Phase One Environmental Site Assessment
788 March Road
Ottawa, Ontario

Revision: 0 (Final)

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Client:	10731854 Canada Inc.	
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Revision Number:	0	Date: July 16, 2018
Prepared by:	Angela Garrison	
Reviewed by:	Sean Sterling	
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EXECUTIVE SUMMARY

Geofirma Engineering Ltd. (Geofirma) was retained by Omnipex Real Estate Inc. (Mr. Ralph Esposito) on behalf of 10731854 Canada Inc. to conduct a Phase One Environmental Site Assessment (ESA) in accordance with current MOECC Reg 153 Phase One ESA requirements on the property addressed as 788 March Road, in Ottawa, Ontario (the site). This work was conducted as part of a requirement from the City of Ottawa in support of a planning application for the site.

The site is a vacant parcel of land. Shirley's Brook is located along the eastern boundary of the site.

Based on historical air photos, one structure was present on the site between 1934 and 1964; two structures were present on the site between 1964 and 1994. All buildings had been demolished by 1994. The site was used as a construction storage area in the 2009 air photo and was once again vacant land by the time of the 2011 air photo.

A Record of Site Condition (RSC#63910) was filed on January 29, 2010 for portions of the site. This RSC was only completed for the portion of the property greater than 30 m from Shirley's Brook. The MOE soil and groundwater standards were updated after this RSC was filed and therefore the historical soil and groundwater concentrations were compared to the current 2011 MOE standards as part of this report. None of the reported soil or groundwater concentrations exceed the currently applicable site standards (2011 MOE Table 2 (potable water condition, for medium/fine soils, residential/parkland/industrial property use)) for the portion of the property greater than 30 m from Shirley's Brook, however exceedances of barium and total chromium were noted compared to 2011 MOE Table 1 (background) standards.

A Phase I ESA and Supplemental Soil Investigation was completed by Geofirma for the City of Ottawa for the entire property in 2010 as part of the City's road widening project in the area. No environmental concerns were noted from the historical review, regulatory inquiries or site inspection, however a series of fill piles (estimated to be greater than 20 years old) were identified within treed areas and adjacent to Shirley's Brook. As previous studies did not investigate the soil quality from these fill piles, shallow soil sampling was completed from a variety of fill pile locations to confirm fill quality. These soil sampling locations were located within 30m of the waterbody and were analysed for PHC, BTEX and metals. Similarly, these historical reported concentrations were compared to the current MOECC standards. Chemistry results from the fill piles showed that there were no exceedences in the fill materials however, minor exceedances of barium was found in two of the native clay soil samples beneath the fill when compared to 2011 MOE Table 8 (soil within 30m of a waterbody in a potable groundwater condition) and MOE Table 1 (background) standards.

A former garage was identified immediately northwest of the site, across March Road historically. Soil and groundwater sampling conducted as part of the RSC report did not identify any impact and therefore this activity was not considered to pose a concern to the site.

Based on the results of this Phase One ESA, no potentially contaminating activities, areas of potential environmental concerns were identified and therefore, no further site characterization is recommended at this time.

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APEC - Area of Potential Environmental Concern

BTEX – Benzene, Toluene, Ethylbenzene, Xylenes

CET – Certified Engineering Technologist

CSA – Canadian Standards Association

CSM – Conceptual Site Model

ESA – Environmental Site Assessment

FIP – Fire Insurance Plan

GIS – Geographical Information System

HLUI – Historical Land Use Inventory

MOE – Ontario Ministry of the Environment (information prior to June 24, 2014)

MOECC – Ontario Ministry of the Environment and Climate Change (information after June 24, 2014)

OGS – Ontario Geological Survey

PAH – Polycyclic Aromatic Hydrocarbon

PCA – Potentially Contaminating Activity

PHC – Petroleum Hydrocarbons

QP – Qualified Person

RSC – Record of Site Condition

TSSA – Technical Standards and Safety Authority

VOC – Volatile Organic Compound

1 INTRODUCTION

Geofirma Engineering Ltd. (Geofirma) was retained by Omnipex Real Estate Inc. (Mr. Ralph Esposito) on behalf of 10731854 Canada Inc. to conduct a Phase One Environmental Site Assessment (ESA) on the property addressed as 788 March Road, in Ottawa, Ontario (the site). The legal description for the site is: Part of Lot 10, Concession 4, as in Instrument no N681746, save and except Part, Geographic Township of March, City of Ottawa, PIN 04517-0801. The site is currently owned by 10731854 Canada Inc. The main contact for the site is Ralph Esposito, Jr, Omnipex Real Estate Inc., 586 Church Street, Beaconsfield, QC (resposito@omnipex.ca).

The Phase One ESA work was completed in accordance with the general requirements of Canadian Standards Association (CSA) Standard *"Z768-01 – Phase I Environmental Site Assessment"* (November 2001) and, more importantly, the specific requirements of the Ontario Ministry of Environment mandatory Phase One Environmental Site Assessment requirements as defined in Part VII and Schedule D of Ontario Regulation 153/04 (as amended by O.Reg. 511/09). The Phase One ESA was completed in accordance with the requirements of O. Reg. 153/04, as part of the planning requirements for the site.

The Phase One Environmental Site Assessment was conducted by Geofirma personnel Angela Garrison, CET and supervised by Sean Sterling, QP_{ESA}, M.Sc., P.Eng., P.Geo.

- Angela Garrison, CET is an Environmental Technologist with Geofirma Engineering Ltd. Ms. Garrison has 20 years of experience in the completion of over 200 Phase I ESAs and numerous Designated Substances Audits for residential, commercial and industrial properties for private and government clients in her time with Geofirma. She graduated from Algonquin College in 1997 and has been employed with Geofirma Engineering Ltd. since graduation. She currently holds a Certified Engineering Technologist (CET) designation with the Ontario Association of Certified Engineering Technicians and Technologists
- Sean Sterling, M.Sc., P.Eng., P.Geo. and Senior Hydrogeologist with Geofirma, is a QP_{ESA} in accordance with O.Reg. 153/04. Mr. Sterling has 23 years of specialized experience and expertise in environmental site assessments. From 1999 to 2002, Mr. Sterling worked as a Research Associate at the University of Waterloo focusing on the development of rock porewater characterization techniques, discrete level and multilevel monitoring systems in fractured bedrock environments and on the prevention of vertical borehole cross-connection in fractured rock systems by using temporary borehole sealing techniques. Since 2002 he has been a consulting hydrogeologist with Geofirma. He is a registered professional engineer and geoscientist in the Province of Ontario.

2 SCOPE OF INVESTIGATION

2.1 Purpose and Objectives

A Phase One ESA involves an assessment of the environmental liability of a property based on a review of reasonably ascertainable information from public records, a site reconnaissance visit and interviews, as appropriate. The purpose of a Phase One ESA is to determine whether conditions exist, based on present or prior land use, tenants or owners, to warrant further exploratory work.

The purpose of this Phase One ESA is to support a planning application to the City of Ottawa (the City).

In accordance with Section 24 of O.Reg.153/04, the Phase One ESA was undertaken to meet the following general objectives:

- 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 property;
- To determine the need for a Phase Two Environmental Site Assessment;
- To provide a basis for carrying out any Phase Two Environmental Site Assessment required; and
- To provide adequate preliminary information about environmental conditions in the land or water on, in or under the phase one property for the conduct of a Risk Assessment following completion of a Phase Two Environmental Site Assessment.

2.2 Scope of Work, Methodology and Limitations

In accordance with Section 25 of O.Reg.153/04, the Phase One ESA of the site consisted of the following components:

- Records review completed prior to interviews and site reconnaissance;
- Site reconnaissance completed on July 3, 2018. The site inspection was conducted by Angela Garrison, CET.
- Evaluation of information from records review, interviews and site reconnaissance and completion of a conceptual site model (CSM);
- Preparation of Phase One ESA report; and
- Delivery of Phase One ESA report to the client.

Historical aerial photographs were reviewed at the National Air Photo Library, in Ottawa and on-line from the City of Ottawa, geoOttawa website. Fire Insurance Plans and City Directories were reviewed at the National Archives of Canada. In addition, the Historical Land Use Database information for an area of 250 m surrounding the site was provided by the City, which includes City Directory and Fire Insurance Plan information from 1900 to 2012. Several former Phase I ESA reports have been prepared for the site, as well as a Record of Site Condition (RSC) for a portion of the property, which were also relied upon for historical information pertaining to the site.

A land title search was completed in a previous report and is reiterated in this report along with known updated information.

A database search was performed by EcoLog ERIS, of Toronto, Ontario in June 2018. The type of report completed is referred to as a RSC (Record of Site Condition) Report (Urban). The report is designed to meet the requirements of the amended Regulation 511/09. All Ontario databases (federal, public and private) are searched for a radius of 300 m from the boundaries of the site.

The Phase One Conceptual Site Model is discussed in Section 6.4 of this report.

2.3 Occupant Description

The site is located at 788 March Road, in Ottawa, Ontario and is approximately 1.2 hectares in size. The site is currently vacant. The site consists of a mix of dense vegetation (trees and shrubs) as well as grassed areas. Shirley's Brook is also located on the eastern boundary of the site.

For the purposes of this report, March Road is considered west of the site and Klondike Road is considered north of the site.

The site location plan is shown in Figure A.1, and the site layout map is provided as Figure A.2, in Appendix A.

