                                              |                                |
| Other Materials:                                                     |                      |                            |                  |                                              |                                |
| Mat3:                                                                | 73                   |                            |                  |                                              |                                |
| Other Materials:                                                     | HARD                 |                            |                  |                                              |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Formation Top Depth:</b>                                |                              | 6.71                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 7.62                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004843127                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LOOSE                              |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 1.22                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004843130                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 4                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 08                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | FINE SAND                          |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.66                               |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.71                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843139                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                            |                              | 4.27                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004843140                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 4.27                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 7.62                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                             |                              | 1004843138                         |                          |             |           |
| <b>Method Construction Code:</b>                           |                              | 6                                  |                          |             |           |
| <b>Method Construction:</b>                                |                              | Boring                             |                          |             |           |
| <b>Other Method Construction:</b>                          |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                            |                              | 1004843126                         |                          |             |           |
| <b>Casing No:</b>                                          |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                            |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                           |                              |                                    |                          |             |           |

| Map Key                                    | Number of<br>Records     | Direction/<br>Distance (m) | Elev/Diff<br>(m)   | Site                      | DB              |
|--------------------------------------------|--------------------------|----------------------------|--------------------|---------------------------|-----------------|
| <b><u>Construction Record - Casing</u></b> |                          |                            |                    |                           |                 |
| Casing ID:                                 |                          | 1004843134                 |                    |                           |                 |
| Layer:                                     |                          | 1                          |                    |                           |                 |
| Material:                                  |                          | 5                          |                    |                           |                 |
| Open Hole or Material:                     |                          | PLASTIC                    |                    |                           |                 |
| Depth From:                                |                          | 0                          |                    |                           |                 |
| Depth To:                                  |                          | 4.57                       |                    |                           |                 |
| Casing Diameter:                           |                          | 5.2                        |                    |                           |                 |
| Casing Diameter UOM:                       |                          | cm                         |                    |                           |                 |
| Casing Depth UOM:                          |                          | m                          |                    |                           |                 |
| <b><u>Construction Record - Screen</u></b> |                          |                            |                    |                           |                 |
| Screen ID:                                 |                          | 1004843135                 |                    |                           |                 |
| Layer:                                     |                          | 1                          |                    |                           |                 |
| Slot:                                      |                          | 10                         |                    |                           |                 |
| Screen Top Depth:                          |                          | 4.57                       |                    |                           |                 |
| Screen End Depth:                          |                          | 7.62                       |                    |                           |                 |
| Screen Material:                           |                          | 5                          |                    |                           |                 |
| Screen Depth UOM:                          |                          | m                          |                    |                           |                 |
| Screen Diameter UOM:                       |                          | cm                         |                    |                           |                 |
| Screen Diameter:                           |                          | 6.03                       |                    |                           |                 |
| <b><u>Water Details</u></b>                |                          |                            |                    |                           |                 |
| Water ID:                                  |                          | 1004843133                 |                    |                           |                 |
| Layer:                                     |                          |                            |                    |                           |                 |
| Kind Code:                                 |                          |                            |                    |                           |                 |
| Kind:                                      |                          |                            |                    |                           |                 |
| Water Found Depth:                         |                          |                            |                    |                           |                 |
| Water Found Depth UOM:                     |                          | m                          |                    |                           |                 |
| <b><u>Hole Diameter</u></b>                |                          |                            |                    |                           |                 |
| Hole ID:                                   |                          | 1004843132                 |                    |                           |                 |
| Diameter:                                  |                          | 10.92                      |                    |                           |                 |
| Depth From:                                |                          | 0                          |                    |                           |                 |
| Depth To:                                  |                          | 7.62                       |                    |                           |                 |
| Hole Depth UOM:                            |                          | m                          |                    |                           |                 |
| Hole Diameter UOM:                         |                          | cm                         |                    |                           |                 |
| <b><u>67</u></b>                           | <b>1 of 3</b>            | <b>SSE/247.0</b>           | <b>61.9 / 0.22</b> | <b>Ottawa ON</b>          | <b>WWIS</b>     |
| Well ID:                                   | 7180695                  |                            |                    | <b>Data Entry Status:</b> |                 |
| Construction Date:                         |                          |                            |                    | <b>Data Src:</b>          |                 |
| Primary Water Use:                         | Monitoring and Test Hole |                            |                    | <b>Date Received:</b>     | 5/10/2012       |
| Sec. Water Use:                            | 0                        |                            |                    | <b>Selected Flag:</b>     | Yes             |
| Final Well Status:                         | Abandoned-Other          |                            |                    | <b>Abandonment Rec:</b>   | Yes             |
| Water Type:                                |                          |                            |                    | <b>Contractor:</b>        | 7241            |
| Casing Material:                           |                          |                            |                    | <b>Form Version:</b>      | 7               |
| Audit No:                                  | Z146458                  |                            |                    | <b>Owner:</b>             |                 |
| Tag:                                       |                          |                            |                    | <b>Street Name:</b>       | 200 LEES AVE    |
| Construction Method:                       |                          |                            |                    | <b>County:</b>            | OTTAWA-CARLETON |
| Elevation (m):                             |                          |                            |                    | <b>Municipality:</b>      | OTTAWA CITY     |
| Elevation Reliability:                     |                          |                            |                    | <b>Site Info:</b>         |                 |
| Depth to Bedrock:                          |                          |                            |                    | <b>Lot:</b>               |                 |
| Well Depth:                                |                          |                            |                    | <b>Concession:</b>        |                 |
| Overburden/Bedrock:                        |                          |                            |                    | <b>Concession Name:</b>   |                 |
| Pump Rate:                                 |                          |                            |                    | <b>Easting NAD83:</b>     |                 |
| Static Water Level:                        |                          |                            |                    | <b>Nothing NAD83:</b>     |                 |

| Map Key                                       | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                      | DB                             |
|-----------------------------------------------|----------------------|----------------------------|------------------|---------------------------|--------------------------------|
| Flowing (Y/N):<br>Flow Rate:<br>Clear/Cloudy: |                      |                            |                  | Zone:<br>UTM Reliability: |                                |
| <u>Bore Hole Information</u>                  |                      |                            |                  |                           |                                |
| Bore Hole ID:                                 | 1003760656           |                            |                  | Elevation:                | 61.73                          |
| DP2BR:                                        |                      |                            |                  | Elevrc:                   |                                |
| Spatial Status:                               |                      |                            |                  | Zone:                     | 18                             |
| Code OB:                                      |                      |                            |                  | East83:                   | 447907                         |
| Code OB Desc:                                 |                      |                            |                  | Org CS:                   | UTM83                          |
| Open Hole:                                    |                      |                            |                  | North83:                  | 5029415                        |
| Cluster Kind:                                 |                      |                            |                  | UTMRC:                    | 4                              |
| Date Completed:                               | 24-FEB-12            |                            |                  | UTMRC Desc:               | margin of error : 30 m - 100 m |
| Remarks:                                      |                      |                            |                  | Location Method:          | wwr                            |
| Elevrc Desc:                                  |                      |                            |                  |                           |                                |
| Location Source Date:                         |                      |                            |                  |                           |                                |
| Improvement Location Source:                  |                      |                            |                  |                           |                                |
| Improvement Location Method:                  |                      |                            |                  |                           |                                |
| Source Revision Comment:                      |                      |                            |                  |                           |                                |
| Supplier Comment:                             |                      |                            |                  |                           |                                |
| <u>Annular Space/Abandonment</u>              |                      |                            |                  |                           |                                |
| <u>Sealing Record</u>                         |                      |                            |                  |                           |                                |
| Plug ID:                                      | 1004303989           |                            |                  |                           |                                |
| Layer:                                        | 2                    |                            |                  |                           |                                |
| Plug From:                                    | .31                  |                            |                  |                           |                                |
| Plug To:                                      | 6.5                  |                            |                  |                           |                                |
| Plug Depth UOM:                               | m                    |                            |                  |                           |                                |
| Plug ID:                                      | 1004303988           |                            |                  |                           |                                |
| Layer:                                        | 1                    |                            |                  |                           |                                |
| Plug From:                                    | 0                    |                            |                  |                           |                                |
| Plug To:                                      | .31                  |                            |                  |                           |                                |
| Plug Depth UOM:                               | m                    |                            |                  |                           |                                |
| <u>Method of Construction &amp; Well</u>      |                      |                            |                  |                           |                                |
| <u>Use</u>                                    |                      |                            |                  |                           |                                |
| Method Construction ID:                       | 1004303987           |                            |                  |                           |                                |
| Method Construction Code:                     | 6                    |                            |                  |                           |                                |
| Method Construction:                          | Boring               |                            |                  |                           |                                |
| Other Method Construction:                    |                      |                            |                  |                           |                                |
| <u>Pipe Information</u>                       |                      |                            |                  |                           |                                |
| Pipe ID:                                      | 1004303979           |                            |                  |                           |                                |
| Casing No:                                    | 0                    |                            |                  |                           |                                |
| Comment:                                      |                      |                            |                  |                           |                                |
| Alt Name:                                     |                      |                            |                  |                           |                                |
| <u>Construction Record - Casing</u>           |                      |                            |                  |                           |                                |
| Casing ID:                                    | 1004303983           |                            |                  |                           |                                |
| Layer:                                        |                      |                            |                  |                           |                                |
| Material:                                     |                      |                            |                  |                           |                                |
| Open Hole or Material:                        |                      |                            |                  |                           |                                |
| Depth From:                                   |                      |                            |                  |                           |                                |
| Depth To:                                     |                      |                            |                  |                           |                                |
| Casing Diameter:                              |                      |                            |                  |                           |                                |
| Casing Diameter UOM:                          | cm                   |                            |                  |                           |                                |

| Map Key                                    | Number of<br>Records     | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB              |
|--------------------------------------------|--------------------------|----------------------------|------------------|--------------------|-----------------|
| Casing Depth UOM:                          |                          | m                          |                  |                    |                 |
| <b><u>Construction Record - Screen</u></b> |                          |                            |                  |                    |                 |
| Screen ID:                                 |                          | 1004303984                 |                  |                    |                 |
| Layer:                                     |                          |                            |                  |                    |                 |
| Slot:                                      |                          |                            |                  |                    |                 |
| Screen Top Depth:                          |                          |                            |                  |                    |                 |
| Screen End Depth:                          |                          |                            |                  |                    |                 |
| Screen Material:                           |                          |                            |                  |                    |                 |
| Screen Depth UOM:                          |                          | m                          |                  |                    |                 |
| Screen Diameter UOM:                       |                          | cm                         |                  |                    |                 |
| Screen Diameter:                           |                          |                            |                  |                    |                 |
| <b><u>Water Details</u></b>                |                          |                            |                  |                    |                 |
| Water ID:                                  |                          | 1004303982                 |                  |                    |                 |
| Layer:                                     |                          |                            |                  |                    |                 |
| Kind Code:                                 |                          |                            |                  |                    |                 |
| Kind:                                      |                          |                            |                  |                    |                 |
| Water Found Depth:                         |                          |                            |                  |                    |                 |
| Water Found Depth UOM:                     |                          | m                          |                  |                    |                 |
| <b><u>Hole Diameter</u></b>                |                          |                            |                  |                    |                 |
| Hole ID:                                   |                          | 1004303981                 |                  |                    |                 |
| Diameter:                                  |                          | 10.92                      |                  |                    |                 |
| Depth From:                                |                          | 0                          |                  |                    |                 |
| Depth To:                                  |                          | 6.5                        |                  |                    |                 |
| Hole Depth UOM:                            |                          | m                          |                  |                    |                 |
| Hole Diameter UOM:                         |                          | cm                         |                  |                    |                 |
| <hr/>                                      |                          |                            |                  |                    |                 |
| <a href="#">67</a>                         | 2 of 3                   | SSE/247.0                  | 61.9 / 0.22      | Ottawa ON          | WWIS            |
| Well ID:                                   | 7180869                  |                            |                  | Data Entry Status: |                 |
| Construction Date:                         |                          |                            |                  | Data Src:          |                 |
| Primary Water Use:                         | Monitoring and Test Hole |                            |                  | Date Received:     | 5/10/2012       |
| Sec. Water Use:                            | 0                        |                            |                  | Selected Flag:     | Yes             |
| Final Well Status:                         | Abandoned-Other          |                            |                  | Abandonment Rec:   | Yes             |
| Water Type:                                |                          |                            |                  | Contractor:        | 7241            |
| Casing Material:                           |                          |                            |                  | Form Version:      | 7               |
| Audit No:                                  | Z146459                  |                            |                  | Owner:             |                 |
| Tag:                                       |                          |                            |                  | Street Name:       | 200 LEES AVE    |
| Construction Method:                       |                          |                            |                  | County:            | OTTAWA-CARLETON |
| Elevation (m):                             |                          |                            |                  | Municipality:      | NEPEAN TOWNSHIP |
| Elevation Reliability:                     |                          |                            |                  | Site Info:         |                 |
| Depth to Bedrock:                          |                          |                            |                  | Lot:               |                 |
| Well Depth:                                |                          |                            |                  | Concession:        |                 |
| Overburden/Bedrock:                        |                          |                            |                  | Concession Name:   |                 |
| Pump Rate:                                 |                          |                            |                  | Easting NAD83:     |                 |
| Static Water Level:                        |                          |                            |                  | Northing NAD83:    |                 |
| Flowing (Y/N):                             |                          |                            |                  | Zone:              |                 |
| Flow Rate:                                 |                          |                            |                  | UTM Reliability:   |                 |
| Clear/Cloudy:                              |                          |                            |                  |                    |                 |
| <b><u>Bore Hole Information</u></b>        |                          |                            |                  |                    |                 |
| Bore Hole ID:                              | 1003767279               |                            |                  | Elevation:         | 61.73           |
| DP2BR:                                     |                          |                            |                  | Elevrc:            |                 |
| Spatial Status:                            |                          |                            |                  | Zone:              | 18              |
| Code OB:                                   |                          |                            |                  | East83:            | 447907          |

| Map Key                                         | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site             | DB                             |
|-------------------------------------------------|----------------------|----------------------------|------------------|------------------|--------------------------------|
| Code OB Desc:                                   |                      |                            |                  | Org CS:          | UTM83                          |
| Open Hole:                                      |                      |                            |                  | North83:         | 5029416                        |
| Cluster Kind:                                   |                      |                            |                  | UTMRC:           | 4                              |
| Date Completed:                                 | 24-FEB-12            |                            |                  | UTMRC Desc:      | margin of error : 30 m - 100 m |
| Remarks:                                        |                      |                            |                  | Location Method: | wwr                            |
| Elevrc Desc:                                    |                      |                            |                  |                  |                                |
| Location Source Date:                           |                      |                            |                  |                  |                                |
| Improvement Location Source:                    |                      |                            |                  |                  |                                |
| Improvement Location Method:                    |                      |                            |                  |                  |                                |
| Source Revision Comment:                        |                      |                            |                  |                  |                                |
| Supplier Comment:                               |                      |                            |                  |                  |                                |
| <b><u>Annular Space/Abandonment</u></b>         |                      |                            |                  |                  |                                |
| <b><u>Sealing Record</u></b>                    |                      |                            |                  |                  |                                |
| Plug ID:                                        |                      | 1004307878                 |                  |                  |                                |
| Layer:                                          |                      | 2                          |                  |                  |                                |
| Plug From:                                      |                      | .31                        |                  |                  |                                |
| Plug To:                                        |                      | 8.8                        |                  |                  |                                |
| Plug Depth UOM:                                 |                      | m                          |                  |                  |                                |
| Plug ID:                                        |                      | 1004307877                 |                  |                  |                                |
| Layer:                                          |                      | 1                          |                  |                  |                                |
| Plug From:                                      |                      | 0                          |                  |                  |                                |
| Plug To:                                        |                      | .31                        |                  |                  |                                |
| Plug Depth UOM:                                 |                      | m                          |                  |                  |                                |
| <b><u>Method of Construction &amp; Well</u></b> |                      |                            |                  |                  |                                |
| <b><u>Use</u></b>                               |                      |                            |                  |                  |                                |
| Method Construction ID:                         |                      | 1004307876                 |                  |                  |                                |
| Method Construction Code:                       |                      | 6                          |                  |                  |                                |
| Method Construction:                            |                      | Boring                     |                  |                  |                                |
| Other Method Construction:                      |                      |                            |                  |                  |                                |
| <b><u>Pipe Information</u></b>                  |                      |                            |                  |                  |                                |
| Pipe ID:                                        |                      | 1004307868                 |                  |                  |                                |
| Casing No:                                      |                      | 0                          |                  |                  |                                |
| Comment:                                        |                      |                            |                  |                  |                                |
| Alt Name:                                       |                      |                            |                  |                  |                                |
| <b><u>Construction Record - Casing</u></b>      |                      |                            |                  |                  |                                |
| Casing ID:                                      |                      | 1004307872                 |                  |                  |                                |
| Layer:                                          |                      |                            |                  |                  |                                |
| Material:                                       |                      |                            |                  |                  |                                |
| Open Hole or Material:                          |                      |                            |                  |                  |                                |
| Depth From:                                     |                      |                            |                  |                  |                                |
| Depth To:                                       |                      |                            |                  |                  |                                |
| Casing Diameter:                                |                      |                            |                  |                  |                                |
| Casing Diameter UOM:                            |                      | cm                         |                  |                  |                                |
| Casing Depth UOM:                               |                      | m                          |                  |                  |                                |
| <b><u>Construction Record - Screen</u></b>      |                      |                            |                  |                  |                                |
| Screen ID:                                      |                      | 1004307873                 |                  |                  |                                |
| Layer:                                          |                      |                            |                  |                  |                                |
| Slot:                                           |                      |                            |                  |                  |                                |
| Screen Top Depth:                               |                      |                            |                  |                  |                                |
| Screen End Depth:                               |                      |                            |                  |                  |                                |
| Screen Material:                                |                      |                            |                  |                  |                                |



| Map Key                      | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site                           | DB   |
|------------------------------|----------------------|----------------------------|------------------|--------------------------------|------|
| Screen Depth UOM:            |                      | m                          |                  |                                |      |
| Screen Diameter UOM:         |                      | cm                         |                  |                                |      |
| Screen Diameter:             |                      |                            |                  |                                |      |
| <u>Water Details</u>         |                      |                            |                  |                                |      |
| Water ID:                    |                      | 1004307871                 |                  |                                |      |
| Layer:                       |                      |                            |                  |                                |      |
| Kind Code:                   |                      |                            |                  |                                |      |
| Kind:                        |                      |                            |                  |                                |      |
| Water Found Depth:           |                      |                            |                  |                                |      |
| Water Found Depth UOM:       |                      | m                          |                  |                                |      |
| <u>Hole Diameter</u>         |                      |                            |                  |                                |      |
| Hole ID:                     |                      | 1004307870                 |                  |                                |      |
| Diameter:                    |                      | 10.92                      |                  |                                |      |
| Depth From:                  |                      | 0                          |                  |                                |      |
| Depth To:                    |                      | 8.8                        |                  |                                |      |
| Hole Depth UOM:              |                      | m                          |                  |                                |      |
| Hole Diameter UOM:           |                      | cm                         |                  |                                |      |
|                              |                      |                            |                  |                                |      |
| <a href="#">67</a>           | 3 of 3               | SSE/247.0                  | 61.9 / 0.22      | Ottawa ON                      | WWIS |
| Well ID:                     |                      | 7180703                    |                  | Data Entry Status:             |      |
| Construction Date:           |                      |                            |                  | Data Src:                      |      |
| Primary Water Use:           |                      | Monitoring and Test Hole   |                  | Date Received:                 |      |
| Sec. Water Use:              |                      | 0                          |                  | 5/10/2012                      |      |
| Final Well Status:           |                      | Abandoned-Other            |                  | Selected Flag:                 |      |
| Water Type:                  |                      |                            |                  | Yes                            |      |
| Casing Material:             |                      |                            |                  | Abandonment Rec:               |      |
| Audit No:                    |                      | Z146460                    |                  | Yes                            |      |
| Tag:                         |                      |                            |                  | Contractor:                    |      |
| Construction Method:         |                      |                            |                  | 7241                           |      |
| Elevation (m):               |                      |                            |                  | Form Version:                  |      |
| Elevation Reliability:       |                      |                            |                  | 7                              |      |
| Depth to Bedrock:            |                      |                            |                  | Owner:                         |      |
| Well Depth:                  |                      |                            |                  | Street Name:                   |      |
| Overburden/Bedrock:          |                      |                            |                  | 200 LEES AVE                   |      |
| Pump Rate:                   |                      |                            |                  | County:                        |      |
| Static Water Level:          |                      |                            |                  | OTTAWA-CARLETON                |      |
| Flowing (Y/N):               |                      |                            |                  | Municipality:                  |      |
| Flow Rate:                   |                      |                            |                  | NEPEAN TOWNSHIP                |      |
| Clear/Cloudy:                |                      |                            |                  | Site Info:                     |      |
|                              |                      |                            |                  | Lot:                           |      |
|                              |                      |                            |                  | Concession:                    |      |
|                              |                      |                            |                  | Concession Name:               |      |
|                              |                      |                            |                  | Easting NAD83:                 |      |
|                              |                      |                            |                  | Northing NAD83:                |      |
|                              |                      |                            |                  | Zone:                          |      |
|                              |                      |                            |                  | UTM Reliability:               |      |
|                              |                      |                            |                  |                                |      |
| <u>Bore Hole Information</u> |                      |                            |                  |                                |      |
| Bore Hole ID:                |                      | 1003760716                 |                  | Elevation:                     |      |
| DP2BR:                       |                      |                            |                  | 61.73                          |      |
| Spatial Status:              |                      |                            |                  | Elevrc:                        |      |
| Code OB:                     |                      |                            |                  | 18                             |      |
| Code OB Desc:                |                      |                            |                  | Zone:                          |      |
| Open Hole:                   |                      |                            |                  | 447907                         |      |
| Cluster Kind:                |                      |                            |                  | East83:                        |      |
| Date Completed:              |                      | 24-FEB-12                  |                  | UTM83                          |      |
| Remarks:                     |                      |                            |                  | Org CS:                        |      |
| Elevrc Desc:                 |                      |                            |                  | UTM83                          |      |
| Location Source Date:        |                      |                            |                  | North83:                       |      |
| Improvement Location Source: |                      |                            |                  | 5029416                        |      |
| Improvement Location Method: |                      |                            |                  | UTMRC:                         |      |
| Source Revision Comment:     |                      |                            |                  | 4                              |      |
|                              |                      |                            |                  | UTMRC Desc:                    |      |
|                              |                      |                            |                  | margin of error : 30 m - 100 m |      |
|                              |                      |                            |                  | Location Method:               |      |
|                              |                      |                            |                  | wwr                            |      |