2.4 Adjacent Properties

Land use in the area surrounding the site is vacant, light commercial and residential. Shirley's Brook is located on the eastern boundary of the site. Land use on the properties immediately adjacent to the site includes:

- North – Klondike Road, light commercial;
- East – Shirley's Brook, small church, residential;
- South – vacant land, residential; and
- West – March Road, light commercial and residential

3 RECORDS REVIEW

3.1 General

Historical land use was determined through a review of Fire Insurance Plans, database searches, aerial photographs, physical setting sources and review of historical reports for the site.

3.1.1 Phase One Study Area Determination

The Phase One ESA property is bordered by Klondike Road to the north, Shirley's Brook to the east, vacant lands to the south and March Road to the west.

The Phase One Study Area includes an area within a circular radius of 250 m of the boundaries of the site. The 250 m radius Study Area includes roadways, residential lands, vacant land and light commercial lands. Review over a larger area is not necessary or justified.

Based on historical land use, as residential, agricultural and vacant land, the site would not be considered an enhanced investigation property in accordance with Section 32 of O.Reg 153/04.

3.1.2 First Development Use Determination

The site Crown ownership prior to 1846 and is assumed to be undeveloped at that time. Several private owners were recorded for the site after 1846 in the title search conducted. Air photos for the site were not available prior to 1934 where one residential/agricultural structure was visible along the western boundary of the site. The exact year the site was developed is unclear but is presumed to be mid to late 1800's.

3.1.3 Fire Insurance Plans

No Fire Insurance Plans (FIPs) are available covering the subject property as FIPs were historically only prepared for select urban centres. Nonetheless, FIPs from 1901, 1912, 1922, and 1956/1963 were reviewed for the site at the National Archives of Canada to confirm that no information exists. As expected, based on the location of the site, outside the City of Ottawa limits during these years, the site was not covered in any of the FIP reviewed.

Fire insurance plans after 1956/1963 are not available for the City of Ottawa.

3.1.4 Chain of Title

A Land Title Search was completed for the Site by Wentzell Titles for a former Phase I ESA, dated July 30, 2010, and is provided in Appendix B. The legal description for the site is:

- "Part of Lot 10, Concession 4, as in instrument no N681746, save and except Part 1, Geographic Township of March, City of Ottawa. PIN 04517-0801"

Owners on the site have included:

Entire Site

- Prior to 1846: Crown
- 1846 to 1854 – John Armstrong
- 1854 to 1905: James Armstrong
- 1905 to 1914: Ann Armstrong
- 1914 to 1940: Estate of George Armstrong
- 1940 to 1948: Eric F. Armstrong

Part of the site

- 1948 to 1960: Harold Armstrong
- 1960 to 1987: Leonard Roy and Sussanna Roy (Part)

Part of the site

- 1948 to 1982: Harold Armstrong
- 1982 to 1983: Allen A. Stewart, Margaret Stewart
- 1983 to 1987: Kanata Red Oak Developments Ltd.

All of the site

- 1987 to 1993: Allen Stewart In Trust
- 1993 to 1997: 1048383 Ontario Inc.
- 1997 to 2001: 1202642 Ontario Inc, Metal Imports Ltd. in trust
- 2001 to 2010: Imperial Oil Limited

The nature of the numbered companies is unknown, however, based on additional historical review, historical land owners are not considered to pose a significant environmental concern to the site. Imperial Oil owned the site but there is no evidence that the site was used or developed by the company.

The City of Ottawa reportedly purchased the property from Imperial Oil in 2010. The current owner of the site, Omnipex Real Estate Inc., acquired the property in 2018.

The boundaries of the site have changed slightly since the 2010 Phase I ESA because of the City of Ottawa road widening project. Portions of the north and west boundaries have been removed for the road widening in these areas. A copy of the current property boundary legal plan is provided in Appendix G.

3.1.5 Environmental Reports

O'Connor Associates Environmental Inc. (O'Connor), 2010. Record of Site Condition (RSC#63910) January 29

O'Connor Associates Environmental Inc. (O'Connor) filed a Record of Site Condition (RSC#63910) on January 29, 2010 on behalf of Imperial Oil Ltd. This RSC was only completed for the portion of the property greater than 30 m from Shirley's Brook. The RSC was obtained through the Ministry of the Environment Brownfields Environmental Site Online Registry, as well as through the MOECC information request discussed in Section 3.6.2. The RSC was based on a Phase One ESA (O'Connor, 2009a) and a subsequent Phase Two ESA (O'Connor, 2009b) for Imperial Oil Ltd., also completed by O'Connor.

Soil and groundwater concentrations reported in these O'Connor studies were compared to the 2004 MOE Table 3 (non-potable) standards as well as Table 1 (background) standards. Soil was sampled and analysed for metals, petroleum hydrocarbons (PHC) and benzene, etylbenzene, toluene, xylenes (BTEX). Groundwater was sampled and analysed for PHC, BTEX and volatile organic compounds (VOCs). Although no soil or groundwater concentrations were reported to exceeded 2004 applicable MOE Table 3 standards (at that time) for the portion of the property greater than 30 m from Shirley's Brook, there were several parameters in these samples that were detected above 2004 MOE Table 1 (background) standards, including barium, zinc, total chromium, benzene, toluene and xylene. The current applicable standards to compare soil and groundwater concentrations to are the 2011 MOE Table 2 standards (full depth generic site conditions standards in a potable water condition, for medium/fine soils, residential/parkland/industrial property use) which also showed no exceedences, however when compared to MOE 2011 Table 1 (background) standards showed exceedences of barium and total chromium.

Intera Engineering Ltd., 2010. Phase I Environmental Site Assessment and Supplemental Soil Investigation, 788 March Road, December

Geofirma (formerly Intera Engineering Ltd.) completed a Phase I ESA and Supplemental Soil Investigation in December 2010 (Intera, 2010) for the City of Ottawa. No environmental concerns were noted from the historical review, regulatory inquiries or site inspection, however a series of fill piles (estimated to be greater than 20 years old) were identified within treed areas and adjacent to Shirley's Brook. As previous studies did not investigate the soil quality from these fill piles, Geofirma completed shallow soil sampling from a variety of fill pile locations to confirm fill quality. Soil samples were analysed for PHC, BTEX and metals. Chemistry results from the fill piles showed that there were no exceedances of applicable MOE Table 8 standards (generic site condition standards for use within 30m of a water body in a potable groundwater condition, residential/parkland/ institutional/industrial/commercial/community property use), however minor exceedances of barium compared to current 2011 MOE Table 8 were noted in two native clay soil samples beneath the fill. These values also exceeded the 2011 MOE Table 1 background standards.

3.1.6 Site Plans

No site plans were provided to Geofirma as part of the project.

3.1.7 City of Ottawa Zoning

City of Ottawa geoOttawa website lists the site as a General Mixed-Use Zone (Sec. 187-188).

"The purpose of the GM – General Mixed-Use Zone is to:

1. *allow residential, commercial and institutional uses, or mixed use development in the **General Urban Area** and in the **Upper Town, Lowertown and Sandy Hill West Character Areas** of the**Central Area** designations of the Official Plan;*

2. *limit commercial uses to individual occupancies or in groupings in well defined areas such that they do not affect the development of the designated Traditional and Arterial Mainstreets as viable mixed-use areas;*

3. *permit uses that are often large and serve or draw from broader areas than the surrounding community and which may generate traffic, noise or other impacts provided the anticipated impacts are adequately mitigated or otherwise addressed; and*

4. *impose development standards that will ensure that the uses are compatible and complement surrounding land uses."*

3.1.8 Environmental Source Information, Database Review

Information sources such as the City of Ottawa Historical Land Use Inventory and the Environmental Risk Information Services (ERIS) databases were searched as part of the environmental source information and database review process.

3.1.8.1 Historical Land Use Inventory

The City of Ottawa provided information from their Historical Land Use Inventory (HLUI) database for a radius of 250 m from the boundaries of the site for a previous Phase I ESA. The HLUI database search also included landfills within 500 m of the site. The HLUI database was created using FIP, City Directories and additional historical information for the City of Ottawa from 1990 to 2012 to identify and map the locations of any businesses or land uses that pose the potential for contamination to soils or groundwater in the vicinity of the site based on their types of facilities and potential chemicals used on-site.

The HLUI identified two automotive garages located at 1111 Klondike Road, north west of the site in 2001 and 2005.

3.1.8.2 ERIS Report

Environmental source information was compiled by ERIS for the site on June 21, 2018, and included a 300 metre search radius from the boundaries of the site. The distance from the site is provided for each entry and only the entries within 250m of the site are discussed below. The complete report is included in Appendix C.

In all of the databases searched, there were a total of 4 occurrences identified on the Phase One ESA site. Occurrences are provided by site location/address. Some addresses may only contain one

occurrence while others may have numerous different entries.