| Map Key                                                    | Number of<br>Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|------------------------------------------------------------|----------------------|----------------------------|------------------|------|----|
| <b>Supplier Comment:</b>                                   |                      |                            |                  |      |    |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                      |                            |                  |      |    |
| Plug ID:                                                   |                      | 1004304089                 |                  |      |    |
| Layer:                                                     |                      | 1                          |                  |      |    |
| Plug From:                                                 |                      | .31                        |                  |      |    |
| Plug To:                                                   |                      | 6.6                        |                  |      |    |
| Plug Depth UOM:                                            |                      | m                          |                  |      |    |
| Plug ID:                                                   |                      | 1004304090                 |                  |      |    |
| Layer:                                                     |                      | 2                          |                  |      |    |
| Plug From:                                                 |                      | .31                        |                  |      |    |
| Plug To:                                                   |                      | 0                          |                  |      |    |
| Plug Depth UOM:                                            |                      | m                          |                  |      |    |
| <b><u>Method of Construction &amp; Well<br/>Use</u></b>    |                      |                            |                  |      |    |
| Method Construction ID:                                    |                      | 1004304088                 |                  |      |    |
| Method Construction Code:                                  |                      | 6                          |                  |      |    |
| Method Construction:                                       |                      | Boring                     |                  |      |    |
| Other Method Construction:                                 |                      |                            |                  |      |    |
| <b><u>Pipe Information</u></b>                             |                      |                            |                  |      |    |
| Pipe ID:                                                   |                      | 1004304080                 |                  |      |    |
| Casing No:                                                 |                      | 0                          |                  |      |    |
| Comment:                                                   |                      |                            |                  |      |    |
| Alt Name:                                                  |                      |                            |                  |      |    |
| <b><u>Construction Record - Casing</u></b>                 |                      |                            |                  |      |    |
| Casing ID:                                                 |                      | 1004304084                 |                  |      |    |
| Layer:                                                     |                      |                            |                  |      |    |
| Material:                                                  |                      |                            |                  |      |    |
| Open Hole or Material:                                     |                      |                            |                  |      |    |
| Depth From:                                                |                      |                            |                  |      |    |
| Depth To:                                                  |                      |                            |                  |      |    |
| Casing Diameter:                                           |                      |                            |                  |      |    |
| Casing Diameter UOM:                                       |                      | cm                         |                  |      |    |
| Casing Depth UOM:                                          |                      | m                          |                  |      |    |
| <b><u>Construction Record - Screen</u></b>                 |                      |                            |                  |      |    |
| Screen ID:                                                 |                      | 1004304085                 |                  |      |    |
| Layer:                                                     |                      |                            |                  |      |    |
| Slot:                                                      |                      |                            |                  |      |    |
| Screen Top Depth:                                          |                      |                            |                  |      |    |
| Screen End Depth:                                          |                      |                            |                  |      |    |
| Screen Material:                                           |                      |                            |                  |      |    |
| Screen Depth UOM:                                          |                      | m                          |                  |      |    |
| Screen Diameter UOM:                                       |                      | cm                         |                  |      |    |
| Screen Diameter:                                           |                      |                            |                  |      |    |
| <b><u>Water Details</u></b>                                |                      |                            |                  |      |    |
| Water ID:                                                  |                      | 1004304083                 |                  |      |    |
| Layer:                                                     |                      |                            |                  |      |    |
| Kind Code:                                                 |                      |                            |                  |      |    |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site      | DB   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|-----------|------|
| <b>Kind:</b><br><b>Water Found Depth:</b><br><b>Water Found Depth UOM:</b> m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                            |                  |           |      |
| <b><u>Hole Diameter</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |                            |                  |           |      |
| <b>Hole ID:</b> 1004304082<br><b>Diameter:</b> 10.91<br><b>Depth From:</b> 0<br><b>Depth To:</b> 6.6<br><b>Hole Depth UOM:</b> m<br><b>Hole Diameter UOM:</b> cm                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |                            |                  |           |      |
| <a href="#">68</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 of 1            | SSW/248.5                  | 61.8 / 0.10      | Ottawa ON | WWIS |
| <b>Well ID:</b> 7191062<br><b>Construction Date:</b><br><b>Primary Water Use:</b> Monitoring and Test Hole<br><b>Sec. Water Use:</b> 0<br><b>Final Well Status:</b> Test Hole<br><b>Water Type:</b><br><b>Casing Material:</b><br><b>Audit No:</b> Z156924<br><b>Tag:</b> A135011<br><b>Construction Method:</b><br><b>Elevation (m):</b><br><b>Elevation Reliability:</b><br><b>Depth to Bedrock:</b><br><b>Well Depth:</b><br><b>Overburden/Bedrock:</b><br><b>Pump Rate:</b><br><b>Static Water Level:</b><br><b>Flowing (Y/N):</b><br><b>Flow Rate:</b><br><b>Clear/Cloudy:</b> |                   |                            |                  |           |      |
| <b>Data Entry Status:</b><br><b>Data Src:</b><br><b>Date Received:</b> 11/9/2012<br><b>Selected Flag:</b> Yes<br><b>Abandonment Rec:</b><br><b>Contractor:</b> 7241<br><b>Form Version:</b> 7<br><b>Owner:</b><br><b>Street Name:</b> 200 LEES AVE<br><b>County:</b> OTTAWA-CARLETON<br><b>Municipality:</b> NEPEAN TOWNSHIP<br><b>Site Info:</b><br><b>Lot:</b><br><b>Concession:</b><br><b>Concession Name:</b><br><b>Easting NAD83:</b><br><b>Northing NAD83:</b><br><b>Zone:</b><br><b>UTM Reliability:</b>                                                                     |                   |                            |                  |           |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   |                            |                  |           |      |
| <b>Bore Hole ID:</b> 1004200170<br><b>DP2BR:</b><br><b>Spatial Status:</b><br><b>Code OB:</b><br><b>Code OB Desc:</b><br><b>Open Hole:</b><br><b>Cluster Kind:</b><br><b>Date Completed:</b> 30-SEP-12<br><b>Remarks:</b><br><b>Elevrc Desc:</b><br><b>Location Source Date:</b><br><b>Improvement Location Source:</b><br><b>Improvement Location Method:</b><br><b>Source Revision Comment:</b><br><b>Supplier Comment:</b>                                                                                                                                                       |                   |                            |                  |           |      |
| <b>Elevation:</b> 62.18<br><b>Elevrc:</b><br><b>Zone:</b> 18<br><b>East83:</b> 447695<br><b>Org CS:</b> UTM83<br><b>North83:</b> 5029389<br><b>UTMRC:</b> 4<br><b>UTMRC Desc:</b> margin of error : 30 m - 100 m<br><b>Location Method:</b> wwr                                                                                                                                                                                                                                                                                                                                     |                   |                            |                  |           |      |
| <b><u>Overburden and Bedrock</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |                            |                  |           |      |
| <b><u>Materials Interval</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |                            |                  |           |      |
| <b>Formation ID:</b> 1004489422<br><b>Layer:</b> 2<br><b>Color:</b> 2<br><b>General Color:</b> GREY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   |                            |                  |           |      |

| <b>Map Key</b>                          | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-----------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Mat1:</b>                            |                              | 01                                 |                          |             |           |
| <b>Most Common Material:</b>            |                              | FILL                               |                          |             |           |
| <b>Mat2:</b>                            |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                 |                              | LOOSE                              |                          |             |           |
| <b>Mat3:</b>                            |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                 |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>             |                              | .91                                |                          |             |           |
| <b>Formation End Depth:</b>             |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth UOM:</b>         |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                    |                              | 1004489421                         |                          |             |           |
| <b>Layer:</b>                           |                              | 1                                  |                          |             |           |
| <b>Color:</b>                           |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                   |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                            |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>            |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                            |                              | 77                                 |                          |             |           |
| <b>Other Materials:</b>                 |                              | LOOSE                              |                          |             |           |
| <b>Mat3:</b>                            |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                 |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>             |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>             |                              | .91                                |                          |             |           |
| <b>Formation End Depth UOM:</b>         |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                    |                              | 1004489424                         |                          |             |           |
| <b>Layer:</b>                           |                              | 4                                  |                          |             |           |
| <b>Color:</b>                           |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                   |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                            |                              | 06                                 |                          |             |           |
| <b>Most Common Material:</b>            |                              | SILT                               |                          |             |           |
| <b>Mat2:</b>                            |                              | 34                                 |                          |             |           |
| <b>Other Materials:</b>                 |                              | TILL                               |                          |             |           |
| <b>Mat3:</b>                            |                              | 81                                 |                          |             |           |
| <b>Other Materials:</b>                 |                              | SANDY                              |                          |             |           |
| <b>Formation Top Depth:</b>             |                              | 7.32                               |                          |             |           |
| <b>Formation End Depth:</b>             |                              | 10.06                              |                          |             |           |
| <b>Formation End Depth UOM:</b>         |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                    |                              | 1004489423                         |                          |             |           |
| <b>Layer:</b>                           |                              | 3                                  |                          |             |           |
| <b>Color:</b>                           |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                   |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                            |                              | 05                                 |                          |             |           |
| <b>Most Common Material:</b>            |                              | CLAY                               |                          |             |           |
| <b>Mat2:</b>                            |                              | 84                                 |                          |             |           |
| <b>Other Materials:</b>                 |                              | SILTY                              |                          |             |           |
| <b>Mat3:</b>                            |                              | 85                                 |                          |             |           |
| <b>Other Materials:</b>                 |                              | SOFT                               |                          |             |           |
| <b>Formation Top Depth:</b>             |                              | 4.57                               |                          |             |           |
| <b>Formation End Depth:</b>             |                              | 7.32                               |                          |             |           |
| <b>Formation End Depth UOM:</b>         |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment</u></b> |                              |                                    |                          |             |           |
| <b><u>Sealing Record</u></b>            |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                         |                              | 1004489433                         |                          |             |           |
| <b>Layer:</b>                           |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                       |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                         |                              | 6.71                               |                          |             |           |
| <b>Plug Depth UOM:</b>                  |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                         |                              | 1004489432                         |                          |             |           |
| <b>Layer:</b>                           |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                       |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                         |                              | .31                                |                          |             |           |

| <b>Map Key</b>                                          | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|---------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <hr/>                                                   |                              |                                    |                          |             |           |
| <b>Plug Depth UOM:</b>                                  |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                         |                              | 1004489434                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                       |                              | 6.71                               |                          |             |           |
| <b>Plug To:</b>                                         |                              | 10.01                              |                          |             |           |
| <b>Plug Depth UOM:</b>                                  |                              | m                                  |                          |             |           |
| <br><b><u>Method of Construction &amp; Well Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                          |                              | 1004489431                         |                          |             |           |
| <b>Method Construction Code:</b>                        |                              | 2                                  |                          |             |           |
| <b>Method Construction:</b>                             |                              | Rotary (Convent.)                  |                          |             |           |
| <b>Other Method Construction:</b>                       |                              |                                    |                          |             |           |
| <br><b><u>Pipe Information</u></b>                      |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                         |                              | 1004489420                         |                          |             |           |
| <b>Casing No:</b>                                       |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                         |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                        |                              |                                    |                          |             |           |
| <br><b><u>Construction Record - Casing</u></b>          |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                       |                              | 1004489427                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                        |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                           |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                      |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                        |                              | 7.01                               |                          |             |           |
| <b>Casing Diameter:</b>                                 |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                             |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <br><b><u>Construction Record - Screen</u></b>          |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                       |                              | 1004489428                         |                          |             |           |
| <b>Layer:</b>                                           |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                            |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                                |                              | 7.01                               |                          |             |           |
| <b>Screen End Depth:</b>                                |                              | 10.06                              |                          |             |           |
| <b>Screen Material:</b>                                 |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                                |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                             |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                                 |                              | 6.03                               |                          |             |           |
| <br><b><u>Water Details</u></b>                         |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                        |                              | 1004489426                         |                          |             |           |
| <b>Layer:</b>                                           |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind:</b>                                            |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                               |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                           |                              | m                                  |                          |             |           |
| <br><b><u>Hole Diameter</u></b>                         |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                         |                              | 1004489425                         |                          |             |           |
| <b>Diameter:</b>                                        |                              | 10.92                              |                          |             |           |
| <b>Depth From:</b>                                      |                              | 0                                  |                          |             |           |

| Map Key                                            | Number of Records        | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site               | DB                             |
|----------------------------------------------------|--------------------------|----------------------------|------------------|--------------------|--------------------------------|
| Depth To:<br>Hole Depth UOM:<br>Hole Diameter UOM: |                          | 10.06<br>m<br>cm           |                  |                    |                                |
| <a href="#">69</a>                                 | 1 of 1                   | SW/248.6                   | 64.2 / 2.53      | Ottawa ON          | WWIS                           |
| Well ID:                                           | 7191092                  |                            |                  | Data Entry Status: |                                |
| Construction Date:                                 |                          |                            |                  | Data Src:          |                                |
| Primary Water Use:                                 | Monitoring and Test Hole |                            |                  | Date Received:     | 11/9/2012                      |
| Sec. Water Use:                                    | 0                        |                            |                  | Selected Flag:     | Yes                            |
| Final Well Status:                                 | Test Hole                |                            |                  | Abandonment Rec:   |                                |
| Water Type:                                        |                          |                            |                  | Contractor:        | 7241                           |
| Casing Material:                                   |                          |                            |                  | Form Version:      | 7                              |
| Audit No:                                          | Z156922                  |                            |                  | Owner:             |                                |
| Tag:                                               | A135004                  |                            |                  | Street Name:       | 191 LEES AVE                   |
| Construction Method:                               |                          |                            |                  | County:            | OTTAWA-CARLETON                |
| Elevation (m):                                     |                          |                            |                  | Municipality:      | NEPEAN TOWNSHIP                |
| Elevation Reliability:                             |                          |                            |                  | Site Info:         |                                |
| Depth to Bedrock:                                  |                          |                            |                  | Lot:               |                                |
| Well Depth:                                        |                          |                            |                  | Concession:        |                                |
| Overburden/Bedrock:                                |                          |                            |                  | Concession Name:   |                                |
| Pump Rate:                                         |                          |                            |                  | Easting NAD83:     |                                |
| Static Water Level:                                |                          |                            |                  | Northing NAD83:    |                                |
| Flowing (Y/N):                                     |                          |                            |                  | Zone:              |                                |
| Flow Rate:                                         |                          |                            |                  | UTM Reliability:   |                                |
| Clear/Cloudy:                                      |                          |                            |                  |                    |                                |
| <b><u>Bore Hole Information</u></b>                |                          |                            |                  |                    |                                |
| Bore Hole ID:                                      | 1004200411               |                            |                  | Elevation:         | 61.73                          |
| DP2BR:                                             |                          |                            |                  | Elevrc:            |                                |
| Spatial Status:                                    |                          |                            |                  | Zone:              | 18                             |
| Code OB:                                           |                          |                            |                  | East83:            | 447608                         |
| Code OB Desc:                                      |                          |                            |                  | Org CS:            | UTM83                          |
| Open Hole:                                         |                          |                            |                  | North83:           | 5029440                        |
| Cluster Kind:                                      |                          |                            |                  | UTMRC:             | 4                              |
| Date Completed:                                    | 25-SEP-12                |                            |                  | UTMRC Desc:        | margin of error : 30 m - 100 m |
| Remarks:                                           |                          |                            |                  | Location Method:   | wwr                            |
| Elevrc Desc:                                       |                          |                            |                  |                    |                                |
| Location Source Date:                              |                          |                            |                  |                    |                                |
| Improvement Location Source:                       |                          |                            |                  |                    |                                |
| Improvement Location Method:                       |                          |                            |                  |                    |                                |
| Source Revision Comment:                           |                          |                            |                  |                    |                                |
| Supplier Comment:                                  |                          |                            |                  |                    |                                |
| <b><u>Overburden and Bedrock</u></b>               |                          |                            |                  |                    |                                |
| <b><u>Materials Interval</u></b>                   |                          |                            |                  |                    |                                |
| Formation ID:                                      | 1004490090               |                            |                  |                    |                                |
| Layer:                                             | 5                        |                            |                  |                    |                                |
| Color:                                             | 2                        |                            |                  |                    |                                |
| General Color:                                     | GREY                     |                            |                  |                    |                                |
| Mat1:                                              | 05                       |                            |                  |                    |                                |
| Most Common Material:                              | CLAY                     |                            |                  |                    |                                |
| Mat2:                                              | 06                       |                            |                  |                    |                                |
| Other Materials:                                   | SILT                     |                            |                  |                    |                                |
| Mat3:                                              | 11                       |                            |                  |                    |                                |
| Other Materials:                                   | GRAVEL                   |                            |                  |                    |                                |
| Formation Top Depth:                               | 8.35                     |                            |                  |                    |                                |
| Formation End Depth:                               | 9.14                     |                            |                  |                    |                                |
| Formation End Depth UOM:                           | m                        |                            |                  |                    |                                |

| <b>Map Key</b>                                             | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Formation ID:</b>                                       |                              | 1004490087                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 2                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | GRAVEL                             |                          |             |           |
| <b>Mat3:</b>                                               |                              | 74                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LAYERED                            |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004490088                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 6                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BROWN                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                               |                              | 74                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | LAYERED                            |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 3.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004490089                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 4                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 2                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | GREY                               |                          |             |           |
| <b>Mat1:</b>                                               |                              | 28                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | SAND                               |                          |             |           |
| <b>Mat2:</b>                                               |                              | 06                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | SILT                               |                          |             |           |
| <b>Mat3:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 6.1                                |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | 8.35                               |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Formation ID:</b>                                       |                              | 1004490086                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 1                                  |                          |             |           |
| <b>Color:</b>                                              |                              | 8                                  |                          |             |           |
| <b>General Color:</b>                                      |                              | BLACK                              |                          |             |           |
| <b>Mat1:</b>                                               |                              | 11                                 |                          |             |           |
| <b>Most Common Material:</b>                               |                              | GRAVEL                             |                          |             |           |
| <b>Mat2:</b>                                               |                              |                                    |                          |             |           |
| <b>Other Materials:</b>                                    |                              |                                    |                          |             |           |
| <b>Mat3:</b>                                               |                              | 73                                 |                          |             |           |
| <b>Other Materials:</b>                                    |                              | HARD                               |                          |             |           |
| <b>Formation Top Depth:</b>                                |                              | 0                                  |                          |             |           |
| <b>Formation End Depth:</b>                                |                              | .31                                |                          |             |           |
| <b>Formation End Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Annular Space/Abandonment<br/>Sealing Record</u></b> |                              |                                    |                          |             |           |
| <b>Plug ID:</b>                                            |                              | 1004490100                         |                          |             |           |
| <b>Layer:</b>                                              |                              | 3                                  |                          |             |           |
| <b>Plug From:</b>                                          |                              | 7.32                               |                          |             |           |
| <b>Plug To:</b>                                            |                              | 9.14                               |                          |             |           |
| <b>Plug Depth UOM:</b>                                     |                              | m                                  |                          |             |           |



| <b>Map Key</b>                                      | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-----------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Plug ID:</b>                                     |                              | 1004490098                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Plug From:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Plug To:</b>                                     |                              | .31                                |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | m                                  |                          |             |           |
| <b>Plug ID:</b>                                     |                              | 1004490099                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 2                                  |                          |             |           |
| <b>Plug From:</b>                                   |                              | .31                                |                          |             |           |
| <b>Plug To:</b>                                     |                              | 7.32                               |                          |             |           |
| <b>Plug Depth UOM:</b>                              |                              | m                                  |                          |             |           |
| <b><u>Method of Construction &amp; Well Use</u></b> |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                      |                              | 1004490097                         |                          |             |           |
| <b>Method Construction Code:</b>                    |                              | 2                                  |                          |             |           |
| <b>Method Construction:</b>                         |                              | Rotary (Convent.)                  |                          |             |           |
| <b>Other Method Construction:</b>                   |                              |                                    |                          |             |           |
| <b><u>Pipe Information</u></b>                      |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                     |                              | 1004490085                         |                          |             |           |
| <b>Casing No:</b>                                   |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                     |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                                    |                              |                                    |                          |             |           |
| <b><u>Construction Record - Casing</u></b>          |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                                   |                              | 1004490093                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Material:</b>                                    |                              | 5                                  |                          |             |           |
| <b>Open Hole or Material:</b>                       |                              | PLASTIC                            |                          |             |           |
| <b>Depth From:</b>                                  |                              | 0                                  |                          |             |           |
| <b>Depth To:</b>                                    |                              | 7.62                               |                          |             |           |
| <b>Casing Diameter:</b>                             |                              | 5.2                                |                          |             |           |
| <b>Casing Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Casing Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b><u>Construction Record - Screen</u></b>          |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                                   |                              | 1004490094                         |                          |             |           |
| <b>Layer:</b>                                       |                              | 1                                  |                          |             |           |
| <b>Slot:</b>                                        |                              | 10                                 |                          |             |           |
| <b>Screen Top Depth:</b>                            |                              | 7.62                               |                          |             |           |
| <b>Screen End Depth:</b>                            |                              | 9.14                               |                          |             |           |
| <b>Screen Material:</b>                             |                              | 5                                  |                          |             |           |
| <b>Screen Depth UOM:</b>                            |                              | m                                  |                          |             |           |
| <b>Screen Diameter UOM:</b>                         |                              | cm                                 |                          |             |           |
| <b>Screen Diameter:</b>                             |                              | 6.03                               |                          |             |           |
| <b><u>Water Details</u></b>                         |                              |                                    |                          |             |           |
| <b>Water ID:</b>                                    |                              | 1004490092                         |                          |             |           |
| <b>Layer:</b>                                       |                              |                                    |                          |             |           |
| <b>Kind Code:</b>                                   |                              |                                    |                          |             |           |
| <b>Kind:</b>                                        |                              |                                    |                          |             |           |
| <b>Water Found Depth:</b>                           |                              |                                    |                          |             |           |
| <b>Water Found Depth UOM:</b>                       |                              | m                                  |                          |             |           |
| <b><u>Hole Diameter</u></b>                         |                              |                                    |                          |             |           |

| Map Key                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|------|------|
| <div> <div>Hole ID:1004490091</div> <div>Diameter:10.92</div> <div>Depth From:0</div> <div>Depth To:9.14</div> <div>Hole Depth UOM:m</div> <div>Hole Diameter UOM:cm</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                            |                  |      |      |
| <a href="#">70</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 of 1            | WSW/249.1                  | 66.6 / 4.92      | ON   | WWIS |
| <div> <div> <div>Well ID:7251494</div> <div>Construction Date:</div> <div>Primary Water Use:</div> <div>Sec. Water Use:</div> <div>Final Well Status:Abandoned-Other</div> <div>Water Type:</div> <div>Casing Material:</div> <div>Audit No:Z82652</div> <div>Tag:A145285</div> <div>Construction Method:</div> <div>Elevation (m):</div> <div>Elevation Reliability:</div> <div>Depth to Bedrock:</div> <div>Well Depth:</div> <div>Overburden/Bedrock:</div> <div>Pump Rate:</div> <div>Static Water Level:</div> <div>Flowing (Y/N):</div> <div>Flow Rate:</div> <div>Clear/Cloudy:</div> </div> <div> <div>Data Entry Status:</div> <div>Data Src:</div> <div>Date Received:11/4/2015</div> <div>Selected Flag:Yes</div> <div>Abandonment Rec:Yes</div> <div>Contractor:6894</div> <div>Form Version:7</div> <div>Owner:</div> <div>Street Name:1 ROBINSON ROAD</div> <div>County:OTTAWA-CARLETON</div> <div>Municipality:OTTAWA CITY</div> <div>Site Info:</div> <div>Lot:</div> <div>Concession:</div> <div>Concession Name:</div> <div>Easting NAD83:</div> <div>Northing NAD83:</div> <div>Zone:</div> <div>UTM Reliability:</div> </div> </div> |                   |                            |                  |      |      |
| <b><u>Bore Hole Information</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |                            |                  |      |      |
| <div> <div> <div>Bore Hole ID:1005782117</div> <div>DP2BR:</div> <div>Spatial Status:</div> <div>Code OB:</div> <div>Code OB Desc:</div> <div>Open Hole:</div> <div>Cluster Kind:</div> <div>Date Completed:</div> <div>Remarks:</div> <div>Elevrc Desc:</div> <div>Location Source Date:</div> <div>Improvement Location Source:</div> <div>Improvement Location Method:</div> <div>Source Revision Comment:</div> <div>Supplier Comment:</div> </div> <div> <div>Elevation:61.24</div> <div>Elevrc:</div> <div>Zone:18</div> <div>East83:447532</div> <div>Org CS:UTM83</div> <div>North83:5029569</div> <div>UTMRC:4</div> <div>UTMRC Desc:margin of error : 30 m - 100 m</div> <div>Location Method:wwr</div> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                          |                   |                            |                  |      |      |
| <b><u>Annular Space/Abandonment Sealing Record</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                            |                  |      |      |
| <div> <div> <div>Plug ID:1005807022</div> <div>Layer:1</div> <div>Plug From:0</div> <div>Plug To:7.38</div> <div>Plug Depth UOM:ft</div> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                            |                  |      |      |
| <b><u>Method of Construction &amp; Well Use</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |                            |                  |      |      |

| <b>Map Key</b>                                 | <b>Number of<br/>Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------------------------|------------------------------|------------------------------------|--------------------------|-------------|-----------|
| <hr/>                                          |                              |                                    |                          |             |           |
| <b>Method Construction ID:</b>                 |                              | 1005807021                         |                          |             |           |
| <b>Method Construction Code:</b>               |                              |                                    |                          |             |           |
| <b>Method Construction:</b>                    |                              |                                    |                          |             |           |
| <b>Other Method Construction:</b>              |                              |                                    |                          |             |           |
| <br><b><u>Pipe Information</u></b>             |                              |                                    |                          |             |           |
| <b>Pipe ID:</b>                                |                              | 1005807015                         |                          |             |           |
| <b>Casing No:</b>                              |                              | 0                                  |                          |             |           |
| <b>Comment:</b>                                |                              |                                    |                          |             |           |
| <b>Alt Name:</b>                               |                              |                                    |                          |             |           |
| <br><b><u>Construction Record - Casing</u></b> |                              |                                    |                          |             |           |
| <b>Casing ID:</b>                              |                              | 1005807019                         |                          |             |           |
| <b>Layer:</b>                                  |                              |                                    |                          |             |           |
| <b>Material:</b>                               |                              |                                    |                          |             |           |
| <b>Open Hole or Material:</b>                  |                              |                                    |                          |             |           |
| <b>Depth From:</b>                             |                              |                                    |                          |             |           |
| <b>Depth To:</b>                               |                              |                                    |                          |             |           |
| <b>Casing Diameter:</b>                        |                              |                                    |                          |             |           |
| <b>Casing Diameter UOM:</b>                    |                              | inch                               |                          |             |           |
| <b>Casing Depth UOM:</b>                       |                              | ft                                 |                          |             |           |
| <br><b><u>Construction Record - Screen</u></b> |                              |                                    |                          |             |           |
| <b>Screen ID:</b>                              |                              | 1005807020                         |                          |             |           |
| <b>Layer:</b>                                  |                              |                                    |                          |             |           |
| <b>Slot:</b>                                   |                              |                                    |                          |             |           |
| <b>Screen Top Depth:</b>                       |                              |                                    |                          |             |           |
| <b>Screen End Depth:</b>                       |                              |                                    |                          |             |           |
| <b>Screen Material:</b>                        |                              |                                    |                          |             |           |
| <b>Screen Depth UOM:</b>                       |                              | ft                                 |                          |             |           |
| <b>Screen Diameter UOM:</b>                    |                              | inch                               |                          |             |           |
| <b>Screen Diameter:</b>                        |                              |                                    |                          |             |           |
| <br><b><u>Water Details</u></b>                |                              |                                    |                          |             |           |
| <b>Water ID:</b>                               |                              | 1005807018                         |                          |             |           |
| <b>Layer:</b>                                  |                              | 1                                  |                          |             |           |
| <b>Kind Code:</b>                              |                              | 8                                  |                          |             |           |
| <b>Kind:</b>                                   |                              | Untested                           |                          |             |           |
| <b>Water Found Depth:</b>                      |                              | 6.1                                |                          |             |           |
| <b>Water Found Depth UOM:</b>                  |                              | ft                                 |                          |             |           |
| <br><b><u>Hole Diameter</u></b>                |                              |                                    |                          |             |           |
| <b>Hole ID:</b>                                |                              | 1005807017                         |                          |             |           |
| <b>Diameter:</b>                               |                              |                                    |                          |             |           |
| <b>Depth From:</b>                             |                              |                                    |                          |             |           |
| <b>Depth To:</b>                               |                              |                                    |                          |             |           |
| <b>Hole Depth UOM:</b>                         |                              | ft                                 |                          |             |           |
| <b>Hole Diameter UOM:</b>                      |                              | inch                               |                          |             |           |

# Unplottable Summary

Total: 62 Unplottable sites

| DB  | Company Name/Site Name                   | Address                                                                     | City               | Postal  |
|-----|------------------------------------------|-----------------------------------------------------------------------------|--------------------|---------|
| CA  | R.M. OF OTTAWA-CARLETON                  | LEES AVE.                                                                   | OTTAWA CITY ON     |         |
| CA  | REG.MUN.OF OTTAWA-CARLETON               | QUEENSWAY N.                                                                | OTTAWA ON          |         |
| CA  | SPENCER & ASSOC.CONSLTG.ENG.LTD.         | LEES AVE.                                                                   | OTTAWA ON          |         |
| CA  |                                          | Lees Avenue                                                                 | Ottawa ON          |         |
| CA  | NATIONAL CAPITAL COMMISSION              | ROBINSON AVE.                                                               | OTTAWA CITY ON     |         |
| EHS |                                          | Hwy 417                                                                     | Ottawa ON          |         |
| EHS |                                          | Highway 417, CN Rail                                                        | Ottawa ON          |         |
| GEN | OTTAWA-CARLTON, REGIONAL MUNICIPALITY OF | (STORM WATER PUMPING STATION, LEES AVE) C/O 222 QUEEN STREET                | OTTAWA ON          | K1P 5Z3 |
| GEN | PITTS ENGINEERING CONSTRUCTION 31-354    | BANISTER CONT. LTD. C/O BOX 8008 OTTAWA TERMINAL HURDMAN BRIDGE AT HWY. 417 | OTTAWA-CARLETON ON | K1G 3H6 |
| GEN | Ecoplans Limited                         | Highway 417 West onramp accessed off Moodie Drive                           | Ottawa ON          | K2H 8G3 |
| GEN | PITTS (OUT OF BUS) 31-354                | BANISTER CONT. LTD. C/O BOX 8008 OTTAWA TERMINAL HURDMAN BRIDGE AT HWY. 417 | OTTAWA-CARLETON ON | K1G 3H6 |
| GEN | RW Tomlinson                             | Lees Avenue Transit Station                                                 | Ottawa ON          |         |
| GEN | CLEAN WATER WORKS                        | LEES AVE @ OC TRANSPOR TRANSIT WAY                                          | OTTAWA ON          |         |
| GEN | OTTAWA-CARLTON, REGIONAL MUNICIPALITY OF | LEES AVENUE TRANSIT STATION                                                 | OTTAWA ON          |         |
| GEN | CITY OF OTTAWA                           | LEES AVENUE TRANSIT STATION                                                 | OTTAWA ON          |         |
| GEN | PITTS ENGINEERING CONSTRUCTION           | BANISTER CONT. LTD. C/O BOX 8008 OTTAWA TERMINAL HURDMAN BRIDGE AT HWY. 417 | OTTAWA-CARLETON ON | K1G 3H6 |
| GEN | CITY OF OTTAWA                           | LEES AVENUE TRANSIT STATION                                                 | OTTAWA ON          |         |

|      |                                                                    |                                                                                                                    |                   |         |
|------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------|---------|
| GEN  | CITY OF OTTAWA                                                     | LEES AVENUE TRANSIT STATION                                                                                        | OTTAWA ON         | K1V 1A6 |
| GEN  | CITY OF OTTAWA                                                     | LEES AVENUE TRANSIT STATION                                                                                        | OTTAWA ON         |         |
| GEN  | CITY OF OTTAWA                                                     | LEES AVENUE TRANSIT STATION                                                                                        | OTTAWA ON         |         |
| GEN  | CITY OF OTTAWA                                                     | LEES AVENUE TRANSIT STATION                                                                                        | OTTAWA ON         | K1V 1A6 |
| GEN  | OTTAWA-CARLTON,<br>REGIONAL MUN. OF                                | LEES AVENUE TRANSIT STATION C/O 222<br>QUEEN STREET                                                                | OTTAWA ON         | K1P 5Z3 |
| GEN  | OTTAWA-CARLTON,<br>REGIONAL MUN. OF 29-120                         | LEES AVENUE TRANSIT STATION C/O 222<br>QUEEN STREET                                                                | OTTAWA ON         | K1P 5Z3 |
| GEN  | OTTAWA-CARLTON,<br>REGIONAL MUNICIPAL                              | (STORM WATER PUMPING STATION, LEES<br>AVE) C/O 222 QUEEN STREET                                                    | OTTAWA ON         | K1P 5Z3 |
| GEN  | CLEAN WATER WORKS                                                  | LEES AVE @ OC TRANSPO TRANSIT WAY                                                                                  | OTTAWA ON         |         |
| LIMO | The Corporation of the Regional<br>Municipality of Ottawa-Carleton |                                                                                                                    | City of Ottawa ON |         |
| RST  | CANADIAN TIRE PIT STOP &<br>PROPANE                                |                                                                                                                    | OTTAWA ON         | K2H5Z2  |
| RST  | CANADIAN TIRE PIT STOP &<br>PROPANE                                |                                                                                                                    | OTTAWA ON         | K2H 5Z2 |
| SPL  | Glenview Iron and Steel<br>Ltd.<UNOFFICIAL>                        | Hwy 417 - Woodroffe W. Bnd, On-Ramp                                                                                | Ottawa ON         |         |
| SPL  | Unisource Canada, Inc.                                             | HWY 417-West near Km 117 on the Vanier Prk<br>Way,                                                                 | Ottawa ON         |         |
| SPL  | City of Ottawa                                                     | Hwy 417 West bound, between the Carling Ave<br>Exit and the Maitland Exit                                          | Ottawa ON         |         |
| SPL  | UNKNOWN                                                            | BLAIR STATION AND QUEENSWAY                                                                                        | OTTAWA CITY ON    |         |
| SPL  | Waste Services Inc.                                                | Highway 417 East bound West of Terry Fox                                                                           | Ottawa ON         |         |
| SPL  | Loblaws Company<br>East<UNOFFICIAL>                                | Queensway, from Greenbank Exit to 1735 Iris<br>Road (Pine Crest Shopping Centre - in front of<br>IKEA)<UNOFFICIAL> | Ottawa ON         |         |
| SPL  | TRANSPORT TRUCK                                                    | QUEENSWAY MOTOR VEHICLE (OPERATING<br>FLUID)                                                                       | OTTAWA CITY ON    |         |
| SPL  | City of Ottawa                                                     | Highway 417                                                                                                        | Ottawa ON         |         |
| SPL  | LECLAIR FUELS LTD.                                                 | HWY 417 BTWN INNIS & PKWY TANK TRUCK<br>(CARGO)                                                                    | OTTAWA CITY ON    |         |
| SPL  | TRANSPORT TRUCK                                                    | HWY 417 BETWEEN NICOLAS AND VANIER<br>PARKWAY MOTOR VEHICLE (OPERATING<br>FLUID)                                   | OTTAWA CITY ON    |         |

|     |                                                                               |                                                                                                                  |                |
|-----|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------|
| SPL | CITY OF OTTAWA SNOW PLOW<UNOFFICIAL>                                          | TERRY FOX DRIVE AT THE HWY. 417 OVERPASS<UNOFFICIAL>                                                             | Ottawa ON      |
| SPL | Waste Management Inc.                                                         | HWY 417 EASTBOUND, ST. LAURENT EXIT (115)<UNOFFICIAL>                                                            | Ottawa ON      |
| SPL | Thermal Shell                                                                 | Highway 417 West of Eagleson Rd                                                                                  | Ottawa ON      |
| SPL | Ferguson Fuels<UNOFFICIAL>                                                    | HWY 417 EASTBOUND AT THE EAGLESON OFF RAMP<UNOFFICIAL>                                                           | Ottawa ON      |
| SPL | TRANSPORT TRUCK                                                               | HWY 417 AT MILE MARKER 5, EASTBOUND MOTOR VEHICLE (OPERATING FLUID)                                              | OTTAWA CITY ON |
| SPL | Ministry of Transportation                                                    | hwy 417 eastbound at MM 131 at hwy 416 overpass                                                                  | Ottawa ON      |
| SPL |                                                                               | HIGHWAY 417 EASTBOUND, EAST OF ROCKDALE EXIT<UNOFFICIAL>                                                         | Ottawa ON      |
| SPL | Sita Ontario Inc.                                                             | Highway 417(westbound) and Moodie Drive ramp                                                                     | Ottawa ON      |
| SPL | Wilway Transport<UNOFFICIAL>                                                  | Highway 417 eastbound, panmure exit(exit 162) MVA - HIGHWAY 417 EASTBOUND AT PANMURE EXIT (EXIT 163)<UNOFFICIAL> | Ottawa ON      |
| SPL |                                                                               | HWY 417 ONRAMP AT TERRY FOX EXIT<UNOFFICIAL>                                                                     | Ottawa ON      |
| SPL | Transport BUSA<UNOFFICIAL>                                                    | Hwy 417 East Bound, km 66                                                                                        | Ottawa ON      |
| SPL | S. 21(1)(f)                                                                   | Hwy 417 E between Vanier Parkway and St. Laurent<UNOFFICIAL>                                                     | Ottawa ON      |
| SPL |                                                                               | 417 EASTBOUND - NICHOLAS ON RAMP<UNOFFICIAL>                                                                     | Ottawa ON      |
| SPL | Ottawa LRT <UNOFFICIAL>                                                       | Hwy 417 near Lees Avenue                                                                                         | Ottawa ON      |
| SPL | Tomlinson Environmental Services Ltd.; SNC-Lavalin Constructors (Pacific) Inc | Highway 417 at Hurdman Bridge                                                                                    | Ottawa ON      |
| SPL |                                                                               | Hwy 417 at Hurdman Bridge, SW Corner                                                                             | Ottawa ON      |
| SPL |                                                                               | central transit way adjacent to hwy 417 between nicholas ave and lees ave                                        | Ottawa ON      |
| SPL |                                                                               | Hwy 417 Under Overpass @ Castlefrank Road                                                                        | Ottawa ON      |
| SPL | Drain-All Ltd.                                                                | Hwy 417 Westbound near Carling off-ramp                                                                          | Ottawa ON      |
| SPL | Enbridge Gas Distribution Inc.                                                | HWY 417 at Vars Bridge                                                                                           | Ottawa ON      |
| SPL |                                                                               | Hwy 417 to the corner of Rideau and King Edward                                                                  | Ottawa ON      |
| SPL |                                                                               | 417 eastbound, east of exit 104                                                                                  | Ottawa ON      |

|     |                                  |                                     |           |
|-----|----------------------------------|-------------------------------------|-----------|
| SPL | Purolator Courier Ltd.           | Hwy 417 Eastbound @ Mile Marker 180 | Ottawa ON |
| SPL | Penske Truck Leasing Canada Inc. | Hwy 417 east, at exit 88, Vars      | Ottawa ON |



# Unplottable Report

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**Site:** R.M. OF OTTAWA-CARLETON  
LEES AVE. OTTAWA CITY ON

**Database:**  
CA

**Certificate #:** 3-1317-86-  
**Application Year:** 86  
**Issue Date:** 9/23/1986  
**Approval Type:** Municipal sewage  
**Status:** Revised  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Site:** REG.MUN.OF OTTAWA-CARLETON  
QUEENSWAY N. OTTAWA ON

**Database:**  
CA

**Certificate #:** 3-0468-85-006  
**Application Year:** 85  
**Issue Date:** 6/4/85  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

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**Site:** SPENCER & ASSOC.CONSLTG.ENG.LTD.  
LEES AVE. OTTAWA ON

**Database:**  
CA

**Certificate #:** 3-0807-85-006  
**Application Year:** 85  
**Issue Date:** 7/30/85  
**Approval Type:** Municipal sewage  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

---

**Site:** Lees Avenue Ottawa ON

**Database:**  
CA

**Certificate #:** 8377-4MUJUZ  
**Application Year:** 00

**Issue Date:** 8/8/00  
**Approval Type:** Municipal & Private water  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** Corporation of the Regional Municipality of Ottawa-Carleton  
**Client Address::** 4475 Trail Rd.  
**Client City::** Nepean  
**Client Postal Code::** K0A 2Z0  
**Project Description::** Rehabilitation of existing watermain with new watermain & hydrants on Lees Avenue  
**Contaminants::**  
**Emission Control::**

---

**Site:** NATIONAL CAPITAL COMMISSION  
ROBINSON AVE. OTTAWA CITY ON

**Database:**  
CA

**Certificate #:** 7-0564-87-  
**Application Year:** 87  
**Issue Date:** 6/12/1987  
**Approval Type:** Municipal water  
**Status:** Approved  
**Application Type:**  
**Client Name::**  
**Client Address::**  
**Client City::**  
**Client Postal Code::**  
**Project Description::**  
**Contaminants::**  
**Emission Control::**

---

**Site:** Hwy 417 Ottawa ON

**Database:**  
EHS

|                                 |                        |                            |            |
|---------------------------------|------------------------|----------------------------|------------|
| <b>Order ID:</b>                | 207153                 | <b>Date Received:</b>      | 5/9/2012   |
| <b>Order No:</b>                | 20120509053            | <b>Lot/Building Size:</b>  |            |
| <b>Customer ID:</b>             | 58127                  | <b>Municipality:</b>       |            |
| <b>Company ID:</b>              | 50                     | <b>Client Prov/State:</b>  | ON         |
| <b>Status:</b>                  | C                      | <b>Search Radius (km):</b> | 0.25       |
| <b>Report Code:</b>             | 4CAN                   | <b>Large Radius:</b>       | 0.25       |
| <b>Report Type:</b>             | Custom Report          | <b>X:</b>                  | -75.670099 |
| <b>Report Date:</b>             | 5/16/2012              | <b>Y:</b>                  | 1          |
| <b>Report Requested by:</b>     | Golder Associates Ltd. |                            |            |
| <b>Nearest Intersection:</b>    |                        |                            |            |
| <b>Previous Site Name:</b>      |                        |                            |            |
| <b>Additional Info Ordered:</b> |                        |                            |            |

---

**Site:** Highway 417, CN Rail Ottawa ON

**Database:**  
EHS

|                                 |                  |                            |            |
|---------------------------------|------------------|----------------------------|------------|
| <b>Order ID:</b>                | 62037            | <b>Date Received:</b>      | 10/17/2005 |
| <b>Order No:</b>                | 20051017044      | <b>Lot/Building Size:</b>  |            |
| <b>Customer ID:</b>             | 44527            | <b>Municipality:</b>       |            |
| <b>Company ID:</b>              | 33445            | <b>Client Prov/State:</b>  | QC         |
| <b>Status:</b>                  | C                | <b>Search Radius (km):</b> | 0.25       |
| <b>Report Code:</b>             | 1CAN             | <b>Large Radius:</b>       | 2          |
| <b>Report Type:</b>             | Site Report      | <b>X:</b>                  |            |
| <b>Report Date:</b>             | 10/18/2005       | <b>Y:</b>                  |            |
| <b>Report Requested by:</b>     | SM Environnement |                            |            |
| <b>Nearest Intersection:</b>    |                  |                            |            |
| <b>Previous Site Name:</b>      |                  |                            |            |
| <b>Additional Info Ordered:</b> |                  |                            |            |

---

**Site:** OTTAWA-CARLTON, REGIONAL MUNICIPALITY OF  
(STORM WATER PUMPING STATION, LEES AVE) C/O 222 QUEEN STREET OTTAWA ON K1P 5Z3

**Database:**  
GEN

Generator No.: ON0303103  
Status:  
Approval Years: 92,93,94  
Contam. Facility:  
MHSW Facility:  
SIC Code: 0000  
SIC Description: \*\*\* NOT DEFINED \*\*\*

PO Box No.:  
Country:  
Choice of Contact:  
Co Admin:  
Phone No. Admin:

---

**Site:** **PITTS ENGINEERING CONSTRUCTION 31-354**  
**BANISTER CONT. LTD. C/O BOX 8008 OTTAWA TERMINAL HURDMAN BRIDGE AT HWY. 417 OTTAWA-CARLETON ON K1G 3H6**

**Database:**  
**GEN**

Generator No.: ON0760802  
Status:  
Approval Years: 92,93,94,95,96  
Contam. Facility:  
MHSW Facility:  
SIC Code: 4121  
SIC Description: HIGHWAYS, STR., ETC.

PO Box No.:  
Country:  
Choice of Contact:  
Co Admin:  
Phone No. Admin:

**--Details--**  
Waste Code: 252  
Waste Description: WASTE OILS & LUBRICANTS

---

**Site:** **Ecoplans Limited**  
**Highway 417 West onramp accessed off Moodie Drive Ottawa ON K2H 8G3**

**Database:**  
**GEN**

Generator No.: ON3922236  
Status:  
Approval Years: 2010  
Contam. Facility:  
MHSW Facility:  
SIC Code: 541620  
SIC Description: Environmental Consulting Services

PO Box No.:  
Country:  
Choice of Contact:  
Co Admin:  
Phone No. Admin:

**--Details--**  
Waste Code: 241  
Waste Description: HALOGENATED SOLVENTS

---

**Site:** **PITTS (OUT OF BUS) 31-354**  
**BANISTER CONT. LTD. C/O BOX 8008 OTTAWA TERMINAL HURDMAN BRIDGE AT HWY. 417 OTTAWA-CARLETON ON K1G 3H6**

**Database:**  
**GEN**

Generator No.: ON0760802  
Status:  
Approval Years: 97,98  
Contam. Facility:  
MHSW Facility:  
SIC Code: 4121  
SIC Description: HIGHWAYS, STR., ETC.