The following databases, were consulted:

- Abandoned Aggregate Inventory
- Aggregate Inventory
- Abandoned Mine Information System
- Anderson's Waste Disposal Sites
- Automobile Wrecking & Supplies
- **Borehole (5)** - The Borehole database, dated 1875-Jul 2014, identified 5 entries within 250 m of the site. There are no environmental concerns associated with these boreholes.
- **Certificates of Approval (3)** – The CA database, dated 1985-Oct 30, 2011 identified 3 entries within 250m of the site. Each of the entries were for municipal or municipal/private sewage works. There are no environmental concerns associated with these certificates of approval.
- Commercial Fuel Oil Tanks
- Chemical Register
- Compressed Natural Gas Stations
- Inventory of Coal Gasification Plants and Coal Tar Sites
- Compliance and Convictions
- Certificates of Property Use
- Drill Hole Database
- Dry Cleaning Facilities
- Environmental Activity and Sector Registry
- Environmental Registry
- **Environmental Compliance Approval (2)** – The ECA database, dated Oct 2011-April 30, 2018 identified 2 entries within 250m of the site. Both of the entries were for private sewage works. There are no environmental concerns associated with these environmental compliance approvals.
- Environmental Effects Monitoring
- **ERIS Historical Searches (4)** - The ERIS Historical Search database, dated 1999-Feb 28, 2018 identified 4 entries within 250m of the site which included one for the site itself. ERIS searches do not pose an environmental concern.
- Environmental Issues Information System
- Environmental Management Historical Event
- **List of TSSA Expired Facilities (1)** – The EXP database, dated Feb 28, 2017 identified one entry 89.4 meters from the site at 1111 Klondike Road. The J. Tierney Jims Gas Bar was identified as an expired TSSA facility in 1990 and 2009. The potential for underground storage tanks could pose an environmental concern to the subject site, however historical soil and groundwater sampling conducted on the site showed no evidence of contamination from this activity.
- Federal Convictions

- Contaminated Sites on Federal Land
- Fisheries & Oceans Fuel Tanks
- Fuel Storage Tank
- Fuel Storage Tank - Historic
- **Ontario Regulation 347 Waste Generators Summary (14)** - The GEN database, dated 1986-Dec 31, 2017 identified 14 entries within 250 m of the site. These include various pharmacies and medical centres. The waste generated included pharmaceuticals and pathological wastes. There are no environmental concerns associated with these waste generators.
- Greenhouse Gas Emissions from Large Facilities
- TSSA Historic Incidents
- Indian & Northern Affairs Fuel Tanks
- TSSA Incidents
- Landfill Inventory Management Ontario
- Canadian Mine Locations
- Environmental Penalty Annual Report
- Mineral Occurrences
- National Analysis of Trends in Emergencies System (NATES)
- Non-Compliance Reports
- National Defence & Canadian Forces Fuel Tanks
- National Defence & Canadian Forces Spills
- National Defence & Canadian Forces Waste Disposal Sites
- National Energy Board Pipeline Incidents
- National Energy Board Wells
- National Environmental Emergencies System (NEES)
- National PCB Inventory
- National Pollutant Release Inventory
- Oil and Gas Wells
- Ontario Oil and Gas Wells
- Inventory of PCB Storage Sites
- Orders
- Canadian Pulp and Paper
- Parks Canada Fuel Storage Tanks
- **Pesticide Register (2) -** The PES database, dated 1988-Mar 2018 identified two entries within 250m of the site. Both are for a nearby pharmacy. There are no environmental concerns associated with these entries.
- TSSA Pipeline Incidents

- **Private and Retail Fuel Storage Tanks (1)** – The PRT database, dated 1989-1996 identified one entry within 250m of the site. The J. Tierney Jims Gas Bar was identified at 1111 Klondike Road. The potential for underground storage tanks could pose an environmental concern to the subject site, however historical soil and groundwater sampling conducted on the site showed no evidence of contamination from this activity.
- Permit to Take Water
- Ontario Regulation 347 Waste Receivers Summary
- **Record of Site Condition (1)** – The RSC database, dated 1997-Sept 2004, Oct 20004-Apr 2018 identified the site located at 788 March Road as having an RSC completed on the property by Imperial Oil in 2009. The RSC is discussed later in this report and does not pose an environmental concern to the site.
- Retail Fuel Storage Tanks
- Scott's Manufacturing Directory
- Ontario Spills
- Wastewater Discharger Registration Database
- Anderson's Storage Tanks
- Transport Canada Fuel Storage Tanks
- TSSA Variances for Abandonment of Underground Storage Tanks
- Waste Disposal Sites - MOE CA Inventory
- Waste Disposal Sites - MOE 1991 Historical Approval Inventory
- **Water Well Information System (21)** - The WWIS database, dated Dec 31, 2017 identified 21 entries within 250 m of the site, with two of these being on the subject site. The two entries for the site include the drilling of a monitoring well in 2009 and its abandonment in 2010. The remaining entries surrounding the site were mainly for the drilling of domestic and municipal water wells. These entries do not pose an environmental concern to the site.

3.2 Physical Setting Sources

3.2.1 Aerial Photographs

Aerial photographs from 1934, 1946, 1952, 1964, 1975, 1988 and 1994 were examined at the National Air Photo Library. Many of these air photos were at small scales and viewing finer details was difficult. City of Ottawa geoOttawa photos from 1965, 1991, 2002, 2008, 2009, 2011, 2014 and 2017 were reviewed on-line and provided much more detailed views of the site and surrounding areas. Air photos at approximately 10 year intervals were reviewed, to supplement historic information for the site. The air photo coverage reviewed was deemed adequate based on the residential, agricultural land and undeveloped nature of the site. Air photographs for the site were not available prior to 1934. Selected photos reviewed are reproduced in Appendix D.

The following provides a list of the aerial photographs reviewed by photo year, line number, photo number and scale.

Date (yyyy/mm/dd)	*Line Number*	*Photo Number*	*Scale*
1934-06-20	A698	22	1 : 20,000
1946-08-14	A10370	232	1 : 15,000
1952-07-31	A13380	22	1 : 15,000
1964-04-15	A18343	73	1 : 25,000
1975-04-30	A23959	59	1 : 15,000
1988-11-25	A31529	94	1 : 20,000
1994-10-12	A28146	79	1 : 10,000
1965, 1991, 2002, 2008, 2009, 2011, 2014, 2017	geoOttawa	Not applicable	Varies

The following information summarizes the findings of the air photos reviewed for the site and adjacent properties within a 250 metre radius of the site. For the purposes of this report, Klondike Road is considered north of the site.

788 March Road – the site

In 1934, there was one structure present along the western boundary of the site, along March Road. The site also included a surface water course (brook) along the eastern boundary and vacant land. By 1952, some of the vacant lands had been converted to farmed agricultural fields. A second structure was visible in the 1964 air photo, on the site along March Road. Both structures appeared to be residential in nature and may have also included small sheds or outbuildings. The 1964 air photo also showed a very small shed structure located in the southern portion of the site, on the east side of the brook, likely used by the adjacent farm to the east of the site, however there were no paths leading to this shed. By 1991, only one residential structure remained on the site along March Road and the remainder of the site was vacant and treed land and the brook. Former agricultural areas had been allowed to grow over. The last remaining structure had been demolished by the 1994 air photo. The land remained vacant between 1994 and 2008. A temporary construction storage area was located along March Road in the central portion of the site in 2009 and included one large metal storage container and several smaller storage items. This area was accessed from March Road a little north of the storage area and was likely used for the March Road and Klondike Road widening projects. By the 2011 air photo, March Road to the west and Klondike Road to the north had been expanded. The storage area was gone, and the land had been allowed to grow over. The site remained vacant and wooded land with Shirley's Brook from 2011 to 2017.

Adjacent North

Klondike Road was present north of the site in all of the air photos reviewed. Lands beyond consisted of residential, agricultural and vacant from 1934 to 2008. Some of the agricultural and vacant lands

were began conversion to light commercial by the 2009 air photo which was completed by the 2011 air photo. Klondike Road was widened by the time of the 2011 air photo. The 2017 air photo showed a crushed gravel drainage path along Klondike Road to the brook.

Adjacent South

Lands south of the site consisted of farmland and agricultural fields from 1934 to 1988. Some of the agricultural lands were converted to residential development by the 1988 air photo. Additional residential housing units were constructed throughout the years.

Adjacent East

A brook was present east of the site in all air photos reviewed. Lands beyond the brook included residential and agricultural from 1934 to 1994. A church and associated parking lots were built by the time of the 1991 air photo on the east side of the brook with residential beyond which remained unchanged through 2017.

Adjacent West

March Road was present in all air photos reviewed and had been widened significantly by the time of the 2001 air photo. Lands beyond March Road consisted of residential and agricultural in 1934. A larger structure was present at the corner of March Road and Klondike Road in 1952 which appeared commercial in nature. Additional potential commercial buildings were observed further west in the 1975 air photo. The Morgan's Grant community development had started by the time of the 1988 air photo the majority of the agricultural lands were being used for construction staging and fill deposition areas. The three commercial buildings had been demolished by 2002 and replaced with residential homes. The original structure at the corner of March and Klondike Roads had been removed by 2007 and this area was under development for light commercial lands by 2008. March Road was widened by the time of the 2011 air photo.

Historical land uses on the site and and within the study area do not pose a significant environmental concern to the site.

The air photos from 1946, 1952, 1975, 1991, 2009 and 2017 are reproduced in Appendix D.

3.2.2 Fire Insurance Plans

No Fire Insurance Plans (FIPs) are available covering the subject property as FIPs were historically only prepared for select urban centres. Nonetheless, FIPs from 1901, 1912, 1922, and 1956/1963 were reviewed for the site at the National Archives of Canada to confirm that no information exists. As expected, based on the location of the site, outside the City of Ottawa limits during these years, the site was not covered in any of the FIP reviewed.

Fire insurance plans after 1956/1963 are not available for the City of Ottawa.

3.2.3 City Directories

City of Ottawa Directories were reviewed for the years 1990, 1996 and 2000. There were no listings

for the site in the City Directories.