PO Box No.:  
Country:  
Choice of Contact:  
Co Admin:  
Phone No. Admin:

**--Details--**  
Waste Code: 252  
Waste Description: WASTE OILS & LUBRICANTS

---

**Site:** **RW Tomlinson**  
**Lees Avenue Transit Station Ottawa ON**

**Database:**  
**GEN**

Generator No.: ON9056839  
Status:

PO Box No.:  
Country:

**Approval Years:** 2013  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 237310  
**SIC Description:** HIGHWAY, STREET AND BRIDGE CONSTRUCTION

**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 251  
**Waste Description:** OIL SKIMMINGS & SLUDGES

---

**Site:** **CLEAN WATER WORKS**  
**LEES AVE @ OC TRANSPO TRANSIT WAY OTTAWA ON**

**Database:**  
**GEN**

**Generator No.:** ON2883524  
**Status:**  
**Approval Years:** 2009  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 238990  
**SIC Description:** All Other Specialty Trade Contractors

**PO Box No.:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 221  
**Waste Description:** LIGHT FUELS

---

**Site:** **OTTAWA-CARLTON, REGIONAL MUNICIPALITY OF**  
**LEES AVENUE TRANSIT STATION OTTAWA ON**

**Database:**  
**GEN**

**Generator No.:** ON0303104  
**Status:**  
**Approval Years:** 92,93,97,98,99,00,01  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 3699  
**SIC Description:** OTHER PETRO. & COAL

**PO Box No.:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 222  
**Waste Description:** HEAVY FUELS

---

**Site:** **CITY OF OTTAWA**  
**LEES AVENUE TRANSIT STATION OTTAWA ON**

**Database:**  
**GEN**

**Generator No.:** ON0303104  
**Status:**  
**Approval Years:** 2011  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 221320  
**SIC Description:** Sewage Treatment Facilities

**PO Box No.:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 146  
**Waste Description:** OTHER SPECIFIED INORGANICS

**Waste Code:** 222  
**Waste Description:** HEAVY FUELS

---

**Site:** **PITTS ENGINEERING CONSTRUCTION**  
**BANISTER CONT. LTD. C/O BOX 8008 OTTAWA TERMINAL HURDMAN BRIDGE AT HWY. 417 OTTAWA-**

**Database:**  
**GEN**

**CARLETON ON K1G 3H6**

|                          |                      |                           |
|--------------------------|----------------------|---------------------------|
| <b>Generator No.:</b>    | ON0760802            | <b>PO Box No.:</b>        |
| <b>Status:</b>           |                      | <b>Country:</b>           |
| <b>Approval Years:</b>   | 86,87,88,89,90       | <b>Choice of Contact:</b> |
| <b>Contam. Facility:</b> |                      | <b>Co Admin:</b>          |
| <b>MHSW Facility:</b>    |                      | <b>Phone No. Admin:</b>   |
| <b>SIC Code:</b>         | 4121                 |                           |
| <b>SIC Description:</b>  | HIGHWAYS, STR., ETC. |                           |

**--Details--**

|                           |                         |
|---------------------------|-------------------------|
| <b>Waste Code:</b>        | 252                     |
| <b>Waste Description:</b> | WASTE OILS & LUBRICANTS |

---

**Site:** CITY OF OTTAWA  
LEES AVENUE TRANSIT STATION OTTAWA ON

**Database:**  
GEN

|                          |                             |                           |
|--------------------------|-----------------------------|---------------------------|
| <b>Generator No.:</b>    | ON0303104                   | <b>PO Box No.:</b>        |
| <b>Status:</b>           |                             | <b>Country:</b>           |
| <b>Approval Years:</b>   | 2010                        | <b>Choice of Contact:</b> |
| <b>Contam. Facility:</b> |                             | <b>Co Admin:</b>          |
| <b>MHSW Facility:</b>    |                             | <b>Phone No. Admin:</b>   |
| <b>SIC Code:</b>         | 221320                      |                           |
| <b>SIC Description:</b>  | Sewage Treatment Facilities |                           |

**--Details--**

|                           |                            |
|---------------------------|----------------------------|
| <b>Waste Code:</b>        | 222                        |
| <b>Waste Description:</b> | HEAVY FUELS                |
| <b>Waste Code:</b>        | 146                        |
| <b>Waste Description:</b> | OTHER SPECIFIED INORGANICS |

---

**Site:** CITY OF OTTAWA  
LEES AVENUE TRANSIT STATION OTTAWA ON K1V 1A6

**Database:**  
GEN

|                          |                             |                           |
|--------------------------|-----------------------------|---------------------------|
| <b>Generator No.:</b>    | ON0303104                   | <b>PO Box No.:</b>        |
| <b>Status:</b>           |                             | <b>Country:</b>           |
| <b>Approval Years:</b>   | 2012                        | <b>Choice of Contact:</b> |
| <b>Contam. Facility:</b> |                             | <b>Co Admin:</b>          |
| <b>MHSW Facility:</b>    |                             | <b>Phone No. Admin:</b>   |
| <b>SIC Code:</b>         | 221320                      |                           |
| <b>SIC Description:</b>  | Sewage Treatment Facilities |                           |

**--Details--**

|                           |                            |
|---------------------------|----------------------------|
| <b>Waste Code:</b>        | 146                        |
| <b>Waste Description:</b> | OTHER SPECIFIED INORGANICS |
| <b>Waste Code:</b>        | 222                        |
| <b>Waste Description:</b> | HEAVY FUELS                |

---

**Site:** CITY OF OTTAWA  
LEES AVENUE TRANSIT STATION OTTAWA ON

**Database:**  
GEN

|                          |                             |                           |
|--------------------------|-----------------------------|---------------------------|
| <b>Generator No.:</b>    | ON0303104                   | <b>PO Box No.:</b>        |
| <b>Status:</b>           |                             | <b>Country:</b>           |
| <b>Approval Years:</b>   | 2013                        | <b>Choice of Contact:</b> |
| <b>Contam. Facility:</b> |                             | <b>Co Admin:</b>          |
| <b>MHSW Facility:</b>    |                             | <b>Phone No. Admin:</b>   |
| <b>SIC Code:</b>         | 221320                      |                           |
| <b>SIC Description:</b>  | SEWAGE TREATMENT FACILITIES |                           |

**--Details--**

**Waste Code:** 251  
**Waste Description:** OIL SKIMMINGS & SLUDGES

**Waste Code:** 146  
**Waste Description:** OTHER SPECIFIED INORGANICS

**Waste Code:** 222  
**Waste Description:** HEAVY FUELS

---

**Site:** CITY OF OTTAWA  
LEES AVENUE TRANSIT STATION OTTAWA ON

**Database:**  
GEN

**Generator No.:** ON0303104  
**Status:**  
**Approval Years:** 2009  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 221320  
**SIC Description:** Sewage Treatment Facilities

**PO Box No.:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 146  
**Waste Description:** OTHER SPECIFIED INORGANICS

**Waste Code:** 222  
**Waste Description:** HEAVY FUELS

---

**Site:** CITY OF OTTAWA  
LEES AVENUE TRANSIT STATION OTTAWA ON K1V 1A6

**Database:**  
GEN

**Generator No.:** ON0303104  
**Status:**  
**Approval Years:** 02,03,04,05,06,07,08  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 221320  
**SIC Description:** Sewage Treatment Facilities

**PO Box No.:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 146  
**Waste Description:** OTHER SPECIFIED INORGANICS

**Waste Code:** 222  
**Waste Description:** HEAVY FUELS

---

**Site:** OTTAWA-CARLTON, REGIONAL MUN. OF  
LEES AVENUE TRANSIT STATION C/O 222 QUEEN STREET OTTAWA ON K1P 5Z3

**Database:**  
GEN

**Generator No.:** ON0303104  
**Status:**  
**Approval Years:** 86,87,88,89,90  
**Contam. Facility:**  
**MHSW Facility:**  
**SIC Code:** 3699  
**SIC Description:** OTHER PETRO. & COAL

**PO Box No.:**  
**Country:**  
**Choice of Contact:**  
**Co Admin:**  
**Phone No. Admin:**

**--Details--**

**Waste Code:** 222  
**Waste Description:** HEAVY FUELS

---

**Site:** OTTAWA-CARLTON, REGIONAL MUN. OF 29-120

**Database:**

## LEES AVENUE TRANSIT STATION C/O 222 QUEEN STREET OTTAWA ON K1P 5Z3

GEN

|                          |                     |                           |  |
|--------------------------|---------------------|---------------------------|--|
| <b>Generator No.:</b>    | ON0303104           | <b>PO Box No.:</b>        |  |
| <b>Status:</b>           |                     | <b>Country:</b>           |  |
| <b>Approval Years:</b>   | 94,95,96            | <b>Choice of Contact:</b> |  |
| <b>Contam. Facility:</b> |                     | <b>Co Admin:</b>          |  |
| <b>MHSW Facility:</b>    |                     | <b>Phone No. Admin:</b>   |  |
| <b>SIC Code:</b>         | 3699                |                           |  |
| <b>SIC Description:</b>  | OTHER PETRO. & COAL |                           |  |

**--Details--**

|                           |             |
|---------------------------|-------------|
| <b>Waste Code:</b>        | 222         |
| <b>Waste Description:</b> | HEAVY FUELS |

**Site:** OTTAWA-CARLTON, REGIONAL MUNICIPAL  
(STORM WATER PUMPING STATION, LEES AVE) C/O 222 QUEEN STREET OTTAWA ON K1P 5Z3

**Database:**  
GEN

|                          |                     |                           |  |
|--------------------------|---------------------|---------------------------|--|
| <b>Generator No.:</b>    | ON0303103           | <b>PO Box No.:</b>        |  |
| <b>Status:</b>           |                     | <b>Country:</b>           |  |
| <b>Approval Years:</b>   | 86,87,88,89,90      | <b>Choice of Contact:</b> |  |
| <b>Contam. Facility:</b> |                     | <b>Co Admin:</b>          |  |
| <b>MHSW Facility:</b>    |                     | <b>Phone No. Admin:</b>   |  |
| <b>SIC Code:</b>         | 0000                |                           |  |
| <b>SIC Description:</b>  | *** NOT DEFINED *** |                           |  |

**Site:** CLEAN WATER WORKS  
LEES AVE @ OC TRANSPO TRANSIT WAY OTTAWA ON

**Database:**  
GEN

|                          |                                       |                           |  |
|--------------------------|---------------------------------------|---------------------------|--|
| <b>Generator No.:</b>    | ON2883524                             | <b>PO Box No.:</b>        |  |
| <b>Status:</b>           |                                       | <b>Country:</b>           |  |
| <b>Approval Years:</b>   | 2010                                  | <b>Choice of Contact:</b> |  |
| <b>Contam. Facility:</b> |                                       | <b>Co Admin:</b>          |  |
| <b>MHSW Facility:</b>    |                                       | <b>Phone No. Admin:</b>   |  |
| <b>SIC Code:</b>         | 238990                                |                           |  |
| <b>SIC Description:</b>  | All Other Specialty Trade Contractors |                           |  |

**--Details--**

|                           |             |
|---------------------------|-------------|
| <b>Waste Code:</b>        | 221         |
| <b>Waste Description:</b> | LIGHT FUELS |

**Site:** The Corporation of the Regional Municipality of Ottawa-Carleton  
City of Ottawa ON

**Database:**  
LIMO

|                           |               |                        |                 |
|---------------------------|---------------|------------------------|-----------------|
| <b>C of A No:</b>         | A460704       | <b>Site County:</b>    | Ottawa          |
| <b>C of A Issue Date:</b> | 6/1/1975      | <b>MOE Region:</b>     | Eastern         |
| <b>C of A Issued to:</b>  |               | <b>MOE District:</b>   | Ottawa          |
| <b>Operation Status:</b>  | Closed        | <b>Easting:</b>        |                 |
| <b>Landfill Type:</b>     |               | <b>Northing:</b>       |                 |
| <b>Total Site Area:</b>   |               | <b>Latitude:</b>       |                 |
| <b>Footprint:</b>         |               | <b>Longitude:</b>      |                 |
| <b>Tot Apprvd Capac:</b>  |               | <b>UTM Zone:</b>       |                 |
| <b>Tot Aprv Cp Unit:</b>  |               | <b>Data Source:</b>    | small landfills |
| <b>Fill Rate:</b>         |               | <b>Cntm Attn Zn:</b>   |                 |
| <b>Fill Rate Unit:</b>    |               | <b>Grndwtr Mntr:</b>   |                 |
| <b>Est Remain Cap:</b>    |               | <b>Surf Wtr Mntr:</b>  |                 |
| <b>ERC Volume Unit:</b>   |               | <b>Lst Rprting Yr:</b> |                 |
| <b>ERC Methodology:</b>   |               | <b>Fin Assrnce:</b>    |                 |
| <b>ERC Dt Last Det:</b>   |               | <b>Nat Attnuatn:</b>   |                 |
| <b>Total Waste Rec:</b>   |               | <b>Liners:</b>         |                 |
| <b>TWR Unit:</b>          |               | <b>Cvr Material:</b>   |                 |
| <b>TWR Methodology:</b>   |               |                        |                 |
| <b>Site Name:</b>         | RMOC Landfill |                        |                 |
| <b>Air Emmis Monitor:</b> |               |                        |                 |
| <b>Leachate Off-Site:</b> |               |                        |                 |



Leachate On Site:  
Landfill Gas Manag (P):  
Landfill Gas Manag (F):  
Landfill Gas Manag (E):  
Req Col Lndfl Gas:  
Lndfl Gas Cllected:  
Lndfl Gas Mntr:  
Service Area:  
Approved Waste Type:

---

**Site:** CANADIAN TIRE PIT STOP & PROPANE  
OTTAWA ON K2H5Z2

**Database:**  
**RST**

**Headcode:** 00921430  
**Headcode Desc:** OIL CHANGES & LUBRICATION SERVICE  
**Phone:** 6138299488  
**List Name:**  
**Description:**

---

**Site:** CANADIAN TIRE PIT STOP & PROPANE  
OTTAWA ON K2H 5Z2

**Database:**  
**RST**

**Headcode:** 00921430  
**Headcode Desc:** OIL CHANGES & LUBRICATION SERVICE  
**Phone:** 6138299488  
**List Name:**  
**Description:**

---

**Site:** Glenview Iron and Steel Ltd.<UNOFFICIAL>  
Hwy 417 - Woodroffe W. Bnd, On-Ramp Ottawa ON

**Database:**  
**SPL**

|                             |                                            |                              |                                                 |
|-----------------------------|--------------------------------------------|------------------------------|-------------------------------------------------|
| <b>Ref No:</b>              | 0000-5NA2HN                                | <b>Discharger Report:</b>    |                                                 |
| <b>Site No:</b>             |                                            | <b>Material Group:</b>       | Oil                                             |
| <b>Incident Dt:</b>         | 6/6/2003                                   | <b>Client Type:</b>          |                                                 |
| <b>Year:</b>                |                                            | <b>Sector Type:</b>          | Transport Truck                                 |
| <b>Incident Cause:</b>      | Other Transport Accident                   | <b>Source Type:</b>          |                                                 |
| <b>Incident Event:</b>      |                                            | <b>Nearest Watercourse:</b>  |                                                 |
| <b>Contaminant Code:</b>    | 13                                         | <b>Site Name:</b>            | HWY 417 - WOODROFFE W. BND, ON-RAMP<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL                                | <b>Site Address:</b>         |                                                 |
| <b>Contaminant Limit 1:</b> |                                            | <b>Site District Office:</b> | Ottawa                                          |
| <b>Contam Limit Freq 1:</b> |                                            | <b>Site County/District:</b> |                                                 |
| <b>Contaminant UN No 1:</b> |                                            | <b>Site Postal Code:</b>     |                                                 |
| <b>Contaminant Qty:</b>     | 50 L                                       | <b>Site Region:</b>          | Eastern                                         |
| <b>Environment Impact:</b>  | Not Anticipated                            | <b>Site Municipality:</b>    | Ottawa                                          |
| <b>Nature of Impact:</b>    | Soil Contamination                         | <b>Site Lot:</b>             |                                                 |
| <b>Receiving Medium:</b>    | Land                                       | <b>Site Conc:</b>            |                                                 |
| <b>Receiving Env:</b>       |                                            | <b>Northing:</b>             |                                                 |
| <b>Health/Env Conseq:</b>   |                                            | <b>Easting:</b>              |                                                 |
| <b>MOE Response:</b>        |                                            | <b>Site Geo Ref Accu:</b>    |                                                 |
| <b>Dt MOE Arvl on Scn:</b>  |                                            | <b>Site Geo Ref Meth:</b>    |                                                 |
| <b>MOE Reported Dt:</b>     | 6/6/2003                                   | <b>Site Map Datum:</b>       |                                                 |
| <b>Dt Document Closed:</b>  |                                            |                              |                                                 |
| <b>SAC Action Class:</b>    | Spill to Highway (Accident); Spill to Land |                              |                                                 |
| <b>Incident Reason:</b>     |                                            |                              |                                                 |
| <b>Incident Summary:</b>    | Ottawa Hwy 417 - MVA, diesel to ditch      |                              |                                                 |

---

**Site:** Unisource Canada, Inc.  
HWY 417-West near Km 117 on the Vanier Prk Way, Ottawa ON

**Database:**  
**SPL**

|                     |             |                           |                 |
|---------------------|-------------|---------------------------|-----------------|
| <b>Ref No:</b>      | 5066-7B6KDT | <b>Discharger Report:</b> |                 |
| <b>Site No:</b>     |             | <b>Material Group:</b>    |                 |
| <b>Incident Dt:</b> |             | <b>Client Type:</b>       |                 |
| <b>Year:</b>        |             | <b>Sector Type:</b>       | Transport Truck |

|                             |                                                              |                              |                                   |
|-----------------------------|--------------------------------------------------------------|------------------------------|-----------------------------------|
| <b>Incident Cause:</b>      | Other Transport Accident                                     | <b>Source Type:</b>          |                                   |
| <b>Incident Event:</b>      |                                                              | <b>Nearest Watercourse:</b>  |                                   |
| <b>Contaminant Code:</b>    | 13                                                           | <b>Site Name:</b>            | MVA of a 10 ton truck<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL                                                  | <b>Site Address:</b>         |                                   |
| <b>Contaminant Limit 1:</b> |                                                              | <b>Site District Office:</b> | Ottawa                            |
| <b>Contam Limit Freq 1:</b> |                                                              | <b>Site County/District:</b> |                                   |
| <b>Contaminant UN No 1:</b> |                                                              | <b>Site Postal Code:</b>     |                                   |
| <b>Contaminant Qty:</b>     | 250 L                                                        | <b>Site Region:</b>          |                                   |
| <b>Environment Impact:</b>  | Not Anticipated                                              | <b>Site Municipality:</b>    | Ottawa                            |
| <b>Nature of Impact:</b>    |                                                              | <b>Site Lot:</b>             |                                   |
| <b>Receiving Medium:</b>    |                                                              | <b>Site Conc:</b>            |                                   |
| <b>Receiving Env:</b>       |                                                              | <b>Northing:</b>             |                                   |
| <b>Health/Env Conseq:</b>   |                                                              | <b>Easting:</b>              |                                   |
| <b>MOE Response:</b>        | No Field Response                                            | <b>Site Geo Ref Accu:</b>    |                                   |
| <b>Dt MOE Arvl on Scn:</b>  |                                                              | <b>Site Geo Ref Meth:</b>    |                                   |
| <b>MOE Reported Dt:</b>     | 1/24/2008                                                    | <b>Site Map Datum:</b>       |                                   |
| <b>Dt Document Closed:</b>  | 2/22/2008                                                    |                              |                                   |
| <b>SAC Action Class:</b>    | Highway Spills (usually highway accidents)                   |                              |                                   |
| <b>Incident Reason:</b>     | Unknown - Reason not determined                              |                              |                                   |
| <b>Incident Summary:</b>    | TT MVA- >250L diesel HWY 417 W/ Drain-all to clean up spill. |                              |                                   |

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|              |                                                                                                                  |                                |
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| <b>Site:</b> | <b>City of Ottawa</b><br><b>Hwy 417 West bound, between the Carling Ave Exit and the Maitland Exit Ottawa ON</b> | <b>Database:</b><br><b>SPL</b> |
|--------------|------------------------------------------------------------------------------------------------------------------|--------------------------------|

|                             |                                                   |                              |                                        |
|-----------------------------|---------------------------------------------------|------------------------------|----------------------------------------|
| <b>Ref No:</b>              | 5074-6J2RLX                                       | <b>Discharger Report:</b>    | 0                                      |
| <b>Site No:</b>             |                                                   | <b>Material Group:</b>       | Chemical                               |
| <b>Incident Dt:</b>         | 11/11/2005                                        | <b>Client Type:</b>          |                                        |
| <b>Year:</b>                |                                                   | <b>Sector Type:</b>          | Other Motor Vehicle                    |
| <b>Incident Cause:</b>      | Pipe Or Hose Leak                                 | <b>Source Type:</b>          |                                        |
| <b>Incident Event:</b>      |                                                   | <b>Nearest Watercourse:</b>  |                                        |
| <b>Contaminant Code:</b>    |                                                   | <b>Site Name:</b>            | Bus # 6070 antifreeze leak<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | ETHYLENE GLYCOL (ANTIFREEZE)                      | <b>Site Address:</b>         |                                        |
| <b>Contaminant Limit 1:</b> |                                                   | <b>Site District Office:</b> | Ottawa                                 |
| <b>Contam Limit Freq 1:</b> |                                                   | <b>Site County/District:</b> |                                        |
| <b>Contaminant UN No 1:</b> |                                                   | <b>Site Postal Code:</b>     |                                        |
| <b>Contaminant Qty:</b>     |                                                   | <b>Site Region:</b>          |                                        |
| <b>Environment Impact:</b>  | Confirmed                                         | <b>Site Municipality:</b>    | Ottawa                                 |
| <b>Nature of Impact:</b>    | Soil Contamination                                | <b>Site Lot:</b>             |                                        |
| <b>Receiving Medium:</b>    | Land                                              | <b>Site Conc:</b>            |                                        |
| <b>Receiving Env:</b>       |                                                   | <b>Northing:</b>             |                                        |
| <b>Health/Env Conseq:</b>   |                                                   | <b>Easting:</b>              |                                        |
| <b>MOE Response:</b>        |                                                   | <b>Site Geo Ref Accu:</b>    |                                        |
| <b>Dt MOE Arvl on Scn:</b>  |                                                   | <b>Site Geo Ref Meth:</b>    |                                        |
| <b>MOE Reported Dt:</b>     | 11/11/2005                                        | <b>Site Map Datum:</b>       |                                        |
| <b>Dt Document Closed:</b>  |                                                   |                              |                                        |
| <b>SAC Action Class:</b>    | Land Spills                                       |                              |                                        |
| <b>Incident Reason:</b>     | Unknown - Reason not determined                   |                              |                                        |
| <b>Incident Summary:</b>    | OC Transpo (Ottawa): 20L antifreeze to grnd, clng |                              |                                        |

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| <b>Site:</b> | <b>UNKNOWN</b><br><b>BLAIR STATION AND QUEENSWAY OTTAWA CITY ON</b> | <b>Database:</b><br><b>SPL</b> |
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|                             |                      |                              |       |
|-----------------------------|----------------------|------------------------------|-------|
| <b>Ref No:</b>              | 239018               | <b>Discharger Report:</b>    |       |
| <b>Site No:</b>             |                      | <b>Material Group:</b>       |       |
| <b>Incident Dt:</b>         | 9/11/2002            | <b>Client Type:</b>          |       |
| <b>Year:</b>                |                      | <b>Sector Type:</b>          |       |
| <b>Incident Cause:</b>      | UNKNOWN              | <b>Source Type:</b>          |       |
| <b>Incident Event:</b>      |                      | <b>Nearest Watercourse:</b>  |       |
| <b>Contaminant Code:</b>    |                      | <b>Site Name:</b>            |       |
| <b>Contaminant Name:</b>    |                      | <b>Site Address:</b>         |       |
| <b>Contaminant Limit 1:</b> |                      | <b>Site District Office:</b> |       |
| <b>Contam Limit Freq 1:</b> |                      | <b>Site County/District:</b> |       |
| <b>Contaminant UN No 1:</b> |                      | <b>Site Postal Code:</b>     |       |
| <b>Contaminant Qty:</b>     |                      | <b>Site Region:</b>          |       |
| <b>Environment Impact:</b>  | POSSIBLE             | <b>Site Municipality:</b>    | 20107 |
| <b>Nature of Impact:</b>    | Water course or lake | <b>Site Lot:</b>             |       |
| <b>Receiving Medium:</b>    | LAND, WATER          | <b>Site Conc:</b>            |       |

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|----------------------------|------------------------------------------------------------------|---------------------------|
| <b>Receiving Env:</b>      |                                                                  | <b>Northings:</b>         |
| <b>Health/Env Conseq:</b>  |                                                                  | <b>Easting:</b>           |
| <b>MOE Response:</b>       |                                                                  | <b>Site Geo Ref Accu:</b> |
| <b>Dt MOE Arvl on Scn:</b> |                                                                  | <b>Site Geo Ref Meth:</b> |
| <b>MOE Reported Dt:</b>    | 9/11/2002                                                        | <b>Site Map Datum:</b>    |
| <b>Dt Document Closed:</b> |                                                                  |                           |
| <b>SAC Action Class:</b>   |                                                                  |                           |
| <b>Incident Reason:</b>    | UNKNOWN                                                          |                           |
| <b>Incident Summary:</b>   | SOURCE UNK: UNK VOLUME OF ANTIFREEZE IN THE STORMSEWER, CLEANING |                           |

|              |                                                           |                  |
|--------------|-----------------------------------------------------------|------------------|
| <b>Site:</b> | <b>Waste Services Inc.</b>                                | <b>Database:</b> |
|              | <b>Highway 417 East bound West of Terry Fox Ottawa ON</b> | <b>SPL</b>       |

|                             |                                                      |                              |                                                    |
|-----------------------------|------------------------------------------------------|------------------------------|----------------------------------------------------|
| <b>Ref No:</b>              | 1683-5S3Q8B                                          | <b>Discharger Report:</b>    |                                                    |
| <b>Site No:</b>             |                                                      | <b>Material Group:</b>       | Oil                                                |
| <b>Incident Dt:</b>         | 10/6/2003                                            | <b>Client Type:</b>          |                                                    |
| <b>Year:</b>                |                                                      | <b>Sector Type:</b>          | Other                                              |
| <b>Incident Cause:</b>      | Other Transport Accident                             | <b>Source Type:</b>          |                                                    |
| <b>Incident Event:</b>      |                                                      | <b>Nearest Watercourse:</b>  |                                                    |
| <b>Contaminant Code:</b>    | 15                                                   | <b>Site Name:</b>            | HYDRAULIC OIL LEAK - HWY. 417 - OTTAWA<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | HYDRAULIC OIL                                        | <b>Site Address:</b>         |                                                    |
| <b>Contaminant Limit 1:</b> |                                                      | <b>Site District Office:</b> | Ottawa                                             |
| <b>Contam Limit Freq 1:</b> |                                                      | <b>Site County/District:</b> |                                                    |
| <b>Contaminant UN No 1:</b> |                                                      | <b>Site Postal Code:</b>     |                                                    |
| <b>Contaminant Qty:</b>     | 60 L                                                 | <b>Site Region:</b>          | Eastern                                            |
| <b>Environment Impact:</b>  | Possible                                             | <b>Site Municipality:</b>    | Ottawa                                             |
| <b>Nature of Impact:</b>    | Soil Contamination; Surface Water Pollution          | <b>Site Lot:</b>             |                                                    |
| <b>Receiving Medium:</b>    | Land & Water                                         | <b>Site Conc:</b>            |                                                    |
| <b>Receiving Env:</b>       |                                                      | <b>Northings:</b>            |                                                    |
| <b>Health/Env Conseq:</b>   |                                                      | <b>Easting:</b>              |                                                    |
| <b>MOE Response:</b>        |                                                      | <b>Site Geo Ref Accu:</b>    |                                                    |
| <b>Dt MOE Arvl on Scn:</b>  |                                                      | <b>Site Geo Ref Meth:</b>    |                                                    |
| <b>MOE Reported Dt:</b>     | 10/6/2003                                            | <b>Site Map Datum:</b>       |                                                    |
| <b>Dt Document Closed:</b>  |                                                      |                              |                                                    |
| <b>SAC Action Class:</b>    | Spill to Land                                        |                              |                                                    |
| <b>Incident Reason:</b>     | Equipment Failure - Malfunction of system components |                              |                                                    |
| <b>Incident Summary:</b>    | Waste Services Inc. - Hydraulic oil spill            |                              |                                                    |

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| <b>Site:</b> | <b>Loblaws Company East&lt;UNOFFICIAL&gt;</b>                                                                            | <b>Database:</b> |
|              | <b>Queensway, from Greenbank Exit to 1735 Iris Road (Pine Crest Shopping Centre - infront of IKEA)&lt;UNOFFICIAL&gt;</b> | <b>SPL</b>       |
|              | <b>Ottawa ON</b>                                                                                                         |                  |

|                             |                                 |                              |                                                  |
|-----------------------------|---------------------------------|------------------------------|--------------------------------------------------|
| <b>Ref No:</b>              | 6833-6H4GWP                     | <b>Discharger Report:</b>    | 0                                                |
| <b>Site No:</b>             |                                 | <b>Material Group:</b>       | Oil                                              |
| <b>Incident Dt:</b>         | 10/12/2005                      | <b>Client Type:</b>          |                                                  |
| <b>Year:</b>                |                                 | <b>Sector Type:</b>          | Other Motor Vehicle                              |
| <b>Incident Cause:</b>      | Pipe Or Hose Leak               | <b>Source Type:</b>          |                                                  |
| <b>Incident Event:</b>      |                                 | <b>Nearest Watercourse:</b>  |                                                  |
| <b>Contaminant Code:</b>    |                                 | <b>Site Name:</b>            | Queensway, from Greenbank Exit to 1735 Iris Road |
| <b>Contaminant Name:</b>    | DIESEL FUEL                     | <b>Site Address:</b>         |                                                  |
| <b>Contaminant Limit 1:</b> |                                 | <b>Site District Office:</b> | Ottawa                                           |
| <b>Contam Limit Freq 1:</b> |                                 | <b>Site County/District:</b> |                                                  |
| <b>Contaminant UN No 1:</b> |                                 | <b>Site Postal Code:</b>     |                                                  |
| <b>Contaminant Qty:</b>     |                                 | <b>Site Region:</b>          |                                                  |
| <b>Environment Impact:</b>  | Not Anticipated                 | <b>Site Municipality:</b>    | Ottawa                                           |
| <b>Nature of Impact:</b>    |                                 | <b>Site Lot:</b>             |                                                  |
| <b>Receiving Medium:</b>    | Land                            | <b>Site Conc:</b>            |                                                  |
| <b>Receiving Env:</b>       |                                 | <b>Northings:</b>            |                                                  |
| <b>Health/Env Conseq:</b>   |                                 | <b>Easting:</b>              |                                                  |
| <b>MOE Response:</b>        |                                 | <b>Site Geo Ref Accu:</b>    |                                                  |
| <b>Dt MOE Arvl on Scn:</b>  |                                 | <b>Site Geo Ref Meth:</b>    |                                                  |
| <b>MOE Reported Dt:</b>     | 10/12/2005                      | <b>Site Map Datum:</b>       |                                                  |
| <b>Dt Document Closed:</b>  |                                 |                              |                                                  |
| <b>SAC Action Class:</b>    | Land Spills                     |                              |                                                  |
| <b>Incident Reason:</b>     | Unknown - Reason not determined |                              |                                                  |

**Incident Summary:**

Loblaws: 10 to 15 L diesel to road/parking lot

**Site:** TRANSPORT TRUCK  
QUEENSWAY MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY ON**Database:**  
SPL

|                             |                                                        |                              |                 |
|-----------------------------|--------------------------------------------------------|------------------------------|-----------------|
| <b>Ref No:</b>              | 224201                                                 | <b>Discharger Report:</b>    |                 |
| <b>Site No:</b>             |                                                        | <b>Material Group:</b>       |                 |
| <b>Incident Dt:</b>         | 4/19/2002                                              | <b>Client Type:</b>          |                 |
| <b>Year:</b>                |                                                        | <b>Sector Type:</b>          |                 |
| <b>Incident Cause:</b>      | OTHER TRANSPORTATION ACCIDENT                          | <b>Source Type:</b>          |                 |
| <b>Incident Event:</b>      |                                                        | <b>Nearest Watercourse:</b>  |                 |
| <b>Contaminant Code:</b>    |                                                        | <b>Site Name:</b>            |                 |
| <b>Contaminant Name:</b>    |                                                        | <b>Site Address:</b>         |                 |
| <b>Contaminant Limit 1:</b> |                                                        | <b>Site District Office:</b> |                 |
| <b>Contam Limit Freq 1:</b> |                                                        | <b>Site County/District:</b> |                 |
| <b>Contaminant UN No 1:</b> |                                                        | <b>Site Postal Code:</b>     |                 |
| <b>Contaminant Qty:</b>     |                                                        | <b>Site Region:</b>          |                 |
| <b>Environment Impact:</b>  | CONFIRMED                                              | <b>Site Municipality:</b>    | 20107           |
| <b>Nature of Impact:</b>    | Soil contamination                                     | <b>Site Lot:</b>             |                 |
| <b>Receiving Medium:</b>    | LAND                                                   | <b>Site Conc:</b>            |                 |
| <b>Receiving Env:</b>       |                                                        | <b>Northing:</b>             |                 |
| <b>Health/Env Conseq:</b>   |                                                        | <b>Easting:</b>              | OPP-KANATA; MTO |
| <b>MOE Response:</b>        |                                                        | <b>Site Geo Ref Accu:</b>    |                 |
| <b>Dt MOE Arvl on Scn:</b>  |                                                        | <b>Site Geo Ref Meth:</b>    |                 |
| <b>MOE Reported Dt:</b>     | 4/19/2002                                              | <b>Site Map Datum:</b>       |                 |
| <b>Dt Document Closed:</b>  |                                                        |                              |                 |
| <b>SAC Action Class:</b>    |                                                        |                              |                 |
| <b>Incident Reason:</b>     | ERROR                                                  |                              |                 |
| <b>Incident Summary:</b>    | LOBLAWS: 450L DIESEL FROMTRUCK TO ROAD ONLY; OPP; MTO. |                              |                 |

**Site:** City of Ottawa  
Highway 417 Ottawa ON**Database:**  
SPL

|                             |                                               |                              |                                       |
|-----------------------------|-----------------------------------------------|------------------------------|---------------------------------------|
| <b>Ref No:</b>              | 3043-7QMTYH                                   | <b>Discharger Report:</b>    |                                       |
| <b>Site No:</b>             |                                               | <b>Material Group:</b>       |                                       |
| <b>Incident Dt:</b>         |                                               | <b>Client Type:</b>          |                                       |
| <b>Year:</b>                |                                               | <b>Sector Type:</b>          | Other                                 |
| <b>Incident Cause:</b>      | Pipe Or Hose Leak                             | <b>Source Type:</b>          |                                       |
| <b>Incident Event:</b>      |                                               | <b>Nearest Watercourse:</b>  |                                       |
| <b>Contaminant Code:</b>    |                                               | <b>Site Name:</b>            | EB Merge Lane Hwy 417 & Eagleson Road |
| <b>Contaminant Name:</b>    | ENGINE OIL                                    | <b>Site Address:</b>         |                                       |
| <b>Contaminant Limit 1:</b> |                                               | <b>Site District Office:</b> |                                       |
| <b>Contam Limit Freq 1:</b> |                                               | <b>Site County/District:</b> |                                       |
| <b>Contaminant UN No 1:</b> |                                               | <b>Site Postal Code:</b>     |                                       |
| <b>Contaminant Qty:</b>     | 10 L                                          | <b>Site Region:</b>          |                                       |
| <b>Environment Impact:</b>  | Not Anticipated                               | <b>Site Municipality:</b>    | Ottawa                                |
| <b>Nature of Impact:</b>    | Other Impact(s)                               | <b>Site Lot:</b>             |                                       |
| <b>Receiving Medium:</b>    |                                               | <b>Site Conc:</b>            |                                       |
| <b>Receiving Env:</b>       |                                               | <b>Northing:</b>             | NA                                    |
| <b>Health/Env Conseq:</b>   |                                               | <b>Easting:</b>              | NA                                    |
| <b>MOE Response:</b>        |                                               | <b>Site Geo Ref Accu:</b>    |                                       |
| <b>Dt MOE Arvl on Scn:</b>  |                                               | <b>Site Geo Ref Meth:</b>    |                                       |
| <b>MOE Reported Dt:</b>     | 3/30/2009                                     | <b>Site Map Datum:</b>       |                                       |
| <b>Dt Document Closed:</b>  |                                               |                              |                                       |
| <b>SAC Action Class:</b>    | Primary Assessment of Incident                |                              |                                       |
| <b>Incident Reason:</b>     | Unknown - Reason not determined               |                              |                                       |
| <b>Incident Summary:</b>    | OC Transpo: 10L engine oil to grnd on Hwy 417 |                              |                                       |

**Site:** LECLAIR FUELS LTD.  
HWY 417 BTWN INNIS & PKWY TANK TRUCK (CARGO) OTTAWA CITY ON**Database:**  
SPL

|                     |           |                           |  |
|---------------------|-----------|---------------------------|--|
| <b>Ref No:</b>      | 4525      | <b>Discharger Report:</b> |  |
| <b>Site No:</b>     |           | <b>Material Group:</b>    |  |
| <b>Incident Dt:</b> | 5/31/1988 | <b>Client Type:</b>       |  |
| <b>Year:</b>        |           | <b>Sector Type:</b>       |  |

|                             |                                              |                              |       |
|-----------------------------|----------------------------------------------|------------------------------|-------|
| <b>Incident Cause:</b>      | ABOVE-GROUND TANK LEAK                       | <b>Source Type:</b>          |       |
| <b>Incident Event:</b>      |                                              | <b>Nearest Watercourse:</b>  |       |
| <b>Contaminant Code:</b>    |                                              | <b>Site Name:</b>            |       |
| <b>Contaminant Name:</b>    |                                              | <b>Site Address:</b>         |       |
| <b>Contaminant Limit 1:</b> |                                              | <b>Site District Office:</b> |       |
| <b>Contam Limit Freq 1:</b> |                                              | <b>Site County/District:</b> |       |
| <b>Contaminant UN No 1:</b> |                                              | <b>Site Postal Code:</b>     |       |
| <b>Contaminant Qty:</b>     |                                              | <b>Site Region:</b>          |       |
| <b>Environment Impact:</b>  |                                              | <b>Site Municipality:</b>    | 20101 |
| <b>Nature of Impact:</b>    |                                              | <b>Site Lot:</b>             |       |
| <b>Receiving Medium:</b>    | LAND                                         | <b>Site Conc:</b>            |       |
| <b>Receiving Env:</b>       |                                              | <b>Northing:</b>             |       |
| <b>Health/Env Conseq:</b>   |                                              | <b>Easting:</b>              |       |
| <b>MOE Response:</b>        |                                              | <b>Site Geo Ref Accu:</b>    |       |
| <b>Dt MOE Arvl on Scn:</b>  |                                              | <b>Site Geo Ref Meth:</b>    |       |
| <b>MOE Reported Dt:</b>     | 5/31/1988                                    | <b>Site Map Datum:</b>       |       |
| <b>Dt Document Closed:</b>  |                                              |                              |       |
| <b>SAC Action Class:</b>    |                                              |                              |       |
| <b>Incident Reason:</b>     | UNKNOWN                                      |                              |       |
| <b>Incident Summary:</b>    | 15 LTR. DIESEL TO HWY. FROM TRUCK FUEL TANK. |                              |       |

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|--------------|--------------------------------------------------------------------------------------------------|------------------|
| <b>Site:</b> | <b>TRANSPORT TRUCK</b>                                                                           | <b>Database:</b> |
|              | <b>HWY 417 BETWEEN NICOLAS AND VANIER PARKWAY MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY ON</b> | <b>SPL</b>       |

|                             |                                                                  |                              |       |
|-----------------------------|------------------------------------------------------------------|------------------------------|-------|
| <b>Ref No:</b>              | 240047                                                           | <b>Discharger Report:</b>    |       |
| <b>Site No:</b>             |                                                                  | <b>Material Group:</b>       |       |
| <b>Incident Dt:</b>         | 9/20/2002                                                        | <b>Client Type:</b>          |       |
| <b>Year:</b>                |                                                                  | <b>Sector Type:</b>          |       |
| <b>Incident Cause:</b>      | BLADDER FAILURE                                                  | <b>Source Type:</b>          |       |
| <b>Incident Event:</b>      |                                                                  | <b>Nearest Watercourse:</b>  |       |
| <b>Contaminant Code:</b>    |                                                                  | <b>Site Name:</b>            |       |
| <b>Contaminant Name:</b>    |                                                                  | <b>Site Address:</b>         |       |
| <b>Contaminant Limit 1:</b> |                                                                  | <b>Site District Office:</b> |       |
| <b>Contam Limit Freq 1:</b> |                                                                  | <b>Site County/District:</b> |       |
| <b>Contaminant UN No 1:</b> |                                                                  | <b>Site Postal Code:</b>     |       |
| <b>Contaminant Qty:</b>     |                                                                  | <b>Site Region:</b>          |       |
| <b>Environment Impact:</b>  | POSSIBLE                                                         | <b>Site Municipality:</b>    | 20107 |
| <b>Nature of Impact:</b>    | Water course or lake                                             | <b>Site Lot:</b>             |       |
| <b>Receiving Medium:</b>    | LAND, WATER                                                      | <b>Site Conc:</b>            |       |
| <b>Receiving Env:</b>       |                                                                  | <b>Northing:</b>             |       |
| <b>Health/Env Conseq:</b>   |                                                                  | <b>Easting:</b>              |       |
| <b>MOE Response:</b>        |                                                                  | <b>Site Geo Ref Accu:</b>    |       |
| <b>Dt MOE Arvl on Scn:</b>  |                                                                  | <b>Site Geo Ref Meth:</b>    |       |
| <b>MOE Reported Dt:</b>     | 9/20/2002                                                        | <b>Site Map Datum:</b>       |       |
| <b>Dt Document Closed:</b>  |                                                                  |                              |       |
| <b>SAC Action Class:</b>    |                                                                  |                              |       |
| <b>Incident Reason:</b>     | DAMAGE BY MOVING EQUIPMENT                                       |                              |       |
| <b>Incident Summary:</b>    | MOLSON'S:300L DIESEL TO GRD,50L TO SEWER, CONTAINED AND CLEANING |                              |       |

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|--------------|-----------------------------------------------------------------------------|------------------|
| <b>Site:</b> | <b>CITY OF OTTAWA SNOW PLOW&lt;UNOFFICIAL&gt;</b>                           | <b>Database:</b> |
|              | <b>TERRY FOX DRIVE AT THE HWY. 417 OVERPASS&lt;UNOFFICIAL&gt; Ottawa ON</b> | <b>SPL</b>       |

|                             |                                    |                              |                                                      |
|-----------------------------|------------------------------------|------------------------------|------------------------------------------------------|
| <b>Ref No:</b>              | 0881-5HS47B                        | <b>Discharger Report:</b>    |                                                      |
| <b>Site No:</b>             |                                    | <b>Material Group:</b>       | Oil                                                  |
| <b>Incident Dt:</b>         | 1/13/2003                          | <b>Client Type:</b>          |                                                      |
| <b>Year:</b>                |                                    | <b>Sector Type:</b>          |                                                      |
| <b>Incident Cause:</b>      | Container Leak (Fuel Tank Barrels) | <b>Source Type:</b>          |                                                      |
| <b>Incident Event:</b>      |                                    | <b>Nearest Watercourse:</b>  |                                                      |
| <b>Contaminant Code:</b>    | 13                                 | <b>Site Name:</b>            | TERRY FOX DRIVE AT THE HWY. 417 OVERPASS<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL                        | <b>Site Address:</b>         |                                                      |
| <b>Contaminant Limit 1:</b> |                                    | <b>Site District Office:</b> | Ottawa                                               |
| <b>Contam Limit Freq 1:</b> |                                    | <b>Site County/District:</b> |                                                      |
| <b>Contaminant UN No 1:</b> |                                    | <b>Site Postal Code:</b>     |                                                      |
| <b>Contaminant Qty:</b>     | 180 L                              | <b>Site Region:</b>          | Eastern                                              |
| <b>Environment Impact:</b>  | Not Anticipated                    | <b>Site Municipality:</b>    | Ottawa                                               |
| <b>Nature of Impact:</b>    |                                    | <b>Site Lot:</b>             |                                                      |

**Receiving Medium:** Land  
**Receiving Env:**  
**Health/Env Conseq:**  
**MOE Response:**  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 1/13/2003  
**Dt Document Closed:**  
**SAC Action Class:** Spill to Land  
**Incident Reason:** Error- Operator error  
**Incident Summary:** CITY OF OTTAWA - 180 L OF DIESEL FUEL TO GROUND.