3.2.4 Databases and Inventories

The following databases and inventories were consulted:

- *Old Landfill Management Strategy – Phase I – Identification of Sites, City of Ottawa, Ontario.* Golder Associates Ltd., 2004;
- *Inventory of Coal Gasification Plant Waste Sites*. INTERA Technologies Ltd., 1987;
- *Mapping and Assessment of Former Industrial Sites*. INTERA Technologies Ltd., 1988; and
- *Wetlands.* MNR, 2015.

3.2.4.1 Old Landfill Management Strategy

Active disposal sites were not identified on the site or in the immediately surrounding area. One closed waste disposal site was identified in the Old Landfill Management Strategy document within two kilometres (km) of the site. The March Landfill was identified approximately 1.7 km west of the site. This landfill was operational from 1960 to 1973 and reportedly accepted domestic wastes, commercial, agricultural, and industrial. Based on regional groundwater flow direction, which is likely toward the Ottawa River to the north, this landfill does not pose a significant environmental concern to the site.

3.2.4.2 Former Industrial Sites and Coal Gasification Plants Inventories

Coal gasification plant sites were not identified on the site or in the surrounding area.

Former industrial sites were not identified on the site or in the surrounding area, as this report does not cover the area of the site.

3.2.4.3 Wetlands

There were no significant wetlands identified on the site or within 250 metres of the site as part of this update report. One swamp was identified approximately 80m north of the site.

3.2.4.4 Ontario Ministry of the Environment and Climate Change (MOECC)

A Freedom of Information request was made to MOE regarding 788 March Road during the 2010 Geofirma Phase I ESA, to determine any environmental orders or other legal undertakings which may have been brought against the site, and to determine whether the site has been used for the purposes of waste disposal. A Record of Site Condition for the site was identified by the MOECC as per a response from Donna Currie, Freedom of Information coordinator. O'Connor Associates Environmental Inc. (O'Connor) filed a Record of Site Condition on behalf of the current site owner, Imperial Oil Limited on January 29, 2010. The Record of Site Condition does not apply to the entire site. In 2009, a Phase I and a Phase II Environmental Site Assessment was completed by O'Connor, results of the soil and groundwater analysis did not indicate any evidence of contamination.

3.2.5 Topography, Hydrology and Geology

Information on site topography, hydrology and geology were obtained from review of surficial and bedrock geology mapping, topographical maps. Figure A.3, Appendix A, is a topographic map of the site and study area, and the location of surface water in the vicinity of the site.

The topography of the site generally slopes from west to east. Total elevation relief over the site is less than 4 meters. The elevation of the site is approximately 76 meters above sea level (mASL).

The site is located approximately 2.5 kilometers (km) southwest of the Ottawa River; approximately 4 km north of the Carp River; and Shirley's Brook is located on the eastern portion of the property. Regional groundwater flow direction is interpreted as north towards the Ottawa River. Local groundwater flow is likely influenced by the location of the nearby brook and underground municipal utility and sewer excavations. No monitoring wells are installed at the site, therefore the elevation of the water table has not been determined. However, wet soil was observed during the previous drilling investigation at approximately 3 meters below ground surface (mBGS) in 2010. The direction of shallow groundwater flow beneath the site is likely toward the north-east, discharging to Shirley's Brook (the brook).

The geological setting of the area is described as follows:

- Surficial Geology: Fine-textured glaciomarine deposits: silt and clay, minor sand and gravel, massive to well laminated (OGS, 2010)
- Bedrock Geology: Dolostone, sandstone – Beekmantown Group (OGS, 2011).

3.2.6 Fill Materials

Geofirma (formerly Intera Engineering Ltd.) completed a Phase I ESA and Supplemental Soil Investigation in December 2010 (Intera, 2010) for the City of Ottawa. A series of fill piles (estimated to be greater than 20 years old) were identified within treed areas and adjacent to Shirley's Brook. Geofirma completed shallow soil sampling from a variety of fill pile locations to confirm fill quality. Soil samples were analysed for PHC, BTEX and metals and chemistry results from the fill piles showed that there were no exceedances of applicable MOE Table 8 standards (generic site condition standards for use within 30m of a water body in a potable groundwater condition, residential/parkland/ institutional/industrial/commercial/community property use), however minor exceedances of barium compared to current 2011 MOE Table 8 were noted in two native soil samples. These values also exceeded the 2011 MOE Table 1 background standards.

3.2.7 Water Bodies and Areas of Natural Significance

Shirley's Brook is located along the eastern boundary of the site. Regional groundwater flow direction is interpreted as north towards the Ottawa River. Local groundwater flow is likely influenced by the location of the nearby brook and underground municipal utility and sewer excavations. There are no areas of natural significance, as defined by the Ontario Ministry of Natural Resources and provided in the MNR GIS database or the ERIS database, located on or within 250 m of the site.

3.2.8 Well Records

The ERIS report (ERIS, 2018) reported that one monitoring well was identified on the site in 2009 and was abandoned in 2010. An additional 19 wells were identified within 250m of the site. These were domestic, municipal and commercial water wells.

3.2.9 Site Operating Records

The site is a vacant parcel of land. There are no site operating records available or required for the site.

4 INTERVIEWS

Imperial Oil Ltd., declined an interview as part of the Geofirma 2010 Phase I ESA, however Imperial Oil Ltd. provided the City an appraisal for the property. Imperial Oil did not provide a copy of the Phase One ESA or Phase Two ESA in support of the 2010 RSC however they provided an opportunity for Geofirma (on behalf of the City of Ottawa) to review the reports under supervision of Imperial Oil's consultant (O'Connor Associates).

Currently there are no additional people associated with the site that are knowledgeable about historical site conditions and as the site remains vacant, no interviews were conducted.

5 SITE RECONNAISSANCE

5.1 General Requirements

The site reconnaissance visit was conducted during the morning of July 3, 2018 by Geofirma staff Angela Garrison who was unaccompanied. It was a sunny morning with a temperature of 18^{o} Celcius. The inspection lasted approximately a half an hour and included a visual inspection of the vacant lands and surrounding land. There were no limitations to the visual inspection at the time of the visit. Water was visible in the brook and was stagnant at the time of the site inspection.

The site is not considered an enhanced investigation property under Ontario Regulation 153/04 (as amended). The site is a vacant parcel of land with no structures and is not currently in use. There are currently no operations of concern at the site.

Photographs were taken to document conditions at the site. Site photographs, including descriptions, are provided in Appendix E.

5.2 Specific Observations at Phase One ESA Property

The site is currently a vacant parcel of land. There are no buildings or structures located on the site.

The site is bounded by Klondike Road to the north, Shirley's Brook to the east, vacant land to the south and March Road to the west.

5.2.1 Utilities

Utilities are not provided to the site, however do run along March Road and Klondike Road to the west and north respectively.

5.2.2 Heating and Cooling Systems

No heating or cooling equipment was observed on the site during the Geofirma site inspection.

5.2.3 Drains and Sumps

No drains or sumps were observed on the site during the Geofirma site inspection.

5.2.4 Unidentified Substances

No unidentified substances were observed at the time of the site inspection.

5.2.5 Odours

No odours were observed at the time of the site inspection.

5.2.6 Staining

No stained materials were observed on the site at the time of the Geofrma site inspection.

5.2.7 Stressed Vegetation

No stressed vegetation were observed on the site at the time of the Geofrma site inspection

5.2.8 Fill Materials

Small piles of sand and gravel fill were observed in the wooded area and along the northern edge of the property during the 2010 Phase I ESA. It was concluded that based on the extensive vegetation growth (i.e. grasses, trees) and animal burrows on top of these fill piles, they are assumed to have been deposited several years prior. Shallow soil sampling was completed from a variety of fill pile locations to confirm fill quality (Intera, 2010). Soil samples were analysed for PHC, BTEX and metals and chemistry results from the fill piles showed that minor exceedances of barium compared to 2011 MOE Table 8 standards were noted in two native soil samples.

5.2.9 Waste Materials

No waste materials were observed on the site.

5.2.10 Pits and Lagoons

No pits or lagoons were observed on the site during the Geofirma site inspection.

5.2.11 Watercourses, Ditches, or Standing Water

Shirley's Brook is located on the east side of the site. No other watercourses, ditches or standing water was observed on site at the time of the Geofirma site inspection.

5.2.12 Well Locations and Details

What appeared to be an artesian well (i.e. not being used and not properly abandoned) was observed on the adjacent south property located within Shirley's Brook in 2010 in a former Phase I ESA. The surface water level in the brook was high enough that it covered the bottom of the well casing and only approximately 0.3 m of the casing was visible. At the time of the 2010 site inspection the well was flowing into the brook. This well was not observed during the site inspection conducted for this report.

5.2.13 Hazardous Materials

No hazardous materials were observed at the site at the time of the Geofirma site inspection.

5.2.14 Storage Tanks and Storage Containers

No storage tanks or storage containers were observed at the site at the time of the Geofirma site inspection.

6 REVIEW AND EVALUATION OF INFORMATION

6.1 Current and Past Uses

The site is currently addressed as 788 March Road, Ottawa. The site is currently vacant.

Form A2 below, provides a summary of past uses of the site, and is provided in the format specified in O.Reg 153/04. Normally the form is divided into two sections; the first section provides a summary based on ownership, while the second section of the table provides a summary based on occupants of the site. However, with this site, the owner and occupant are the same and therefore are only provided once. All known occupants for the site are listed on Form A2. All information was collected through the historical review for the site.

Form A2

Table of Current and Past Uses of the Phase One ESA Property
(Refer to clause 16(2)(b), Schedule D, O. Reg. 153/04)

Year	Name of **Owner/Occupant**	Description of Property Use	Property Use	Other Observation from Aerial Photographs, Fire Insurance Plans, etc.
Pre 1846	Crown	Vacant	Agricultural or other	Historical information prior to 1934 is based on the title search only.
1846 - 1854	John Armstrong	Residential	Residential	Historical information prior to 1934 is based on the title search only.
1854 - 1905	James Armstrong	Residential	Residential	Historical information prior to 1934 is based on the title search only.
1905 - 1914	Ann Armstrong	Residential	Residential	Historical information prior to 1934 is based on the title search only.
1914 - 1940	Estate of George Armstrong	Residential	Residential	In 1934, there was one structure present along the western boundary of the site, along March Road. The site also included Shirley's Brook along the eastern boundary and vacant land.
1940 - 1948	Eric F. Armstrong	Residential	Residential	Residential
1948 – 1960 (part 1)	Harold Armstrong	Residential, Agricultural	Residential, Agricultural or other	By 1952, some of the vacant lands had been converted to farmed agricultural fields.

Year	Name of **Owner/Occupant**	Description of Property Use	Property Use	Other Observation from Aerial Photographs, Fire Insurance Plans, etc.
1960 – 1987 (part 1)	Leonard Roy, Sussanna Roy	Residential, Agricultural	Residential, Agricultural or other	A second structure was visible in the 1964 air photo, on the site along March Road. Both structures on the site appeared to be residential in nature and may have also included small sheds or outbuildings. The 1964 air photo also showed a very small shed structure located in the southern portion of the site, on the east side of the brook, likely used by the adjacent farm to the east of the site, however there were no paths leading to this shed.
1948 – 1982 (part 2)	Harold Armstrong	Residential, Agricultural	Residential, Agricultural or other	Residential and agricultural farm lands.
1982 – 1983 (part 2)	Allen A. Stewart, Margaret Stewart	Residential, Agricultural	Residential, Agricultural or other	Residential and agricultural farm lands.
1983 – 1987 (part 2)	Kanata Red Oak Developments Ltd.	Residential, Agricultural	Residential, Agricultural or other	Residential and agricultural farm lands.
1987 - 1993	Allen Stewart In Trust	Residential, Agricultural	Residential, Agricultural or other	By 1991, only one residential structure remained on the site along March Road and the remainder of the site was vacant and treed land and the brook. Former agricultural areas had been allowed to grow over.
1993 - 1997	1048383 Ontario Inc.	Vacant	Agricultural or other	The last remaining structure had been demolished by the 1994 air photo. The land remained vacant between 1994 and 2008.
1997 - 2001	1202642 Ontario Inc., Metal Imports Ltd. In Trust	Vacant	Agricultural or other	Vacant land.
2001 - 2010	Imperial Oil Limited	Vacant, container storage area	Agricultural or other, Industrial	A temporary container/material storage area was located along March Road in the central portion of the site in 2009 and included one large metal storage container and several smaller storage items. This area was accessed from March Road a little north of the storage area and may have been used for the March Road and Klondike Road widening projects.

Year	Name of **Owner/Occupant**	Description of Property Use	Property Use	Other Observation from Aerial Photographs, Fire Insurance Plans, etc.
2010 - 2018	City of Ottawa	Vacant	Agricultural or other	By the 2011 air photo, March Road to the west and Klondike Road to the north had been expanded. The storage area was gone, and the land had been allowed to grow over. The site remained vacant and wooded land with Shirley's Brook from 2011 to 2017.
2018	Omnipex Ltd.	Vacant	Agricultural or other	Vacant, wooded land with Shirley's Brook.

6.2 Potentially Contaminating Activities

There are no potentially contaminating activities (PCA) associated with the site. Two activities that may have posed a concern included the fill materials placed on the site and the former garage located northwest of the site, however both of these activities were investigated as part of previous environmental investigations and were not concluded to be PCA's. The 2010 RSC for the property reported all soil and groundwater concentrations met the current applicable standards for the site. The fill piles were investigated as part of the 2010 Phase I ESA (Intera, 2010) and reported minor exceedences of barium above 2011 MOECC Table 8 standards in native clay materials below the fill which do not pose a significant environmental concern to the site.

6.3 Areas of Potential Environmental Concern

As there were no PCA's identified for the site, no areas of potential environmental concern (APECs) are identified.

6.4 Phase One Conceptual Site Model

Interpreting the probable environmental conditions of the site is undertaken by reference to a Phase One Conceptual Site Model (CSM). A Conceptual Site Model is an idealization of potential site contaminants and their interaction with the hydrogeologic system and surrounding properties, based on the known conditions of a site. The Conceptual Site Model includes a description of the potentially contaminating activities at the Phase One ESA property and surrounding properties, identifying contaminants of concern and their source locations. The model also demonstrates the interaction of these contaminants with the natural environment (soil, groundwater, bedrock, water bodies) and the built environment (utilities, buildings), identifying potential receptors.

As there were no potentially contaminating activities identified and no areas of potential concern, a conceptual site model is not required for the site.

7 CONCLUSIONS

Based on the information obtained during the 2010 Phase I ESA and soil investigation program as well as the current Phase One ESA, the following conclusions are made:

- The site is currently a vacant parcel of land. Shirley's Brook is located along the eastern boundary of the site.
- Based on historical air photos, one structure was present on the site between 1934 and 1964; two structures were present on the site between 1964 and 1994. All buildings had been demolished by 1994. The site was used as a construction storage area in the 2009 air photo and was once again vacant land by the time of the 2011 air photo.
- A Record of Site Condition (RSC#63910) was filed on January 29, 2010 for portions of the site. This RSC was only completed for the portion of the property greater than 30 m from Shirley's Brook. The MOE soil and groundwater standards were updated after this RSC was filed and therefore the historical soil and groundwater concentrations were compared to the current 2011 MOECC standards as part of this report. None of the reported soil or groundwater concentrations exceed the current 2011 MOECC Table 2 (potable water condition, for medium/fine soils, residential/parkland/industrial property use) for the portion of the property greater than 30 m from Shirley's Brook, however exceedances of barium and total chromium were noted compared to 2011 MOE Table 1 (background) standards.
- A Phase I ESA and Supplemental Soil Investigation was completed by Geofirma for the City of Ottawa for the property in 2010 as part of the City's road widening project in the area. No environmental concerns were noted from the historical review, regulatory inquiries or site inspection, however a series of fill piles (estimated to be greater than 20 years old) were identified within treed areas and adjacent to Shirley's Brook. As previous studies did not investigate the soil quality from these fill piles, shallow soil sampling was completed from a variety of fill pile locations to confirm fill quality. These soil sampling locations were located within 30m of the waterbody and were analysed for PHC, BTEX and metals. Similarly, these historical reported concentrations were compared to the current MOECC standards. Chemistry results from the fill piles showed that there were no exceedences in the fill materials however, minor exceedances of barium was found in two of the native clay soil samples beneath the fill when compared to 2011 MOE Table 8 (soil within 30m of a waterbody in a potable groundwater condition) and MOE Table 1 (background) standards.
- A former garage was identified immediately northwest of the site, across March Road historically. Soil and groundwater sampling conducted as part of the RSC did not identify any impact to the subject property and therefore this activity is not considered to pose a concern to the site.
- Based on the results of this Phase One ESA, no further site characterization is recommended at this time.

8 CLOSURE

This report has been prepared for the exclusive use of 10731854 Canada Inc. using a methodology for conducting environmental site assessments that is acceptable within the profession. It should be noted that results of an investigation of this type should in no way be construed as a warranty that the site is free from any and all contamination from past or current practices.

Geofirma Engineering Ltd. has exercised professional judgment in collecting and analyzing the information and in formulating recommendations based on the results of the study. The mandate at Geofirma is to perform the given tasks within guidelines prescribed by the client and with the quality and due diligence expected within the profession. No other warranty or representation expressed or implied, as to the accuracy of the information or recommendations is included or intended in this report.

Geofirma Engineering Ltd. hereby disclaims any liability or responsibility to any person or party, other than the party to whom this report is addressed, for any loss, damage, expense, fines or penalties which may arise or result from the use of any information or recommendations contained in this report by any other party. Any use of this report constitutes acceptance of the limits of Geofirma's liability. Geofirma's liability extends only to its client and only for the total amount of fees received from the client for this specific project and not to other parties who may obtain this report.

Respectfully submitted,

Geofirma Engineering Ltd.

Angela Garrison, CET
Environmental Technologist

Sean Sterling, MSc, PEng, PGeo
Principal / Senior Engineer

PROFESSIONAL GEOSCIENTIST
SEAN N. STERLING
PRACTISING MEMBER
1678
ONTARIO

9 REFERENCES

Canadian Standards Association (CSA), 2001, re-affirmed 2012. Phase I Environmental Site Assessment (Z768-01)

City of Ottawa, 2016. http://maps.ottawa.ca/geoOttawa/, mapping website

Golder Associates Ltd., 2004. Old Landfill Management Strategy – Phase I - Identification of Sites, City of Ottawa, Ontario

Google Earth: website, 2018

Intera Engineering Ltd., 2010. Phase I Environmental Site Assessment and Supplemental Soil Investigation – 788 March Road, Ottawa, Ontario, December

Intera Technologies Ltd., 1987. Inventory of Coal Gasification Plant Waste Sites in Ontario, July

Intera Technologies Ltd., 1988. Mapping and Assessment of Former Industrial Sites, City of Ottawa, July

O'Connor Associates Environmental Inc., 2009a. Phase I Environmental Site Assessment, Vacant Land, 788 March Road, Kanata, Ontario. July 30.