**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Geo Ref Meth:**  
**Site Map Datum:**

**Site:** Waste Management Inc.  
 HWY 417 EASTBOUND, ST. LAURENT EXIT (115)<UNOFFICIAL> Ottawa ON

**Database:**  
 SPL

|                             |                                                      |                              |                     |
|-----------------------------|------------------------------------------------------|------------------------------|---------------------|
| <b>Ref No:</b>              | 8781-6L7M7T                                          | <b>Discharger Report:</b>    |                     |
| <b>Site No:</b>             |                                                      | <b>Material Group:</b>       | Oils                |
| <b>Incident Dt:</b>         | 1/19/2006                                            | <b>Client Type:</b>          |                     |
| <b>Year:</b>                |                                                      | <b>Sector Type:</b>          | Other Motor Vehicle |
| <b>Incident Cause:</b>      |                                                      | <b>Source Type:</b>          |                     |
| <b>Incident Event:</b>      |                                                      | <b>Nearest Watercourse:</b>  |                     |
| <b>Contaminant Code:</b>    | 15                                                   | <b>Site Name:</b>            |                     |
| <b>Contaminant Name:</b>    | HYDRAULIC OIL                                        | <b>Site Address:</b>         |                     |
| <b>Contaminant Limit 1:</b> |                                                      | <b>Site District Office:</b> | Ottawa              |
| <b>Contam Limit Freq 1:</b> |                                                      | <b>Site County/District:</b> |                     |
| <b>Contaminant UN No 1:</b> |                                                      | <b>Site Postal Code:</b>     |                     |
| <b>Contaminant Qty:</b>     | 200 L                                                | <b>Site Region:</b>          |                     |
| <b>Environment Impact:</b>  | Not Anticipated                                      | <b>Site Municipality:</b>    | Ottawa              |
| <b>Nature of Impact:</b>    | Soil Contamination                                   | <b>Site Lot:</b>             |                     |
| <b>Receiving Medium:</b>    | Land                                                 | <b>Site Conc:</b>            |                     |
| <b>Receiving Env:</b>       |                                                      | <b>Northing:</b>             |                     |
| <b>Health/Env Conseq:</b>   |                                                      | <b>Easting:</b>              |                     |
| <b>MOE Response:</b>        |                                                      | <b>Site Geo Ref Accu:</b>    |                     |
| <b>Dt MOE Arvl on Scn:</b>  |                                                      | <b>Site Geo Ref Meth:</b>    |                     |
| <b>MOE Reported Dt:</b>     | 1/19/2006                                            | <b>Site Map Datum:</b>       |                     |
| <b>Dt Document Closed:</b>  |                                                      |                              |                     |
| <b>SAC Action Class:</b>    |                                                      |                              |                     |
| <b>Incident Reason:</b>     |                                                      |                              |                     |
| <b>Incident Summary:</b>    | HWY 417: garbage truck fire, 45 gal hyd. oil to road |                              |                     |

**Site:** Thermal Shell  
 Highway 417 West of Eagleson Rd Ottawa ON

**Database:**  
 SPL

|                             |                                                    |                              |                               |
|-----------------------------|----------------------------------------------------|------------------------------|-------------------------------|
| <b>Ref No:</b>              | 2847-5NPPU5                                        | <b>Discharger Report:</b>    |                               |
| <b>Site No:</b>             |                                                    | <b>Material Group:</b>       | Oil                           |
| <b>Incident Dt:</b>         | 6/20/2003                                          | <b>Client Type:</b>          |                               |
| <b>Year:</b>                |                                                    | <b>Sector Type:</b>          |                               |
| <b>Incident Cause:</b>      | Container Leak (Fuel Tank Barrels)                 | <b>Source Type:</b>          |                               |
| <b>Incident Event:</b>      |                                                    | <b>Nearest Watercourse:</b>  |                               |
| <b>Contaminant Code:</b>    | 13                                                 | <b>Site Name:</b>            | THERMASHELL TRUCK<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | FUEL OIL                                           | <b>Site Address:</b>         |                               |
| <b>Contaminant Limit 1:</b> |                                                    | <b>Site District Office:</b> | Ottawa                        |
| <b>Contam Limit Freq 1:</b> |                                                    | <b>Site County/District:</b> |                               |
| <b>Contaminant UN No 1:</b> |                                                    | <b>Site Postal Code:</b>     |                               |
| <b>Contaminant Qty:</b>     |                                                    | <b>Site Region:</b>          | Eastern                       |
| <b>Environment Impact:</b>  | Possible                                           | <b>Site Municipality:</b>    | Ottawa                        |
| <b>Nature of Impact:</b>    | Soil Contamination                                 | <b>Site Lot:</b>             |                               |
| <b>Receiving Medium:</b>    | Land                                               | <b>Site Conc:</b>            |                               |
| <b>Receiving Env:</b>       |                                                    | <b>Northing:</b>             |                               |
| <b>Health/Env Conseq:</b>   |                                                    | <b>Easting:</b>              |                               |
| <b>MOE Response:</b>        |                                                    | <b>Site Geo Ref Accu:</b>    |                               |
| <b>Dt MOE Arvl on Scn:</b>  |                                                    | <b>Site Geo Ref Meth:</b>    |                               |
| <b>MOE Reported Dt:</b>     | 6/20/2003                                          | <b>Site Map Datum:</b>       |                               |
| <b>Dt Document Closed:</b>  |                                                    |                              |                               |
| <b>SAC Action Class:</b>    | Spill to Land                                      |                              |                               |
| <b>Incident Reason:</b>     | Unknown - Reason not determined                    |                              |                               |
| <b>Incident Summary:</b>    | Spill:Thermashell truck- 20L of fuel oil to ground |                              |                               |

**Site:** **Ferguson Fuels<UNOFFICIAL>**  
**HWY 417 EASTBOUND AT THE EAGLESON OFF RAMP<UNOFFICIAL> Ottawa ON**

**Database:**  
**SPL**

|                             |                                                           |                              |                     |
|-----------------------------|-----------------------------------------------------------|------------------------------|---------------------|
| <b>Ref No:</b>              | 2342-6QAQYF                                               | <b>Discharger Report:</b>    |                     |
| <b>Site No:</b>             |                                                           | <b>Material Group:</b>       | Oils                |
| <b>Incident Dt:</b>         | 5/30/2006                                                 | <b>Client Type:</b>          |                     |
| <b>Year:</b>                |                                                           | <b>Sector Type:</b>          | Other Motor Vehicle |
| <b>Incident Cause:</b>      | Other Transport Accident                                  | <b>Source Type:</b>          |                     |
| <b>Incident Event:</b>      |                                                           | <b>Nearest Watercourse:</b>  |                     |
| <b>Contaminant Code:</b>    | 13                                                        | <b>Site Name:</b>            |                     |
| <b>Contaminant Name:</b>    | DIESEL FUEL                                               | <b>Site Address:</b>         |                     |
| <b>Contaminant Limit 1:</b> |                                                           | <b>Site District Office:</b> | Ottawa              |
| <b>Contam Limit Freq 1:</b> |                                                           | <b>Site County/District:</b> |                     |
| <b>Contaminant UN No 1:</b> |                                                           | <b>Site Postal Code:</b>     |                     |
| <b>Contaminant Qty:</b>     | 60 L                                                      | <b>Site Region:</b>          |                     |
| <b>Environment Impact:</b>  | Confirmed                                                 | <b>Site Municipality:</b>    | Ottawa              |
| <b>Nature of Impact:</b>    | Soil Contamination; Surface Water Pollution               | <b>Site Lot:</b>             |                     |
| <b>Receiving Medium:</b>    | Land & Water                                              | <b>Site Conc:</b>            |                     |
| <b>Receiving Env:</b>       |                                                           | <b>Northing:</b>             |                     |
| <b>Health/Env Conseq:</b>   |                                                           | <b>Easting:</b>              |                     |
| <b>MOE Response:</b>        |                                                           | <b>Site Geo Ref Accu:</b>    |                     |
| <b>Dt MOE Arvl on Scn:</b>  |                                                           | <b>Site Geo Ref Meth:</b>    |                     |
| <b>MOE Reported Dt:</b>     | 5/30/2006                                                 | <b>Site Map Datum:</b>       |                     |
| <b>Dt Document Closed:</b>  |                                                           |                              |                     |
| <b>SAC Action Class:</b>    |                                                           |                              |                     |
| <b>Incident Reason:</b>     |                                                           |                              |                     |
| <b>Incident Summary:</b>    | Ferguson Fuels ~60 L diesel spill, Hwy 417, Eagleson exit |                              |                     |

**Site:** **TRANSPORT TRUCK**  
**HWY 417 AT MILE MARKER 5, EASTBOUND MOTOR VEHICLE (OPERATING FLUID) OTTAWA CITY ON**

**Database:**  
**SPL**

|                             |                                                                       |                              |         |
|-----------------------------|-----------------------------------------------------------------------|------------------------------|---------|
| <b>Ref No:</b>              | 233267                                                                | <b>Discharger Report:</b>    |         |
| <b>Site No:</b>             |                                                                       | <b>Material Group:</b>       |         |
| <b>Incident Dt:</b>         | 7/25/2002                                                             | <b>Client Type:</b>          |         |
| <b>Year:</b>                |                                                                       | <b>Sector Type:</b>          |         |
| <b>Incident Cause:</b>      | OTHER TRANSPORTATION ACCIDENT                                         | <b>Source Type:</b>          |         |
| <b>Incident Event:</b>      |                                                                       | <b>Nearest Watercourse:</b>  |         |
| <b>Contaminant Code:</b>    |                                                                       | <b>Site Name:</b>            |         |
| <b>Contaminant Name:</b>    |                                                                       | <b>Site Address:</b>         |         |
| <b>Contaminant Limit 1:</b> |                                                                       | <b>Site District Office:</b> |         |
| <b>Contam Limit Freq 1:</b> |                                                                       | <b>Site County/District:</b> |         |
| <b>Contaminant UN No 1:</b> |                                                                       | <b>Site Postal Code:</b>     |         |
| <b>Contaminant Qty:</b>     |                                                                       | <b>Site Region:</b>          |         |
| <b>Environment Impact:</b>  | POSSIBLE                                                              | <b>Site Municipality:</b>    | 20107   |
| <b>Nature of Impact:</b>    | Soil contamination                                                    | <b>Site Lot:</b>             |         |
| <b>Receiving Medium:</b>    | LAND                                                                  | <b>Site Conc:</b>            |         |
| <b>Receiving Env:</b>       |                                                                       | <b>Northing:</b>             |         |
| <b>Health/Env Conseq:</b>   |                                                                       | <b>Easting:</b>              | OPP,MTO |
| <b>MOE Response:</b>        |                                                                       | <b>Site Geo Ref Accu:</b>    |         |
| <b>Dt MOE Arvl on Scn:</b>  |                                                                       | <b>Site Geo Ref Meth:</b>    |         |
| <b>MOE Reported Dt:</b>     | 7/25/2002                                                             | <b>Site Map Datum:</b>       |         |
| <b>Dt Document Closed:</b>  |                                                                       |                              |         |
| <b>SAC Action Class:</b>    |                                                                       |                              |         |
| <b>Incident Reason:</b>     | UNKNOWN                                                               |                              |         |
| <b>Incident Summary:</b>    | BELFAST FRUIT INC. MVA PUT TRUCK IN DITCH. DIE-SEL FROM SADDLE TANKS. |                              |         |

**Site:** **Ministry of Transportation**  
**hwy 417 eastbound at MM 131 at hwy 416 overpass Ottawa ON**

**Database:**  
**SPL**

|                        |             |                             |                          |
|------------------------|-------------|-----------------------------|--------------------------|
| <b>Ref No:</b>         | 8446-9ZQMXL | <b>Discharger Report:</b>   |                          |
| <b>Site No:</b>        | NA          | <b>Material Group:</b>      |                          |
| <b>Incident Dt:</b>    | 8/25/2015   | <b>Client Type:</b>         |                          |
| <b>Year:</b>           |             | <b>Sector Type:</b>         | Miscellaneous Industrial |
| <b>Incident Cause:</b> |             | <b>Source Type:</b>         |                          |
| <b>Incident Event:</b> |             | <b>Nearest Watercourse:</b> |                          |



|                             |                                            |                              |                                                 |
|-----------------------------|--------------------------------------------|------------------------------|-------------------------------------------------|
| <b>Contaminant Code:</b>    | 15                                         | <b>Site Name:</b>            | TT rollover<UNOFFICIAL>                         |
| <b>Contaminant Name:</b>    | HYDRAULIC OIL                              | <b>Site Address:</b>         | hwy 417 eastbound at MM 131 at hwy 416 overpass |
| <b>Contaminant Limit 1:</b> |                                            | <b>Site District Office:</b> |                                                 |
| <b>Contam Limit Freq 1:</b> |                                            | <b>Site County/District:</b> |                                                 |
| <b>Contaminant UN No 1:</b> |                                            | <b>Site Postal Code:</b>     |                                                 |
| <b>Contaminant Qty:</b>     | 0 gal-lmp                                  | <b>Site Region:</b>          |                                                 |
| <b>Environment Impact:</b>  |                                            | <b>Site Municipality:</b>    | Ottawa                                          |
| <b>Nature of Impact:</b>    |                                            | <b>Site Lot:</b>             |                                                 |
| <b>Receiving Medium:</b>    |                                            | <b>Site Conc:</b>            |                                                 |
| <b>Receiving Env:</b>       |                                            | <b>Northing:</b>             | 5021331                                         |
| <b>Health/Env Conseq:</b>   |                                            | <b>Easting:</b>              | 435872                                          |
| <b>MOE Response:</b>        | No                                         | <b>Site Geo Ref Accu:</b>    |                                                 |
| <b>Dt MOE Arvl on Scn:</b>  |                                            | <b>Site Geo Ref Meth:</b>    |                                                 |
| <b>MOE Reported Dt:</b>     | 8/25/2015                                  | <b>Site Map Datum:</b>       |                                                 |
| <b>Dt Document Closed:</b>  | 8/26/2015                                  |                              |                                                 |
| <b>SAC Action Class:</b>    | Highway Spills (usually highway accidents) |                              |                                                 |
| <b>Incident Reason:</b>     | Operator/Human Error                       |                              |                                                 |
| <b>Incident Summary:</b>    | TT rollover, dsl spill to hwy 417          |                              |                                                 |

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**Site:** **HIGHWAY 417 EASTBOUND, EAST OF ROCKDALE EXIT<UNOFFICIAL> Ottawa ON** **Database:** **SPL**

|                             |                                                             |                              |                     |
|-----------------------------|-------------------------------------------------------------|------------------------------|---------------------|
| <b>Ref No:</b>              | 2415-6M4SUB                                                 | <b>Discharger Report:</b>    |                     |
| <b>Site No:</b>             |                                                             | <b>Material Group:</b>       | Oils                |
| <b>Incident Dt:</b>         | 2/17/2006                                                   | <b>Client Type:</b>          |                     |
| <b>Year:</b>                |                                                             | <b>Sector Type:</b>          | Other Motor Vehicle |
| <b>Incident Cause:</b>      | Other Transport Accident                                    | <b>Source Type:</b>          |                     |
| <b>Incident Event:</b>      |                                                             | <b>Nearest Watercourse:</b>  |                     |
| <b>Contaminant Code:</b>    | 12                                                          | <b>Site Name:</b>            |                     |
| <b>Contaminant Name:</b>    | GASOLINE                                                    | <b>Site Address:</b>         |                     |
| <b>Contaminant Limit 1:</b> |                                                             | <b>Site District Office:</b> | Ottawa              |
| <b>Contam Limit Freq 1:</b> |                                                             | <b>Site County/District:</b> |                     |
| <b>Contaminant UN No 1:</b> |                                                             | <b>Site Postal Code:</b>     |                     |
| <b>Contaminant Qty:</b>     | Not specified 12                                            | <b>Site Region:</b>          |                     |
| <b>Environment Impact:</b>  | Not Anticipated                                             | <b>Site Municipality:</b>    | Ottawa              |
| <b>Nature of Impact:</b>    | Human Health/Safety; Other Impact(s); Soil Contamination    | <b>Site Lot:</b>             |                     |
| <b>Receiving Medium:</b>    | Land                                                        | <b>Site Conc:</b>            |                     |
| <b>Receiving Env:</b>       |                                                             | <b>Northing:</b>             |                     |
| <b>Health/Env Conseq:</b>   |                                                             | <b>Easting:</b>              |                     |
| <b>MOE Response:</b>        |                                                             | <b>Site Geo Ref Accu:</b>    |                     |
| <b>Dt MOE Arvl on Scn:</b>  |                                                             | <b>Site Geo Ref Meth:</b>    |                     |
| <b>MOE Reported Dt:</b>     | 2/17/2006                                                   | <b>Site Map Datum:</b>       |                     |
| <b>Dt Document Closed:</b>  |                                                             |                              |                     |
| <b>SAC Action Class:</b>    |                                                             |                              |                     |
| <b>Incident Reason:</b>     | Equipment Failure                                           |                              |                     |
| <b>Incident Summary:</b>    | Hwy 417 eastbound, 36 vehicle MVA - operating fluid to grnd |                              |                     |

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**Site:** **Sita Ontario Inc.** **Database:** **SPL**  
**Highway 417(westbound) and Moodie Drive ramp Ottawa ON**

|                             |                          |                              |                                     |
|-----------------------------|--------------------------|------------------------------|-------------------------------------|
| <b>Ref No:</b>              | 4124-6DJQGX              | <b>Discharger Report:</b>    | 0                                   |
| <b>Site No:</b>             |                          | <b>Material Group:</b>       | Oil                                 |
| <b>Incident Dt:</b>         | 6/20/2005                | <b>Client Type:</b>          |                                     |
| <b>Year:</b>                |                          | <b>Sector Type:</b>          | Transport Truck                     |
| <b>Incident Cause:</b>      | Other Transport Accident | <b>Source Type:</b>          |                                     |
| <b>Incident Event:</b>      |                          | <b>Nearest Watercourse:</b>  |                                     |
| <b>Contaminant Code:</b>    |                          | <b>Site Name:</b>            | 50 L diesel to shoulder<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL              | <b>Site Address:</b>         |                                     |
| <b>Contaminant Limit 1:</b> |                          | <b>Site District Office:</b> | Ottawa                              |
| <b>Contam Limit Freq 1:</b> |                          | <b>Site County/District:</b> |                                     |
| <b>Contaminant UN No 1:</b> |                          | <b>Site Postal Code:</b>     |                                     |
| <b>Contaminant Qty:</b>     |                          | <b>Site Region:</b>          |                                     |
| <b>Environment Impact:</b>  | Not Anticipated          | <b>Site Municipality:</b>    | Ottawa                              |
| <b>Nature of Impact:</b>    | Soil Contamination       | <b>Site Lot:</b>             |                                     |
| <b>Receiving Medium:</b>    | Land                     | <b>Site Conc:</b>            |                                     |

**Receiving Env:**  
**Health/Env Conseq:**  
**MOE Response:**  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 6/20/2005  
**Dt Document Closed:**  
**SAC Action Class:** Spills to Highways (usually highway accidents)  
**Incident Reason:**  
**Incident Summary:** MVA: SITA Can.: 50 L diesel to Hwy 417/Moodie Dr.

**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Geo Ref Meth:**  
**Site Map Datum:**

**Site:** Wilway Transport<UNOFFICIAL>  
 Highway 417 eastbound, panmure exit(exit 162) MVA - HIGHWAY 417 EASTBOUND AT PANMURE EXIT (EXIT 163)<UNOFFICIAL> Ottawa ON

**Database:**  
 SPL

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ref No:</b> 5853-6SC638<br><b>Site No:</b><br><b>Incident Dt:</b> 8/3/2006<br><b>Year:</b><br><b>Incident Cause:</b> Other Transport Accident<br><b>Incident Event:</b><br><b>Contaminant Code:</b> 13<br><br><b>Contaminant Name:</b> DIESEL FUEL<br><br><b>Contaminant Limit 1:</b><br><b>Contam Limit Freq 1:</b><br><b>Contaminant UN No 1:</b><br><b>Contaminant Qty:</b> 50 L<br><b>Environment Impact:</b> Confirmed<br><b>Nature of Impact:</b> Soil Contamination; Vegetation Damage<br><b>Receiving Medium:</b> Land<br><b>Receiving Env:</b><br><b>Health/Env Conseq:</b><br><b>MOE Response:</b><br><b>Dt MOE Arvl on Scn:</b><br><b>MOE Reported Dt:</b> 8/3/2006<br><b>Dt Document Closed:</b><br><b>SAC Action Class:</b><br><b>Incident Reason:</b> Equipment/Vehicles<br><b>Incident Summary:</b> MVA: Hwy 417 eastbnd, Panmure exit, diesel to median | <b>Discharger Report:</b><br><b>Material Group:</b> Oils<br><b>Client Type:</b><br><b>Sector Type:</b> Transport Truck<br><b>Source Type:</b><br><b>Nearest Watercourse:</b><br><b>Site Name:</b> HIGHWAY 417 EASTBOUND, PANMURE EXIT(EXIT 162)<br><b>Site Address:</b> HIGHWAY 417 EASTBOUND, PANMURE EXIT(EXIT 162)<br><b>Site District Office:</b> Ottawa<br><b>Site County/District:</b><br><b>Site Postal Code:</b><br><b>Site Region:</b><br><b>Site Municipality:</b> Ottawa<br><b>Site Lot:</b><br><b>Site Conc:</b><br><b>Northing:</b><br><b>Easting:</b><br><b>Site Geo Ref Accu:</b><br><b>Site Geo Ref Meth:</b><br><b>Site Map Datum:</b> |
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**Site:** HWY 417 ONRAMP AT TERRY FOX EXIT<UNOFFICIAL> Ottawa ON

**Database:**  
 SPL

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ref No:</b> 5448-5KXU3S<br><b>Site No:</b><br><b>Incident Dt:</b> 3/24/2003<br><b>Year:</b><br><b>Incident Cause:</b><br><b>Incident Event:</b><br><b>Contaminant Code:</b> 15<br><br><b>Contaminant Name:</b> HYDRAULIC OIL<br><b>Contaminant Limit 1:</b><br><b>Contam Limit Freq 1:</b><br><b>Contaminant UN No 1:</b><br><b>Contaminant Qty:</b> 68 L<br><b>Environment Impact:</b> Possible<br><b>Nature of Impact:</b> Soil Contamination<br><b>Receiving Medium:</b> Land<br><b>Receiving Env:</b><br><b>Health/Env Conseq:</b><br><b>MOE Response:</b><br><b>Dt MOE Arvl on Scn:</b><br><b>MOE Reported Dt:</b> 3/24/2003<br><b>Dt Document Closed:</b><br><b>SAC Action Class:</b> Spill to Land | <b>Discharger Report:</b><br><b>Material Group:</b> Oil<br><b>Client Type:</b><br><b>Sector Type:</b><br><b>Source Type:</b><br><b>Nearest Watercourse:</b><br><b>Site Name:</b> HWY 417 ONRAMP AT TERRY FOX EXIT<UNOFFICIAL><br><b>Site Address:</b><br><b>Site District Office:</b> Ottawa<br><b>Site County/District:</b><br><b>Site Postal Code:</b><br><b>Site Region:</b> Eastern<br><b>Site Municipality:</b> Ottawa<br><b>Site Lot:</b><br><b>Site Conc:</b><br><b>Northing:</b><br><b>Easting:</b><br><b>Site Geo Ref Accu:</b><br><b>Site Geo Ref Meth:</b><br><b>Site Map Datum:</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Incident Reason:**  
**Incident Summary:** Dundas Drilling- 68 L hydr.oil to ditch, cleaning

**Site:** Transport BUSA<UNOFFICIAL>  
Hwy 417 East Bound, km 66 Ottawa ON

**Database:**  
SPL

**Ref No:** 0545-9ZJKM4  
**Site No:** NA  
**Incident Dt:** 8/19/2015  
**Year:**  
**Incident Cause:**  
**Incident Event:**  
**Contaminant Code:** 13  
**Contaminant Name:** DIESEL FUEL  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Contaminant Qty:** 300 L  
**Environment Impact:**  
**Nature of Impact:**  
**Receiving Medium:**  
**Receiving Env:**  
**Health/Env Conseq:**  
**MOE Response:** No  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 8/19/2015  
**Dt Document Closed:** 10/9/2015  
**SAC Action Class:** Land Spills  
**Incident Reason:** Equipment Failure  
**Incident Summary:** HWY 417 TT - 300L fuel to ditch.