O'Connor Associates Environmental Inc., 2009b. Phase II Environmental Site Assessment, 788 March Road, Kanata, Ontario. August 20.

Ontario Geological Survey, 2010. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV

Ontario Geological Survey, 2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release---Data 126-Revision 1

Ontario Ministry of Natural Resources (MNR), 2015. Wetlands Unit

Ontario Ministry of Natural Resources (MNR), 2012. Areas of Natural and Scientific Interest

Ontario Ministry of the Environment and Climate Change (MOECC), 2017. Brownfields Environmental Site Registry: http://www.ene.gov.on.ca/environment/en/subject/brownfields/STDPROD_075742.html

Ontario Ministry of the Environment (MOE), 2009. Ontario Regulation 490/09, Designated Substances

Natural Resources Values Information System, 2012. Areas of Natural and Scientific Interest

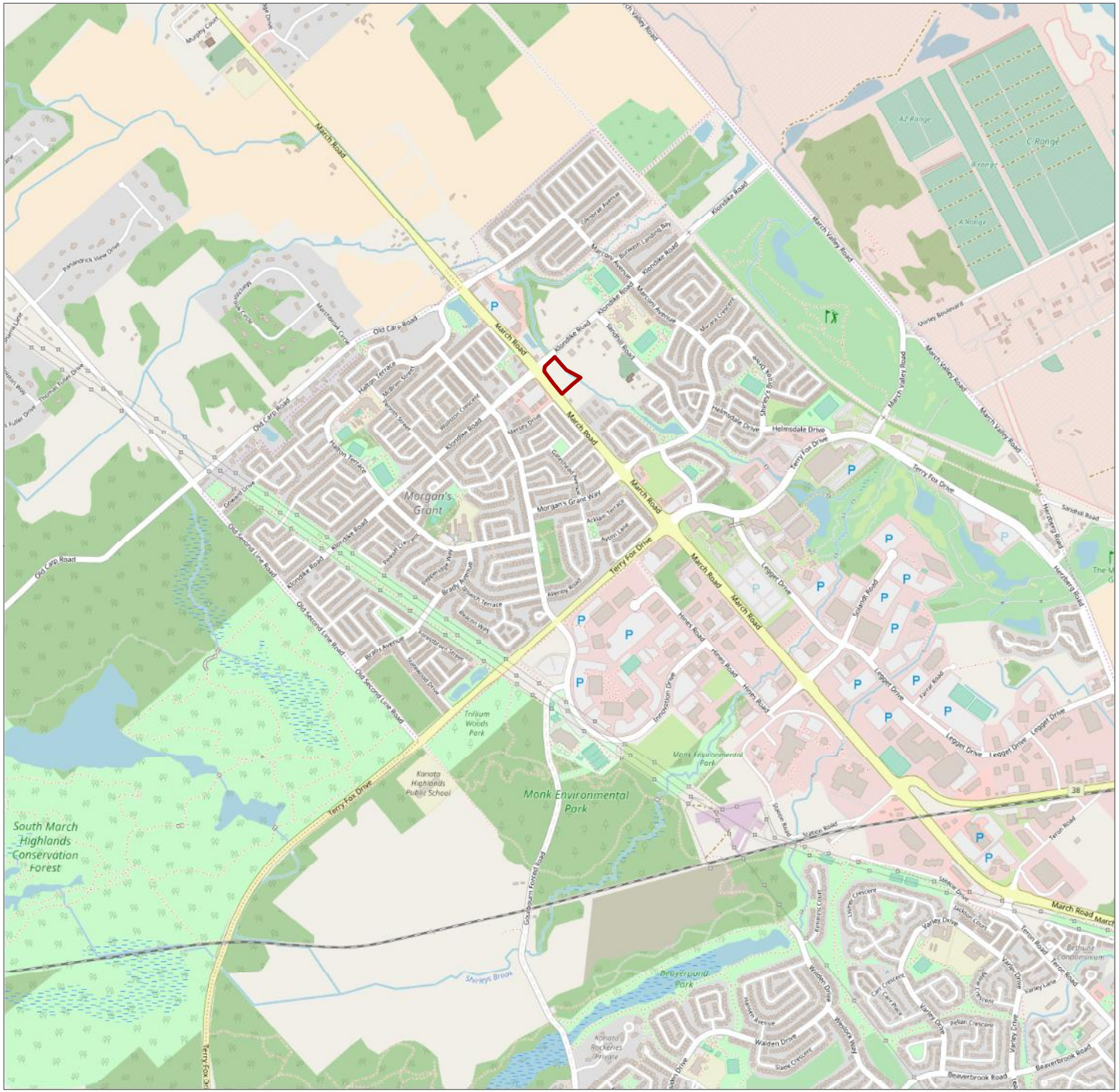
APPENDIX A

Figures

Figure A.1 – Site Location

Figure A.2 – Site Layout

Figure A.3 – Topographic Map



LEGEND

788 March Road

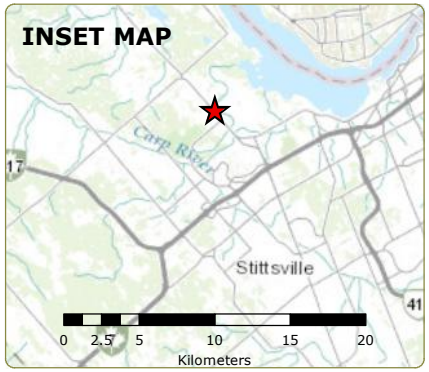


Figure A.1
Site Location

Scale 1:25,000

0 100 200 400 600 800
Meters

N

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 24/06/2018

Geofirma Engineering Ltd

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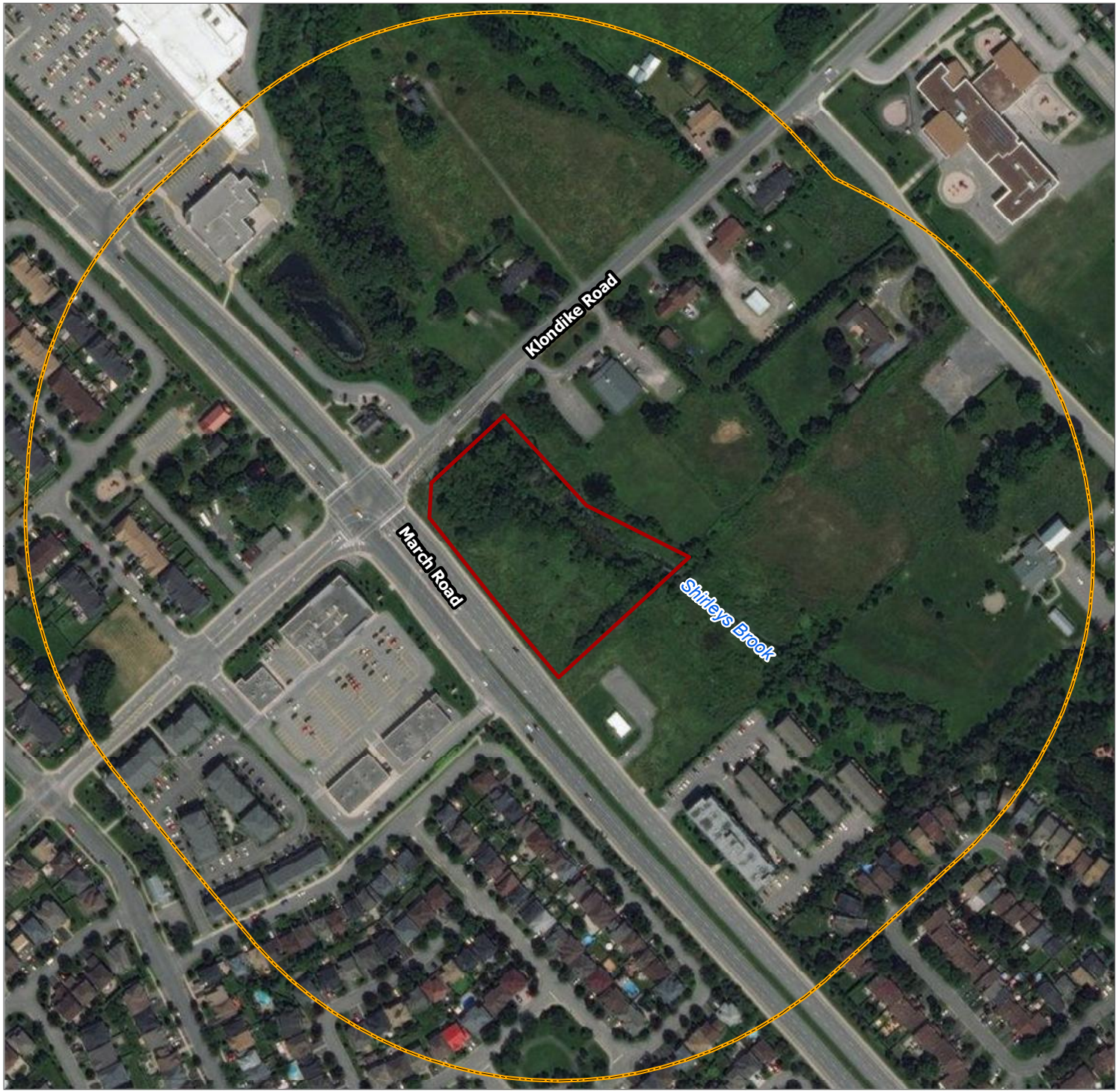

LEGEND

788 March Road

250m Study Area Buffer from the Boundaries of the Site

Figure A.2
Site Layout

Scale 1:3,500

0 20 40 80 120 160
Meters

N

Coordinate System: NAD 1983 MTM 9
Source: ESRI, geobase
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 24/06/2018

Geofirma Engineering Ltd

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LEGEND

- 788 March Road
- 250m Study Area Buffer from the Boundaries of the Site

Figure A.3
Topographic Map

Scale 1:3,500

0 20 40 80 120 160
Meters

N

Coordinate System: NAD 1983 MTM 9
Source: ESRI, geobase
Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 24/06/2018

Geofirma Engineering Ltd

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APPENDIX B

Title Search

Attn: Trish Petrie

(1)

ENVIRONMENTAL SEARCH 788 March Road, Kanata

INSTRUMENT #	TYPE	DATE	VENDOR	PURCHASER
	Patent	Apr 23 1846	Crown	John Armstrong
RO7854	Deed	Oct 5 1854	John Armstrong	James Armstrong
MH1775	Will	May 30 1905	James Armstrong	Ann Armstrong George Armstrong
MH2417	Deed	June 20 1914	Ann Armstrong	George Armstrong
MH3485	Deed	June 4 1940	Estate of George Armstrong	Harold Armstrong Eric F. Armstrong
MH3746	Deed	June 8 1948	Eric F. Armstrong	Harold Armstrong
MH4515	Deed	Feb 4 1960	Harold Armstrong	Leonard Kay Susanna Kay (Part)
N398637	Deed	July 17 1987	Susanna Kay	Allen Stewart In Trust

ENVIRONMENTAL SEARCH

INSTRUMENT #	TYPE	DATE	VENDOR	PURCHASER
N681746	Deed	Dec 24 1993	Allan Stewart In Trust	1048383 Ontario Inc. (all)
LT1097317	Fore-closure	Dec 24 1997	Ontario Court (General Division)	1202642 Ontario Inc.
LT1380109	Power of Sale	May 1 2001	Metal Exports Ltd., In Trust	1436996 Ontario Inc.
LT1384542	Deed	May 16 2001	1436996 Ontario Inc.	Imperial Oil Limited (Current Owner)
* Note - See page 1 up previous owners			until Instrument no. of the chain of title	MH3746 for the continued below.
N5154358	Deed	June 25 1982	Estate of Harold Armstrong	Allen A. Stewart Margaret Stewart (Part)
N521927	Deed	Nov 25 1983	Allen A. Stewart Margaret Stewart	Kanata Red Oak Developments Ltd.

ENVIRONMENTAL SEARCH

INSTRUMENT #	TYPE	DATE	VENDOR	PURCHASER
N382009	Deed	April 1987	Kanata Red Oak Developments Ltd.	Allen Stewart In Trust
* See Instrument no's N681746, LT1097317, LT1380109 & LT1384542 on Page 2 for the subsequent owners of this chain of title.				
# Legal Description is: Part of Lot 10, Concession 4, as in Instrument no. N681746, save & except Part, Geographic Township of March, City of Ottawa. PIN 04517-0801.				
			July 30/10	

APPENDIX C

ERIS Documentation

ENVIRONMENTAL RISK INFORMATION SERVICES

DATABASE REPORT

Project Property:	*788 March Road* *788 March Road* *Kanata ON K2K 1X7*
Project No:	
Report Type:	*RSC Report (Urban)*
Order No:	*20180618029*
Requested by:	*Geofirma Engineering*
Date Completed:	*June 21, 2018*

Environmental Risk Information Services
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:	*788 March Road* *788 March Road Kanata ON K2K 1X7*
Project No:	

Order Information:

Order No:	*20180618029*
Date Requested:	*June 18, 2018*
Requested by:	*Geofirma Engineering*
Report Type:	*RSC Report (Urban)*

Historical/Products:

Topographic Map	*Ontario Base Map (OBM)*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
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	6	6
CA	Certificates of Approval	Y	0	4	4
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	0	0
ECA	Environmental Compliance Approval	Y	0	2	2
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	1	4	5
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	1	1
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	14	14
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	TSSA Incidents	Y	0	0	0
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

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
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	2	2
PINC	TSSA Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	1	1
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	1	0	1
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	0	0
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	2	20	22
	Total:		4	54	58

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	WWIS		Ottawa ON	-/0.0	-0.64	18
1	WWIS		KANATA ON	-/0.0	-0.64	23
2	RSC	Imperial Oil Limited	1092 Klondike Road and 788 March Road, Kanata, Ontario K2K 1X7 Kanata ON K2K 1X7	-/0.0	1.37	25
3	EHS		788 March Road Kanata ON	-/0.0	1.66	26

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
4	EHS		Klondike Rd & March Rd Ottawa ON	NNW/18.6	-2.46	26
5	WWIS		lot 10 con 4 ON	W/23.0	6.45	27
6	BORE		ON	WSW/27.1	6.45	29
6	WWIS		lot 10 con 4 ON	WSW/27.1	6.45	29
7	CA	R.M. OF OTTAWA-CARLETON	MARCH RD./KLONDIKE RD. (SWM) KANATA CITY ON	W/50.5	6.04	32
8	BORE		ON	NNW/62.7	-2.49	33
8	WWIS		lot 11 con 4 ON	NNW/62.7	-2.49	33
9	WWIS		lot 11 con 4 KANATA ON	NW/63.7	1.34	36
10	WWIS		lot 11 con 3 ON	W/80.4	5.97	37
11	WWIS		lot 10 con 4 ON	NNE/81.1	3.06	40
12	WWIS		lot 11 con 4 KANATA ON	NW/87.3	-1.45	43
13	BORE		ON	WNW/87.5	5.69	47
13	WWIS		lot 11 con 4 ON	WNW/87.5	5.69	48
14	EXP	J TIERNEY JIMS GAS BAR	1111 KLONDIKE RD LOT 11 CON 3 KANATA ON P7B 6C2	W/89.4	5.97	50
14	PRT	J TIERNEY JIMS GAS BAR	1111 KLONDIKE RD LOT 11 CON 3 KANATA ON	W/89.4	5.97	50
15	GEN	2325225 Ontario Inc.	1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	W/102.2	7.69	50
15	GEN	2325225 Ontario Inc.	1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	W/102.2	7.69	51
15	GEN	G.G. Pharmacy Inc.	1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	W/102.2	7.69	51
15	PES	G.G PHARMACY INC.	1102 KLONDIKE RD KANATA ON K2K1X7	W/102.2	7.69	51
15	PES	G.G PHARMACY INC.	1102 KLONDIKE RD KANATA ON K2K 0G1	W/102.2	7.69	52
16	WWIS		lot 10 con 3 ON	WSW/120.9	9.11	52
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	54
17	GEN	INVIVA McKesson Pharma	1108 Klondike Road Unit A Kanata ON K2K 0G1	SW/127.5	9.00	55

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
17	GEN	INVIVA McKesson Pharma INVIVA	1108 Klondike Road Unit A Kanata ON K2K 0G1	SW/127.5	9.00	55
17	GEN	INVIVA McKesson Pharma	1108 Klondike Road Unit A Kanata ON K2K 0G1	SW/127.5	9.00	55
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	55
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	56
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	56
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	56
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON	SW/127.5	9.00	57
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	57
17	GEN	Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	SW/127.5	9.00	57
18	ECA	Blue Heron Co-operative Homes Inc.	750, 760 March Rd Kanata Ottawa ON K2K 2W4	SSE/131.5	3.14	57
19	WWIS		lot 11 con 4 KANATA ON	NW/134.3	-0.31	58
20	CA	Blue Heron Co-operative Homes Inc.	750, 760 March Road, Kanata Ottawa ON	SSE/145.4	4.34	62
20	CA	Blue Heron Co-operative Homes Inc.	750, 760 March Road, Kanata Ottawa ON	SSE/145.4	4.34	62
21	WWIS		lot 10 con 3 KANATA ON	WNW/150.8	4.61	63
22	EHS		351 Sandhill Rd Ottawa ON K2K1X7	ENE/160.9	5.75	64
23	ECA	Blue Heron Co-operative Homes Inc.	750 March Rd Kanata Ottawa ON K2K 2W4	SSE/161.8	3.81	64
24	WWIS		lot 11 con 4 KANATA ON	NW/171.4	-1.36	64
25	EHS		1055 & 1075 Klondike Rd Ottawa ON	NNW/188.5	6.50	68
26	BORE		ON	NE/193.5	5.72	69
26	WWIS		lot 10 con 4 ON	NE/193.5	5.72	69
27	WWIS		lot 10 con 4 KANATA ON	NE/197.2	5.73	71
28	WWIS		lot 11 con 3 ON	WSW/204.6	9.92	77
29	BORE		ON	WSW/217.0	10.08	79
29	WWIS		lot 11 con 3 ON	WSW/217.0	10.08	80
30	WWIS		lot 10 con 4 KANATA ON	NE/217.0	4.90	82
31	WWIS		lot 11 con 4 ON	NE/222.2	5.24	88