**Discharger Report:**  
**Material Group:**  
**Client Type:**  
**Sector Type:** Miscellaneous Communal  
**Source Type:**  
**Nearest Watercourse:**  
**Site Name:** Fuel Spill<UNOFFICIAL>  
**Site Address:** Hwy 417 East Bound, km 66  
**Site District Office:**  
**Site County/District:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Geo Ref Meth:**  
**Site Map Datum:**

**Site:** S. 21(1)(f)  
Hwy 417 E between Vanier Parkway and St. Laurent<UNOFFICIAL> Ottawa ON

**Database:**  
SPL

**Ref No:** 1301-6XAFSY  
**Site No:**  
**Incident Dt:**  
**Year:**  
**Incident Cause:** Other Transport Accident  
**Incident Event:**  
**Contaminant Code:** 13  
**Contaminant Name:** DIESEL FUEL  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Contaminant Qty:** 150 L  
**Environment Impact:** Not Anticipated  
**Nature of Impact:** Surface Water Pollution  
**Receiving Medium:** Water  
**Receiving Env:**  
**Health/Env Conseq:**  
**MOE Response:** No Field Response  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 1/9/2007  
**Dt Document Closed:** 2/23/2007  
**SAC Action Class:**  
**Incident Reason:**  
**Incident Summary:** Andleaur Transp & S. 21(1)(f) - 150 L diesel to Hwy and sewer

**Discharger Report:**  
**Material Group:** Oil  
**Client Type:**  
**Sector Type:** Other Motor Vehicle  
**Source Type:**  
**Nearest Watercourse:**  
**Site Name:** Hwy 417 E between Vanier Parkway and St. Laurent<UNOFFICIAL>  
**Site Address:**  
**Site District Office:**  
**Site County/District:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Geo Ref Meth:**  
**Site Map Datum:**

**Site:** 417 EASTBOUND - NICHOLAS ON RAMP<UNOFFICIAL> Ottawa ON

**Database:**  
SPL

**Ref No:** 1151-5R4LZR  
**Site No:**

**Discharger Report:**  
**Material Group:** Oil

|                             |                                      |                              |                                              |
|-----------------------------|--------------------------------------|------------------------------|----------------------------------------------|
| <b>Incident Dt:</b>         | 9/5/2003                             | <b>Client Type:</b>          |                                              |
| <b>Year:</b>                |                                      | <b>Sector Type:</b>          | Other                                        |
| <b>Incident Cause:</b>      | Other Discharges                     | <b>Source Type:</b>          |                                              |
| <b>Incident Event:</b>      |                                      | <b>Nearest Watercourse:</b>  |                                              |
| <b>Contaminant Code:</b>    | 13                                   | <b>Site Name:</b>            | 417 EASTBOUND - NICHOLAS ON RAMP<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL                          | <b>Site Address:</b>         |                                              |
| <b>Contaminant Limit 1:</b> |                                      | <b>Site District Office:</b> | Ottawa                                       |
| <b>Contam Limit Freq 1:</b> |                                      | <b>Site County/District:</b> |                                              |
| <b>Contaminant UN No 1:</b> |                                      | <b>Site Postal Code:</b>     |                                              |
| <b>Contaminant Qty:</b>     | 100 L                                | <b>Site Region:</b>          | Eastern                                      |
| <b>Environment Impact:</b>  | Not Anticipated                      | <b>Site Municipality:</b>    | Ottawa                                       |
| <b>Nature of Impact:</b>    |                                      | <b>Site Lot:</b>             |                                              |
| <b>Receiving Medium:</b>    | Land                                 | <b>Site Conc:</b>            |                                              |
| <b>Receiving Env:</b>       |                                      | <b>Northing:</b>             |                                              |
| <b>Health/Env Conseq:</b>   |                                      | <b>Easting:</b>              |                                              |
| <b>MOE Response:</b>        |                                      | <b>Site Geo Ref Accu:</b>    |                                              |
| <b>Dt MOE Arvl on Scn:</b>  |                                      | <b>Site Geo Ref Meth:</b>    |                                              |
| <b>MOE Reported Dt:</b>     | 9/5/2003                             | <b>Site Map Datum:</b>       |                                              |
| <b>Dt Document Closed:</b>  |                                      |                              |                                              |
| <b>SAC Action Class:</b>    |                                      |                              |                                              |
| <b>Incident Reason:</b>     | Other - Reason not otherwise defined |                              |                                              |
| <b>Incident Summary:</b>    | Hwy 417 - diesel spill               |                              |                                              |

**Site:** Ottawa LRT <UNOFFICIAL>  
Hwy 417 near Lees Avenue Ottawa ON

**Database:**  
**SPL**

|                             |                                                  |                              |                                                                 |
|-----------------------------|--------------------------------------------------|------------------------------|-----------------------------------------------------------------|
| <b>Ref No:</b>              | 0640-9MYHCJ                                      | <b>Discharger Report:</b>    |                                                                 |
| <b>Site No:</b>             | NA                                               | <b>Material Group:</b>       |                                                                 |
| <b>Incident Dt:</b>         | 2014/08/07                                       | <b>Client Type:</b>          |                                                                 |
| <b>Year:</b>                |                                                  | <b>Sector Type:</b>          | Pipeline/Components                                             |
| <b>Incident Cause:</b>      | Leak/Break                                       | <b>Source Type:</b>          |                                                                 |
| <b>Incident Event:</b>      |                                                  | <b>Nearest Watercourse:</b>  |                                                                 |
| <b>Contaminant Code:</b>    | 15                                               | <b>Site Name:</b>            | highway construction site Hwy 417 at Hurdman Bridge<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | HYDRAULIC OIL                                    | <b>Site Address:</b>         | Hwy 417 near Lees Avenue                                        |
| <b>Contaminant Limit 1:</b> |                                                  | <b>Site District Office:</b> |                                                                 |
| <b>Contam Limit Freq 1:</b> |                                                  | <b>Site County/District:</b> |                                                                 |
| <b>Contaminant UN No 1:</b> |                                                  | <b>Site Postal Code:</b>     |                                                                 |
| <b>Contaminant Qty:</b>     | 15 L                                             | <b>Site Region:</b>          |                                                                 |
| <b>Environment Impact:</b>  | Not Anticipated                                  | <b>Site Municipality:</b>    | Ottawa                                                          |
| <b>Nature of Impact:</b>    | Soil Contamination                               | <b>Site Lot:</b>             |                                                                 |
| <b>Receiving Medium:</b>    |                                                  | <b>Site Conc:</b>            |                                                                 |
| <b>Receiving Env:</b>       |                                                  | <b>Northing:</b>             |                                                                 |
| <b>Health/Env Conseq:</b>   |                                                  | <b>Easting:</b>              |                                                                 |
| <b>MOE Response:</b>        |                                                  | <b>Site Geo Ref Accu:</b>    |                                                                 |
| <b>Dt MOE Arvl on Scn:</b>  |                                                  | <b>Site Geo Ref Meth:</b>    |                                                                 |
| <b>MOE Reported Dt:</b>     | 2014/08/14                                       | <b>Site Map Datum:</b>       |                                                                 |
| <b>Dt Document Closed:</b>  |                                                  |                              |                                                                 |
| <b>SAC Action Class:</b>    | Land Spills                                      |                              |                                                                 |
| <b>Incident Reason:</b>     | Equipment Failure                                |                              |                                                                 |
| <b>Incident Summary:</b>    | Ottawa LRT: late report of hyd oil spill to grnd |                              |                                                                 |

**Site:** Tomlinson Environmental Services Ltd.; SNC-Lavalin Constructors (Pacific) Inc  
Highway 417 at Hurdman Bridge Ottawa ON

**Database:**  
**SPL**

|                             |                |                              |                                                |
|-----------------------------|----------------|------------------------------|------------------------------------------------|
| <b>Ref No:</b>              | 1322-9K2JFE    | <b>Discharger Report:</b>    |                                                |
| <b>Site No:</b>             | NA             | <b>Material Group:</b>       |                                                |
| <b>Incident Dt:</b>         | 2014/05/07     | <b>Client Type:</b>          |                                                |
| <b>Year:</b>                |                | <b>Sector Type:</b>          | Drilling Operation                             |
| <b>Incident Cause:</b>      | Leak/Break     | <b>Source Type:</b>          |                                                |
| <b>Incident Event:</b>      |                | <b>Nearest Watercourse:</b>  |                                                |
| <b>Contaminant Code:</b>    | 41             | <b>Site Name:</b>            | OLRT: Highway 417 @ Hurdman Bridge<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | WATER/SEDIMENT | <b>Site Address:</b>         | Highway 417 at Hurdman Bridge                  |
| <b>Contaminant Limit 1:</b> |                | <b>Site District Office:</b> |                                                |
| <b>Contam Limit Freq 1:</b> |                | <b>Site County/District:</b> |                                                |

|                             |                                                      |                           |        |
|-----------------------------|------------------------------------------------------|---------------------------|--------|
| <b>Contaminant UN No 1:</b> |                                                      | <b>Site Postal Code:</b>  |        |
| <b>Contaminant Qty:</b>     | 5 L                                                  | <b>Site Region:</b>       |        |
| <b>Environment Impact:</b>  | Not Anticipated                                      | <b>Site Municipality:</b> | Ottawa |
| <b>Nature of Impact:</b>    | Surface Water Pollution                              | <b>Site Lot:</b>          |        |
| <b>Receiving Medium:</b>    |                                                      | <b>Site Conc:</b>         |        |
| <b>Receiving Env:</b>       |                                                      | <b>Northing:</b>          |        |
| <b>Health/Env Conseq:</b>   |                                                      | <b>Easting:</b>           |        |
| <b>MOE Response:</b>        | No Field Response                                    | <b>Site Geo Ref Accu:</b> |        |
| <b>Dt MOE Arvl on Scn:</b>  |                                                      | <b>Site Geo Ref Meth:</b> |        |
| <b>MOE Reported Dt:</b>     | 2014/05/12                                           | <b>Site Map Datum:</b>    |        |
| <b>Dt Document Closed:</b>  |                                                      |                           |        |
| <b>SAC Action Class:</b>    | Watercourse Spills                                   |                           |        |
| <b>Incident Reason:</b>     | Unknown / N/A                                        |                           |        |
| <b>Incident Summary:</b>    | OLRT: Spill of Concrete Drilling Fluid to Hwy 417 CB |                           |        |

**Site:** Hwy 417 at Hurdman Bridge, SW Corner Ottawa ON

**Database:**  
SPL

|                             |                                                    |                              |                                      |
|-----------------------------|----------------------------------------------------|------------------------------|--------------------------------------|
| <b>Ref No:</b>              | 6747-9RDR6G                                        | <b>Discharger Report:</b>    |                                      |
| <b>Site No:</b>             | NA                                                 | <b>Material Group:</b>       |                                      |
| <b>Incident Dt:</b>         | 2014/12/01                                         | <b>Client Type:</b>          |                                      |
| <b>Year:</b>                |                                                    | <b>Sector Type:</b>          | Unknown / N/A                        |
| <b>Incident Cause:</b>      | Unknown / N/A                                      | <b>Source Type:</b>          |                                      |
| <b>Incident Event:</b>      |                                                    | <b>Nearest Watercourse:</b>  |                                      |
| <b>Contaminant Code:</b>    | 13                                                 | <b>Site Name:</b>            | Ottawa LRT Project <UNOFFICIAL>      |
| <b>Contaminant Name:</b>    | HYDROCARBON LIGHT                                  | <b>Site Address:</b>         | Hwy 417 at Hurdman Bridge, SW Corner |
| <b>Contaminant Limit 1:</b> |                                                    | <b>Site District Office:</b> |                                      |
| <b>Contam Limit Freq 1:</b> |                                                    | <b>Site County/District:</b> |                                      |
| <b>Contaminant UN No 1:</b> |                                                    | <b>Site Postal Code:</b>     |                                      |
| <b>Contaminant Qty:</b>     | 4 L                                                | <b>Site Region:</b>          |                                      |
| <b>Environment Impact:</b>  | Land                                               | <b>Site Municipality:</b>    | Ottawa                               |
| <b>Nature of Impact:</b>    |                                                    | <b>Site Lot:</b>             |                                      |
| <b>Receiving Medium:</b>    |                                                    | <b>Site Conc:</b>            |                                      |
| <b>Receiving Env:</b>       |                                                    | <b>Northing:</b>             | 5029450                              |
| <b>Health/Env Conseq:</b>   |                                                    | <b>Easting:</b>              | 448057                               |
| <b>MOE Response:</b>        | N                                                  | <b>Site Geo Ref Accu:</b>    |                                      |
| <b>Dt MOE Arvl on Scn:</b>  |                                                    | <b>Site Geo Ref Meth:</b>    |                                      |
| <b>MOE Reported Dt:</b>     | 2014/12/01                                         | <b>Site Map Datum:</b>       |                                      |
| <b>Dt Document Closed:</b>  |                                                    |                              |                                      |
| <b>SAC Action Class:</b>    | Land Spills                                        |                              |                                      |
| <b>Incident Reason:</b>     | Unknown / N/A                                      |                              |                                      |
| <b>Incident Summary:</b>    | Ottawa LRT Project - 4L petroleum to grd, cleaning |                              |                                      |

**Site:** central transit way adjacent to hwy 417 between nicholas ave and lees ave Ottawa ON

**Database:**  
SPL

|                             |                         |                              |                                                                              |
|-----------------------------|-------------------------|------------------------------|------------------------------------------------------------------------------|
| <b>Ref No:</b>              | 8444-9FTKCZ             | <b>Discharger Report:</b>    |                                                                              |
| <b>Site No:</b>             |                         | <b>Material Group:</b>       |                                                                              |
| <b>Incident Dt:</b>         | 2014/01/29              | <b>Client Type:</b>          |                                                                              |
| <b>Year:</b>                |                         | <b>Sector Type:</b>          | Unknown / N/A                                                                |
| <b>Incident Cause:</b>      | Unknown / N/A           | <b>Source Type:</b>          |                                                                              |
| <b>Incident Event:</b>      |                         | <b>Nearest Watercourse:</b>  |                                                                              |
| <b>Contaminant Code:</b>    | 99                      | <b>Site Name:</b>            | Construction job site<UNOFFICIAL>                                            |
| <b>Contaminant Name:</b>    | WATER                   | <b>Site Address:</b>         | central transit way adjacent to hwy 417<br>between nicholas ave and lees ave |
| <b>Contaminant Limit 1:</b> |                         | <b>Site District Office:</b> |                                                                              |
| <b>Contam Limit Freq 1:</b> |                         | <b>Site County/District:</b> |                                                                              |
| <b>Contaminant UN No 1:</b> |                         | <b>Site Postal Code:</b>     |                                                                              |
| <b>Contaminant Qty:</b>     | 200 L                   | <b>Site Region:</b>          |                                                                              |
| <b>Environment Impact:</b>  | Confirmed               | <b>Site Municipality:</b>    | Ottawa                                                                       |
| <b>Nature of Impact:</b>    | Surface Water Pollution | <b>Site Lot:</b>             |                                                                              |
| <b>Receiving Medium:</b>    |                         | <b>Site Conc:</b>            |                                                                              |
| <b>Receiving Env:</b>       |                         | <b>Northing:</b>             |                                                                              |
| <b>Health/Env Conseq:</b>   |                         | <b>Easting:</b>              |                                                                              |
| <b>MOE Response:</b>        | Referral to others      | <b>Site Geo Ref Accu:</b>    |                                                                              |
| <b>Dt MOE Arvl on Scn:</b>  |                         | <b>Site Geo Ref Meth:</b>    |                                                                              |
| <b>MOE Reported Dt:</b>     | 2014/01/29              | <b>Site Map Datum:</b>       |                                                                              |

**Dt Document Closed:**  
**SAC Action Class:** Land Spills  
**Incident Reason:** Unknown / N/A  
**Incident Summary:** RW Tomlinson: Dewatering to CB,

**Site:** Hwy 417 Under Overpass @ Castlefrank Road Ottawa ON

**Database:**  
**SPL**

**Ref No:** 7705-67XN2B  
**Site No:**  
**Incident Dt:** 12/22/2004  
**Year:**  
**Incident Cause:** Other Transport Accident  
**Incident Event:**  
**Contaminant Code:** 13  
**Contaminant Name:** DIESEL FUEL  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Contaminant Qty:**  
**Environment Impact:** Confirmed  
**Nature of Impact:** Groundwater Pollution; Other Impact(s); Soil Contamination; Surface Water Pollution  
**Receiving Medium:** Land & Water  
**Receiving Env:**  
**Health/Env Conseq:**  
**MOE Response:**  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 12/23/2004  
**Dt Document Closed:**  
**SAC Action Class:**  
**Incident Reason:** Weather  
**Incident Summary:** MVA: 200L diesel to Ditch

**Discharger Report:**  
**Material Group:** Oil  
**Client Type:**  
**Sector Type:** Transport Truck  
**Source Type:**  
**Nearest Watercourse:**  
**Site Name:** MVA<UNOFFICIAL>  
**Site Address:**  
**Site District Office:** Ottawa  
**Site County/District:**  
**Site Postal Code:**  
**Site Region:** Eastern  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Geo Ref Meth:**  
**Site Map Datum:**

**Site:** Drain-All Ltd.  
Hwy 417 Westbound near Carling off-ramp Ottawa ON

**Database:**  
**SPL**

**Ref No:** 6127-8K6T47  
**Site No:**  
**Incident Dt:** 7/27/2011  
**Year:**  
**Incident Cause:** Pipe Or Hose Leak  
**Incident Event:**  
**Contaminant Code:** 15  
**Contaminant Name:** MOTOR OIL  
**Contaminant Limit 1:**  
**Contam Limit Freq 1:**  
**Contaminant UN No 1:**  
**Contaminant Qty:** 10 L  
**Environment Impact:** Not Anticipated  
**Nature of Impact:**  
**Receiving Medium:**  
**Receiving Env:**  
**Health/Env Conseq:**  
**MOE Response:** No Field Response  
**Dt MOE Arvl on Scn:**  
**MOE Reported Dt:** 7/27/2011  
**Dt Document Closed:**  
**SAC Action Class:** Highway Spills (usually highway accidents)  
**Incident Reason:** Equipment/Vehicles  
**Incident Summary:** 10 L's of motor oil to Queensway, cleaned

**Discharger Report:**  
**Material Group:**  
**Client Type:**  
**Sector Type:** Motor Vehicle  
**Source Type:**  
**Nearest Watercourse:**  
**Site Name:** Queensway Hwy 417<UNOFFICIAL>  
**Site Address:** Hwy 417 Westbound near Carling off-ramp  
**Site District Office:**  
**Site County/District:**  
**Site Postal Code:**  
**Site Region:**  
**Site Municipality:** Ottawa  
**Site Lot:**  
**Site Conc:**  
**Northing:**  
**Easting:**  
**Site Geo Ref Accu:**  
**Site Geo Ref Meth:**  
**Site Map Datum:**

**Site:** Enbridge Gas Distribution Inc.  
HWY 417 at Vars Bridge Ottawa ON

**Database:**  
**SPL**



|                             |                                               |                              |                                    |
|-----------------------------|-----------------------------------------------|------------------------------|------------------------------------|
| <b>Ref No:</b>              | 6748-7X7R4U                                   | <b>Discharger Report:</b>    |                                    |
| <b>Site No:</b>             |                                               | <b>Material Group:</b>       |                                    |
| <b>Incident Dt:</b>         |                                               | <b>Client Type:</b>          |                                    |
| <b>Year:</b>                |                                               | <b>Sector Type:</b>          |                                    |
| <b>Incident Cause:</b>      |                                               | <b>Source Type:</b>          |                                    |
| <b>Incident Event:</b>      |                                               | <b>Nearest Watercourse:</b>  |                                    |
| <b>Contaminant Code:</b>    | 46                                            | <b>Site Name:</b>            | HWY 417 at Vars Bridge<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | USED MOTOR OIL                                | <b>Site Address:</b>         |                                    |
| <b>Contaminant Limit 1:</b> |                                               | <b>Site District Office:</b> |                                    |
| <b>Contam Limit Freq 1:</b> |                                               | <b>Site County/District:</b> |                                    |
| <b>Contaminant UN No 1:</b> |                                               | <b>Site Postal Code:</b>     |                                    |
| <b>Contaminant Qty:</b>     | 30 L                                          | <b>Site Region:</b>          |                                    |
| <b>Environment Impact:</b>  | Not Anticipated                               | <b>Site Municipality:</b>    |                                    |
| <b>Nature of Impact:</b>    |                                               | <b>Site Lot:</b>             |                                    |
| <b>Receiving Medium:</b>    |                                               | <b>Site Conc:</b>            |                                    |
| <b>Receiving Env:</b>       |                                               | <b>Northing:</b>             |                                    |
| <b>Health/Env Conseq:</b>   |                                               | <b>Easting:</b>              |                                    |
| <b>MOE Response:</b>        | No Field Response                             | <b>Site Geo Ref Accu:</b>    |                                    |
| <b>Dt MOE Arvl on Scn:</b>  |                                               | <b>Site Geo Ref Meth:</b>    |                                    |
| <b>MOE Reported Dt:</b>     | 10/26/2009                                    | <b>Site Map Datum:</b>       |                                    |
| <b>Dt Document Closed:</b>  | 1/8/2010                                      |                              |                                    |
| <b>SAC Action Class:</b>    | Highway Spills (usually highway accidents)    |                              |                                    |
| <b>Incident Reason:</b>     |                                               |                              |                                    |
| <b>Incident Summary:</b>    | Motor Vehicle-30 L Used Motor Oil to Hwy 417. |                              |                                    |

**Site:** Hwy 417 to the corner of Rideau and King Edward Ottawa ON

**Database:**  
SPL

|                             |                                           |                              |                                   |
|-----------------------------|-------------------------------------------|------------------------------|-----------------------------------|
| <b>Ref No:</b>              | 5750-74BMWG                               | <b>Discharger Report:</b>    |                                   |
| <b>Site No:</b>             |                                           | <b>Material Group:</b>       | Oil                               |
| <b>Incident Dt:</b>         |                                           | <b>Client Type:</b>          |                                   |
| <b>Year:</b>                |                                           | <b>Sector Type:</b>          | Transport Truck                   |
| <b>Incident Cause:</b>      | Unknown                                   | <b>Source Type:</b>          |                                   |
| <b>Incident Event:</b>      |                                           | <b>Nearest Watercourse:</b>  |                                   |
| <b>Contaminant Code:</b>    | 15                                        | <b>Site Name:</b>            | Oil Spill on the road<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | OIL (PETROLEUM BASED, NOT SPECIFIED)      | <b>Site Address:</b>         |                                   |
| <b>Contaminant Limit 1:</b> |                                           | <b>Site District Office:</b> |                                   |
| <b>Contam Limit Freq 1:</b> |                                           | <b>Site County/District:</b> |                                   |
| <b>Contaminant UN No 1:</b> |                                           | <b>Site Postal Code:</b>     |                                   |
| <b>Contaminant Qty:</b>     | 50 L                                      | <b>Site Region:</b>          |                                   |
| <b>Environment Impact:</b>  | Not Anticipated                           | <b>Site Municipality:</b>    | Ottawa                            |
| <b>Nature of Impact:</b>    | Other Impact(s)                           | <b>Site Lot:</b>             |                                   |
| <b>Receiving Medium:</b>    | Land                                      | <b>Site Conc:</b>            |                                   |
| <b>Receiving Env:</b>       |                                           | <b>Northing:</b>             |                                   |
| <b>Health/Env Conseq:</b>   |                                           | <b>Easting:</b>              |                                   |
| <b>MOE Response:</b>        | No Field Response                         | <b>Site Geo Ref Accu:</b>    |                                   |
| <b>Dt MOE Arvl on Scn:</b>  |                                           | <b>Site Geo Ref Meth:</b>    |                                   |
| <b>MOE Reported Dt:</b>     | 6/19/2007                                 | <b>Site Map Datum:</b>       |                                   |
| <b>Dt Document Closed:</b>  | 12/8/2007                                 |                              |                                   |
| <b>SAC Action Class:</b>    |                                           |                              |                                   |
| <b>Incident Reason:</b>     | Unknown - Reason not determined           |                              |                                   |
| <b>Incident Summary:</b>    | UnknTransport Truck: 50L Oil to Road, Cln |                              |                                   |

**Site:** 417 eastbound, east of exit 104 Ottawa ON

**Database:**  
SPL

|                             |             |                              |                                 |
|-----------------------------|-------------|------------------------------|---------------------------------|
| <b>Ref No:</b>              | 2172-9F4M4N | <b>Discharger Report:</b>    |                                 |
| <b>Site No:</b>             |             | <b>Material Group:</b>       |                                 |
| <b>Incident Dt:</b>         | 2014/01/06  | <b>Client Type:</b>          |                                 |
| <b>Year:</b>                |             | <b>Sector Type:</b>          | Motor Vehicle                   |
| <b>Incident Cause:</b>      | Leak/Break  | <b>Source Type:</b>          |                                 |
| <b>Incident Event:</b>      |             | <b>Nearest Watercourse:</b>  |                                 |
| <b>Contaminant Code:</b>    | 13          | <b>Site Name:</b>            | MVA<UNOFFICIAL>                 |
| <b>Contaminant Name:</b>    | DIESEL FUEL | <b>Site Address:</b>         | 417 eastbound, east of exit 104 |
| <b>Contaminant Limit 1:</b> |             | <b>Site District Office:</b> |                                 |
| <b>Contam Limit Freq 1:</b> |             | <b>Site County/District:</b> |                                 |
| <b>Contaminant UN No 1:</b> |             | <b>Site Postal Code:</b>     |                                 |



|                            |                                        |                           |        |
|----------------------------|----------------------------------------|---------------------------|--------|
| <b>Contaminant Qty:</b>    | 100 L                                  | <b>Site Region:</b>       |        |
| <b>Environment Impact:</b> | Confirmed                              | <b>Site Municipality:</b> | Ottawa |
| <b>Nature of Impact:</b>   | Soil Contamination                     | <b>Site Lot:</b>          |        |
| <b>Receiving Medium:</b>   |                                        | <b>Site Conc:</b>         |        |
| <b>Receiving Env:</b>      |                                        | <b>Northing:</b>          |        |
| <b>Health/Env Conseq:</b>  |                                        | <b>Easting:</b>           |        |
| <b>MOE Response:</b>       |                                        | <b>Site Geo Ref Accu:</b> |        |
| <b>Dt MOE Arvl on Scn:</b> |                                        | <b>Site Geo Ref Meth:</b> |        |
| <b>MOE Reported Dt:</b>    | 2014/01/06                             | <b>Site Map Datum:</b>    |        |
| <b>Dt Document Closed:</b> |                                        |                           |        |
| <b>SAC Action Class:</b>   | Land Spills                            |                           |        |
| <b>Incident Reason:</b>    | Weather Conditions                     |                           |        |
| <b>Incident Summary:</b>   | Day & Ross: diesel on Hwy 417 exit 104 |                           |        |

**Site:** Purolator Courier Ltd.  
Hwy 417 Eastbound @ Mile Marker 180 Ottawa ON

**Database:**  
SPL

|                             |                                           |                              |                                      |
|-----------------------------|-------------------------------------------|------------------------------|--------------------------------------|
| <b>Ref No:</b>              | 8553-8S9HPE                               | <b>Discharger Report:</b>    |                                      |
| <b>Site No:</b>             |                                           | <b>Material Group:</b>       |                                      |
| <b>Incident Dt:</b>         | 10-MAR-12                                 | <b>Client Type:</b>          |                                      |
| <b>Year:</b>                |                                           | <b>Sector Type:</b>          |                                      |
| <b>Incident Cause:</b>      | Other Transport Accident                  | <b>Source Type:</b>          |                                      |
| <b>Incident Event:</b>      |                                           | <b>Nearest Watercourse:</b>  |                                      |
| <b>Contaminant Code:</b>    | 13                                        | <b>Site Name:</b>            | Transport Truck Accident<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL                               | <b>Site Address:</b>         | Hwy 417 Eastbound @ Mile Marker 180  |
| <b>Contaminant Limit 1:</b> |                                           | <b>Site District Office:</b> |                                      |
| <b>Contam Limit Freq 1:</b> |                                           | <b>Site County/District:</b> |                                      |
| <b>Contaminant UN No 1:</b> |                                           | <b>Site Postal Code:</b>     |                                      |
| <b>Contaminant Qty:</b>     |                                           | <b>Site Region:</b>          |                                      |
| <b>Environment Impact:</b>  | Not Anticipated                           | <b>Site Municipality:</b>    | Ottawa                               |
| <b>Nature of Impact:</b>    | Other Impact(s); Soil Contamination       | <b>Site Lot:</b>             |                                      |
| <b>Receiving Medium:</b>    | Sewage - Municipal/Private and Commercial | <b>Site Conc:</b>            |                                      |
| <b>Receiving Env:</b>       |                                           | <b>Northing:</b>             |                                      |
| <b>Health/Env Conseq:</b>   |                                           | <b>Easting:</b>              |                                      |
| <b>MOE Response:</b>        | No Field Response                         | <b>Site Geo Ref Accu:</b>    |                                      |
| <b>Dt MOE Arvl on Scn:</b>  |                                           | <b>Site Geo Ref Meth:</b>    |                                      |
| <b>MOE Reported Dt:</b>     | 10-MAR-12                                 | <b>Site Map Datum:</b>       |                                      |
| <b>Dt Document Closed:</b>  |                                           |                              |                                      |
| <b>SAC Action Class:</b>    | Land Spills                               |                              |                                      |
| <b>Incident Reason:</b>     | Spill                                     |                              |                                      |
| <b>Incident Summary:</b>    | TT Accident: 300L to grnd                 |                              |                                      |

**Site:** Penske Truck Leasing Canada Inc.  
Hwy 417 east, at exit 88, Vars Ottawa ON

**Database:**  
SPL

|                             |                             |                              |                      |
|-----------------------------|-----------------------------|------------------------------|----------------------|
| <b>Ref No:</b>              | 5218-5LGE4L                 | <b>Discharger Report:</b>    |                      |
| <b>Site No:</b>             |                             | <b>Material Group:</b>       | Oil                  |
| <b>Incident Dt:</b>         | 4/10/2003                   | <b>Client Type:</b>          |                      |
| <b>Year:</b>                |                             | <b>Sector Type:</b>          | Transport Truck      |
| <b>Incident Cause:</b>      |                             | <b>Source Type:</b>          |                      |
| <b>Incident Event:</b>      |                             | <b>Nearest Watercourse:</b>  |                      |
| <b>Contaminant Code:</b>    | 13                          | <b>Site Name:</b>            | MVA SITE<UNOFFICIAL> |
| <b>Contaminant Name:</b>    | DIESEL FUEL                 | <b>Site Address:</b>         |                      |
| <b>Contaminant Limit 1:</b> |                             | <b>Site District Office:</b> | Ottawa               |
| <b>Contam Limit Freq 1:</b> |                             | <b>Site County/District:</b> |                      |
| <b>Contaminant UN No 1:</b> |                             | <b>Site Postal Code:</b>     |                      |
| <b>Contaminant Qty:</b>     | 100 L                       | <b>Site Region:</b>          | Eastern              |
| <b>Environment Impact:</b>  | Possible                    | <b>Site Municipality:</b>    | Ottawa               |
| <b>Nature of Impact:</b>    | Soil Contamination          | <b>Site Lot:</b>             |                      |
| <b>Receiving Medium:</b>    | Land                        | <b>Site Conc:</b>            |                      |
| <b>Receiving Env:</b>       |                             | <b>Northing:</b>             |                      |
| <b>Health/Env Conseq:</b>   |                             | <b>Easting:</b>              |                      |
| <b>MOE Response:</b>        |                             | <b>Site Geo Ref Accu:</b>    |                      |
| <b>Dt MOE Arvl on Scn:</b>  |                             | <b>Site Geo Ref Meth:</b>    |                      |
| <b>MOE Reported Dt:</b>     | 4/10/2003                   | <b>Site Map Datum:</b>       |                      |
| <b>Dt Document Closed:</b>  |                             |                              |                      |
| <b>SAC Action Class:</b>    | Spill to Highway (Accident) |                              |                      |

**Incident Reason:**  
**Incident Summary:**

Summit Food: truck diesel to shoulder. contained

## Appendix: Database Descriptions

*Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. **Note:** Databases denoted with " \* " indicates that the database will no longer be updated. See the individual database description for more information.*

### **Abandoned Aggregate Inventory:**

Provincial

**AGR**

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.\*

**Government Publication Date: Sept 2002\***

### **Aggregate Inventory:**

Provincial

**AGR**

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

**Government Publication Date: Up to Sep 2017**

### **Abandoned Mine Information System:**

Provincial

**AMIS**

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

**Government Publication Date: 1800-Nov 2016**

### **Anderson's Waste Disposal Sites:**

Private

**ANDR**

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

**Government Publication Date: 1860s-Present**

### **Automobile Wrecking & Supplies:**

Private

**AUWR**

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

**Government Publication Date: 1999-Jan 31, 2018**

### **Borehole:**

Provincial

**BORE**

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

**Government Publication Date: 1875-Jul 2014**

### **Certificates of Approval:**

Provincial

**CA**

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

**Government Publication Date: 1985-Oct 30, 2011\***

**Commercial Fuel Oil Tanks:**

Provincial

CFOT

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

**Government Publication Date:** Feb 28, 2017

**Chemical Register:**

Private

CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

**Government Publication Date:** 1999-Jan 31, 2018

**Compressed Natural Gas Stations:**

Private

CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

**Government Publication Date:** Dec 31, 2012

**Inventory of Coal Gasification Plants and Coal Tar Sites:**

Provincial

COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.\*

**Government Publication Date:** Apr 1987 and Nov 1988\*

**Compliance and Convictions:**

Provincial

CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

**Government Publication Date:** 1989-Nov 2017

**Certificates of Property Use:**

Provincial

CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

**Government Publication Date:** 1994-Apr 30, 2018

**Drill Hole Database:**

Provincial

DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

**Government Publication Date:** 1886-Nov 30, 2017

**Dry Cleaning Facilities:**

Federal

DRYCLEANERS

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

**Government Publication Date:** Jan 2004-Dec 2016

**Environmental Activity and Sector Registry:**

Provincial

EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

**Government Publication Date:** Oct 2011-Jun 30, 2018

**Environmental Registry:**

Provincial

[EBR](#)

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

**Government Publication Date: 1994-Apr 30, 2018**

**Environmental Compliance Approval:**

Provincial

[ECA](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

**Government Publication Date: Oct 2011-Jun 30, 2018**

**Environmental Effects Monitoring:**

Federal

[EEM](#)

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

**Government Publication Date: 1992-2007\***

**ERIS Historical Searches:**

Private

[EHS](#)

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

**Government Publication Date: 1999-Feb 28, 2018**

**Environmental Issues Inventory System:**

Federal

[EIIS](#)

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

**Government Publication Date: 1992-2001\***

**Emergency Management Historical Event:**

Provincial

[EMHE](#)

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

**Government Publication Date: Dec 31, 2016**

**List of TSSA Expired Facilities:**

Provincial

[EXP](#)

List of facilities with removed tanks which were once registered with the Fuels Safety Program of the Technical Standards and Safety Authority (TSSA). Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. Tanks which have been removed automatically fall under the expired facilities inventory held by TSSA.

**Government Publication Date: Feb 28, 2017**

**Federal Convictions:**

Federal

[FCON](#)

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

**Government Publication Date: 1988-Jun 2007\***

**Contaminated Sites on Federal Land:**

Federal

[FCS](#)

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

**Government Publication Date:** Jun 2000-May 2018

**Fisheries & Oceans Fuel Tanks:**

Federal

[FOFT](#)

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

**Government Publication Date:** 1964-Sep 2017

**Fuel Storage Tank:**

Provincial

[FST](#)

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

**Government Publication Date:** Feb 28, 2017

**Fuel Storage Tank - Historic:**

Provincial

[FSTH](#)

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

**Government Publication Date:** Pre-Jan 2010\*

**Ontario Regulation 347 Waste Generators Summary:**

Provincial

[GEN](#)

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

**Government Publication Date:** 1986-December 31, 2017

**Greenhouse Gas Emissions from Large Facilities:**

Federal

[GHG](#)

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO<sub>2</sub> eq).

**Government Publication Date:** 2013-Dec 2016

**TSSA Historic Incidents:**

Provincial

[HINC](#)

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

**Government Publication Date:** 2006-June 2009\*

**Indian & Northern Affairs Fuel Tanks:**

Federal

[IAFT](#)

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

**Government Publication Date:** 1950-Aug 2003\*

**TSSA Incidents:**Provincial **INC**

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

**Government Publication Date: Feb 28, 2017**

**Landfill Inventory Management Ontario:**Provincial **LIMO**

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

**Government Publication Date: Dec 31, 2013**

**Canadian Mine Locations:**Private **MINE**

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

**Government Publication Date: 1998-2009\***

**Environmental Penalty Annual Report:**Provincial **MISA PENALTY**

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

**Government Publication Date: Jan 1, 2011 - Dec 31, 2017**

**Mineral Occurrences:**Provincial **MNR**

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

**Government Publication Date: 1846-Jan 2018**

**National Analysis of Trends in Emergencies System (NATES):**Federal **NATE**

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

**Government Publication Date: 1974-1994\***

**Non-Compliance Reports:**Provincial **NCPL**

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

**Government Publication Date: Dec 31, 2016**

**National Defense & Canadian Forces Fuel Tanks:**Federal **NDFT**

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

**Government Publication Date: Up to May 2001\***



**National Defense & Canadian Forces Spills:**

Federal

NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

**Government Publication Date: Mar 1999-Apr 2018**

**National Defence & Canadian Forces Waste Disposal Sites:**

Federal

NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

**Government Publication Date: 2001-Apr 2007\***

**National Energy Board Pipeline Incidents:**

Federal

NEBI

Locations of pipeline incidents from 2008 to present, made available by the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

**Government Publication Date: 2008-Mar 31, 2018**

**National Energy Board Wells:**

Federal

NEBW

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

**Government Publication Date: 1920-Feb 2003\***

**National Environmental Emergencies System (NEES):**

Federal

NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

**Government Publication Date: 1974-2003\***

**National PCB Inventory:**

Federal

NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

**Government Publication Date: 1988-2008\***

**National Pollutant Release Inventory:**

Federal

NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

**Government Publication Date: 1993-May 2017**

**Oil and Gas Wells:**

Private

OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at [www.nickles.com](http://www.nickles.com).

**Government Publication Date: 1988-April 30, 2018**

**Ontario Oil and Gas Wells:**

Provincial

OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSRLibrary has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

**Government Publication Date: 1800-Oct 2017**

**Inventory of PCB Storage Sites:**

Provincial

OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

**Government Publication Date:** 1987-Oct 2004; 2012-Dec 2013

**Orders:**

Provincial

ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

**Government Publication Date:** 1994-Apr 30, 2018

**Canadian Pulp and Paper:**

Private

PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

**Government Publication Date:** 1999, 2002, 2004, 2005, 2009-2014

**Parks Canada Fuel Storage Tanks:**

Federal

PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

**Government Publication Date:** 1920-Jan 2005\*

**Pesticide Register:**

Provincial

PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

**Government Publication Date:** 1988-Mar 2018

**TSSA Pipeline Incidents:**

Provincial

PINC

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

**Government Publication Date:** Feb 28, 2017

**Private and Retail Fuel Storage Tanks:**

Provincial

PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

**Government Publication Date:** 1989-1996\*

**Permit to Take Water:**

Provincial

PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

**Government Publication Date:** 1994-Apr 30, 2018

**Ontario Regulation 347 Waste Receivers Summary:**

Provincial

REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

**Government Publication Date:** 1986-2016

**Record of Site Condition:**

Provincial

RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.

RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

**Government Publication Date: 1997-Sept 2001, Oct 2004-Apr 2018**

**Retail Fuel Storage Tanks:**

Private

RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

**Government Publication Date: 1999-Jan 31, 2018**

**Scott's Manufacturing Directory:**

Private

SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

**Government Publication Date: 1992-Mar 2011\***

**Ontario Spills:**

Provincial

SPL

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

**Government Publication Date: 1988-Feb 2018**

**Wastewater Discharger Registration Database:**

Provincial

SRDS

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

**Government Publication Date: 1990-Dec 31, 2016**

**Anderson's Storage Tanks:**

Private

TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

**Government Publication Date: 1915-1953\***

**Transport Canada Fuel Storage Tanks:**

Federal

TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

**Government Publication Date: 1970-Aug 2017**

**TSSA Variances for Abandonment of Underground Storage Tanks:**

Provincial

VAR

List of variances granted for abandoned tanks. Under the Technical Standards and Safety Authority (TSSA) Liquid Fuels Handling Code and Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, an application may be sought for a variance from this code requirement.

**Government Publication Date: Feb 28, 2017**

**Waste Disposal Sites - MOE CA Inventory:**

Provincial

WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

**Government Publication Date: Oct 2011-Jun 30, 2018**

**Waste Disposal Sites - MOE 1991 Historical Approval Inventory:**

Provincial

[WDSH](#)

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

**Government Publication Date: Up to Oct 1990\***

**Water Well Information System:**

Provincial

[WWIS](#)

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

**Government Publication Date: Dec 31, 2017**

# Definitions

**Database Descriptions:** This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

**Detail Report:** This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

**Distance:** The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

**Direction:** The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

**Elevation:** The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

**Executive Summary:** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

**Map Key:** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

**Unplottables:** These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

# Appendix D

## Environmental Regulatory Correspondence

Ministry of the Environment,  
Conservation and Parks

Ministère de l'Environnement, de  
la Protection de la nature et des  
Parcs



Freedom of Information and  
Protection of Privacy Office

Bureau de l'accès à l'information et  
de la protection de la vie privée

12<sup>th</sup> Floor  
40 St. Clair Avenue West  
Toronto ON M4V 1M2  
Tel: (416) 314-4075

12<sup>e</sup> étage  
40, avenue St. Clair ouest  
Toronto ON M4V 1M2  
Tél. : (416) 314-4075

August 22, 2018

Scott Wallis  
GHD Inc.  
1225 Gardiners Dr, Unit 104  
Kingston, ON K7P 0G3

RECEIVED  
AUG 30 2018

Dear Scott Wallis:

RE: ***Freedom of Information and Protection of Privacy Act Request***  
**Our File # A-2018-05566, Your Reference 11180676-E1**

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 17, 19 Robinson Avenue, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, no records were located responsive to your request. To provide you with this response and in accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, the fee owed is \$30.00 for 1 hour of search time @ \$30.00 per hour. **We have applied the \$30.00 for this request from your initial payment. This file is now closed.**

You may request a review of my decision by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, ON M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a \$25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Erin Hunte at [Erin.Hunte@ontario.ca](mailto:Erin.Hunte@ontario.ca).

Yours truly,

Janet Dadufalza  
FOI Manager



## Nicole Carroll

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**From:** Public Information Services <publicinformationsservices@tssa.org>  
**Sent:** Monday, July 30, 2018 3:19 PM  
**To:** Scott Wallis  
**Subject:** RE: 11180676-E1 request for information TSSA

Hi Scott,

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please complete our release of public information form found at [https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?\\_mid\\_=392](https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?_mid_=392) and email the completed form to [publicinformationsservices@tssa.org](mailto:publicinformationsservices@tssa.org) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Thank you and have a great day,

Roxana



**Roxana Mashtaler | Public Information Agent**

Facilities  
345 Carlingview Drive  
Toronto, Ontario M9W 6N9  
Tel: +1-416-734-3472 | Fax: +1-416-231-6183 | E-Mail: [mashtaler@tssa.org](mailto:mashtaler@tssa.org)  
[www.tssa.org](http://www.tssa.org)



---

**From:** Scott.Wallis@ghd.com [mailto:Scott.Wallis@ghd.com]  
**Sent:** July 27, 2018 3:36 PM  
**To:** Public Information Services <publicinformationsservices@tssa.org>  
**Subject:** 11180676-E1 request for information TSSA

Good Afternoon,

GHD has been retained to conduct a Phase I Environmental Site Assessment at **17&19 Robinson Avenue in Ottawa, ON** (a single property). Could you please search the TSSA database for records of fuel storage tanks, spills, incidents or infractions for the following addresses located in the City of Ottawa, ON:

**17&19 Robinson Avenue in Ottawa, ON**

Thank you for your time,

**Scott Wallis, B.Sc.**  
**Project Manager**

**GHD**

T: +1 613 389 9812 | M: +1 613 328 9733 | E: [scott.wallis@ghd.com](mailto:scott.wallis@ghd.com)  
Unit 104 – 1225 Gardiners Road Kingston Ontario Canada K7P 0G3 | [www.ghd.com](http://www.ghd.com)  
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# Appendix E

## Aerial Photographs



**Year 1928**



**Aerial Photograph**



Year 1958



## Aerial Photograph





Year 1965



## Aerial Photograph



Year 1976



## Aerial Photograph





Year 1991



## Aerial Photograph



Year 1999



## Aerial Photograph





Year 2002



## Aerial Photograph



Year 2005



## Aerial Photograph





Year 2007



## Aerial Photograph



Year 2008



## Aerial Photograph





Year 2009



## Aerial Photograph





Year 2011



## Aerial Photograph



Year 2014



## Aerial Photograph





**Year 2017**



## **Aerial Photograph**



**Year 2017**



## **Aerial Photograph**

# Appendix F Site Photographs





Photo 1 – 17 and 19 Robinson Avenue – from street



Photo 2 – 17 and 19 Robinson Avenue - rear



## Site Photographs





Photo 3 – 23 Robinson Avenue – from street



Photo 4 – 23 Robinson Avenue – from rear, showing 900L AST (Heating Oil) – on building exterior (PCA 1, APEC 1)



## Site Photographs





Photo 5 – rear yard showing monitoring well from previous investigation



## Site Photographs



## about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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