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
32	WWIS		lot 11 con 3 ON	WNW/240.7	6.69	90
33	CA	Riotrin Properties (March Road) Inc.	830 March Rd 1095 Klondike Road Ottawa ON	NW/276.4	5.61	93
34	BORE		ON	E/282.5	5.69	93
34	WWIS		lot 10 con 4 ON	E/282.5	5.69	94
35	EHS		Klondike Rd. and Sandhill Rd. Kanata ON	NNE/286.6	3.10	97

Executive Summary: Summary By Data Source

BORE - Borehole

A search of the BORE database, dated 1875-Jul 2014 has found that there are 6 BORE site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	ON	27.1	6
	ON	62.7	8
	ON	87.5	13
	ON	193.5	26
	ON	217.0	29
	ON	282.5	34

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 4 CA site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
R.M. OF OTTAWA-CARLETON	MARCH RD./KLONDIKE RD. (SWM) KANATA CITY ON	50.5	7
Blue Heron Co-operative Homes Inc.	750, 760 March Road, Kanata Ottawa ON	145.4	20
Blue Heron Co-operative Homes Inc.	750, 760 March Road, Kanata Ottawa ON	145.4	20
Riotrin Properties (March Road) Inc.	830 March Rd 1095 Klondike Road Ottawa ON	276.4	33

ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011-Apr 30, 2018 has found that there are 2 ECA site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Blue Heron Co-operative Homes Inc.	750, 760 March Rd Kanata Ottawa ON K2K 2W4	131.5	18

Site	Address	Distance (m)	Map Key
Blue Heron Co-operative Homes Inc.	750 March Rd Kanata Ottawa ON K2K 2W4	161.8	23

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Feb 28, 2018 has found that there are 5 EHS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	788 March Road Kanata ON	0.0	3
	Klondike Rd & March Rd Ottawa ON	18.6	4
	351 Sandhill Rd Ottawa ON K2K1X7	160.9	22
	1055 & 1075 Klondike Rd Ottawa ON	188.5	25
	Klondike Rd. and Sandhill Rd. Kanata ON	286.6	35

EXP - List of TSSA Expired Facilities

A search of the EXP database, dated Feb 28, 2017 has found that there are 1 EXP site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
J TIERNEY JIMS GAS BAR	1111 KLONDIKE RD LOT 11 CON 3 KANATA ON P7B 6C2	89.4	14

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-December 31, 2017 has found that there are 14 GEN site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
G.G. Pharmacy Inc.	1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	102.2	15
2325225 Ontario Inc.	1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	102.2	15
2325225 Ontario Inc.	1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	102.2	15
INVIVA McKesson Pharma	1108 Klondike Road Unit A Kanata ON K2K 0G1	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17

Site	Address	Distance (m)	Map Key
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17
INVIVA McKesson Pharma INVIVA	1108 Klondike Road Unit A Kanata ON K2K 0G1	127.5	17
INVIVA McKesson Pharma	1108 Klondike Road Unit A Kanata ON K2K 0G1	127.5	17
Activecare klondike medical centre	1108 klondike rd. ottawa ON K2K0G1	127.5	17

PES - Pesticide Register

A search of the PES database, dated 1988-Mar 2018 has found that there are 2 PES site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
G.G PHARMACY INC.	1102 KLONDIKE RD KANATA ON K2K 0G1	102.2	15
G.G PHARMACY INC.	1102 KLONDIKE RD KANATA ON K2K1X7	102.2	15

PRT - Private and Retail Fuel Storage Tanks

A search of the PRT database, dated 1989-1996* has found that there are 1 PRT site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
J TIERNEY JIMS GAS BAR	1111 KLONDIKE RD LOT 11 CON 3 KANATA ON	89.4	14

RSC - Record of Site Condition

A search of the RSC database, dated 1997-Sept 2001, Oct 2004-Apr 2018 has found that there are 1 RSC site(s) within approximately 0.30 kilometers of the project property.

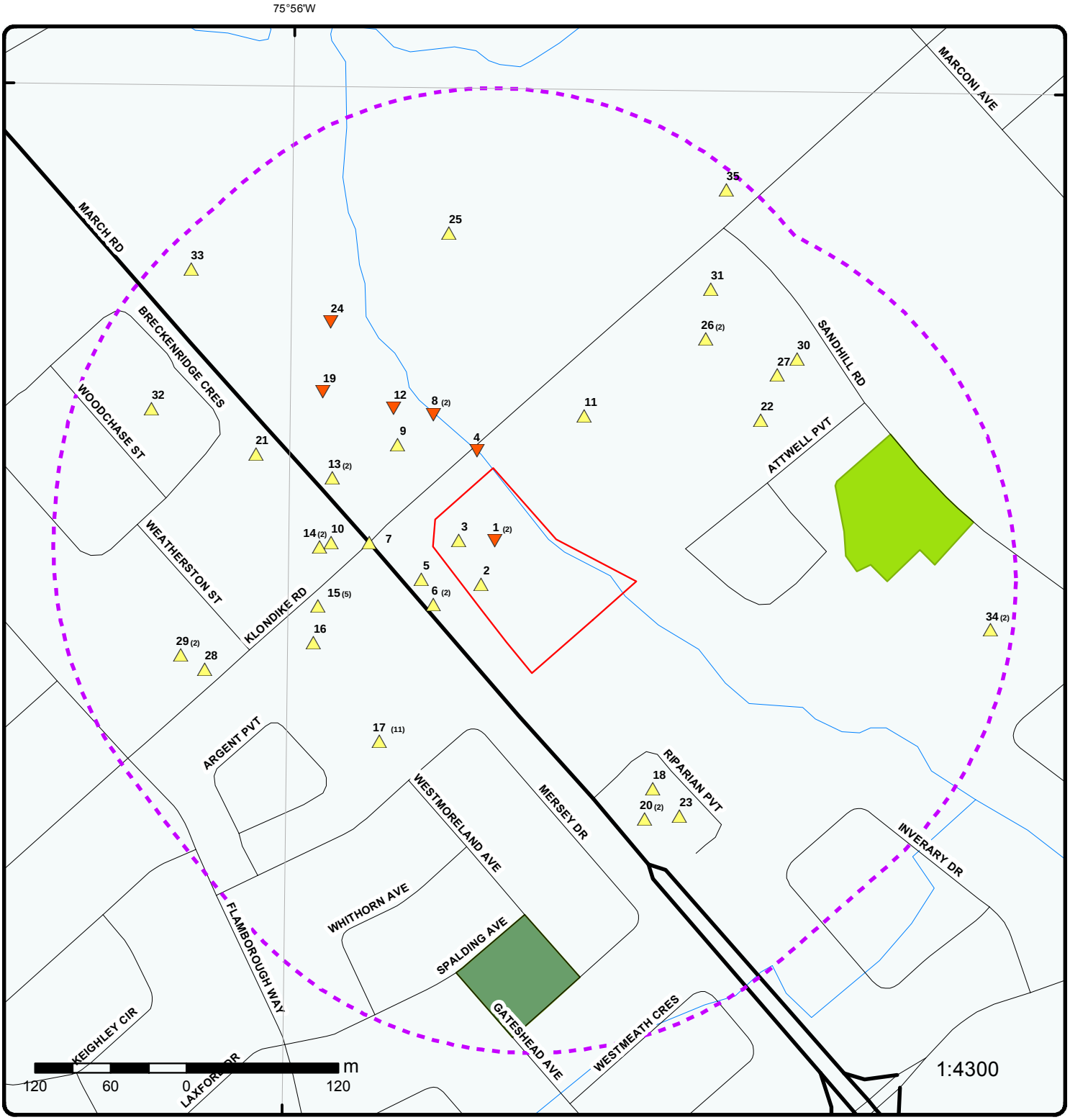
Site	Address	Distance (m)	Map Key
Imperial Oil Limited	1092 Klondike Road and 788 March Road, Kanata, Ontario K2K 1X7 Kanata ON K2K 1X7	0.0	2

WWIS - Water Well Information System

A search of the WWIS database, dated Dec 31, 2017 has found that there are 22 WWIS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	Ottawa ON	0.0	1
	KANATA ON	0.0	1
	lot 10 con 4 ON	23.0	5
	lot 10 con 4 ON	27.1	6
	lot 11 con 4 ON	62.7	8
	lot 11 con 4 KANATA ON	63.7	9
	lot 11 con 3 ON	80.4	10
	lot 10 con 4 ON	81.1	11
	lot 11 con 4 KANATA ON	87.3	12
	lot 11 con 4 ON	87.5	13
	lot 10 con 3 ON	120.9	16
	lot 11 con 4 KANATA ON	134.3	19
	lot 10 con 3 KANATA ON	150.8	21
	lot 11 con 4 KANATA ON	171.4	24
	lot 10 con 4 ON	193.5	26
	lot 10 con 4 KANATA ON	197.2	27
	lot 11 con 3 ON	204.6	28
	lot 11 con 3 ON	217.0	29

Site	Address	Distance (m)	Map Key
	lot 10 con 4 KANATA ON	217.0	30
	lot 11 con 4 ON	222.2	31
	lot 11 con 3 ON	240.7	32
	lot 10 con 4 ON	282.5	34



Map : 0.3 Kilometer Radius

Order No: 20180618029

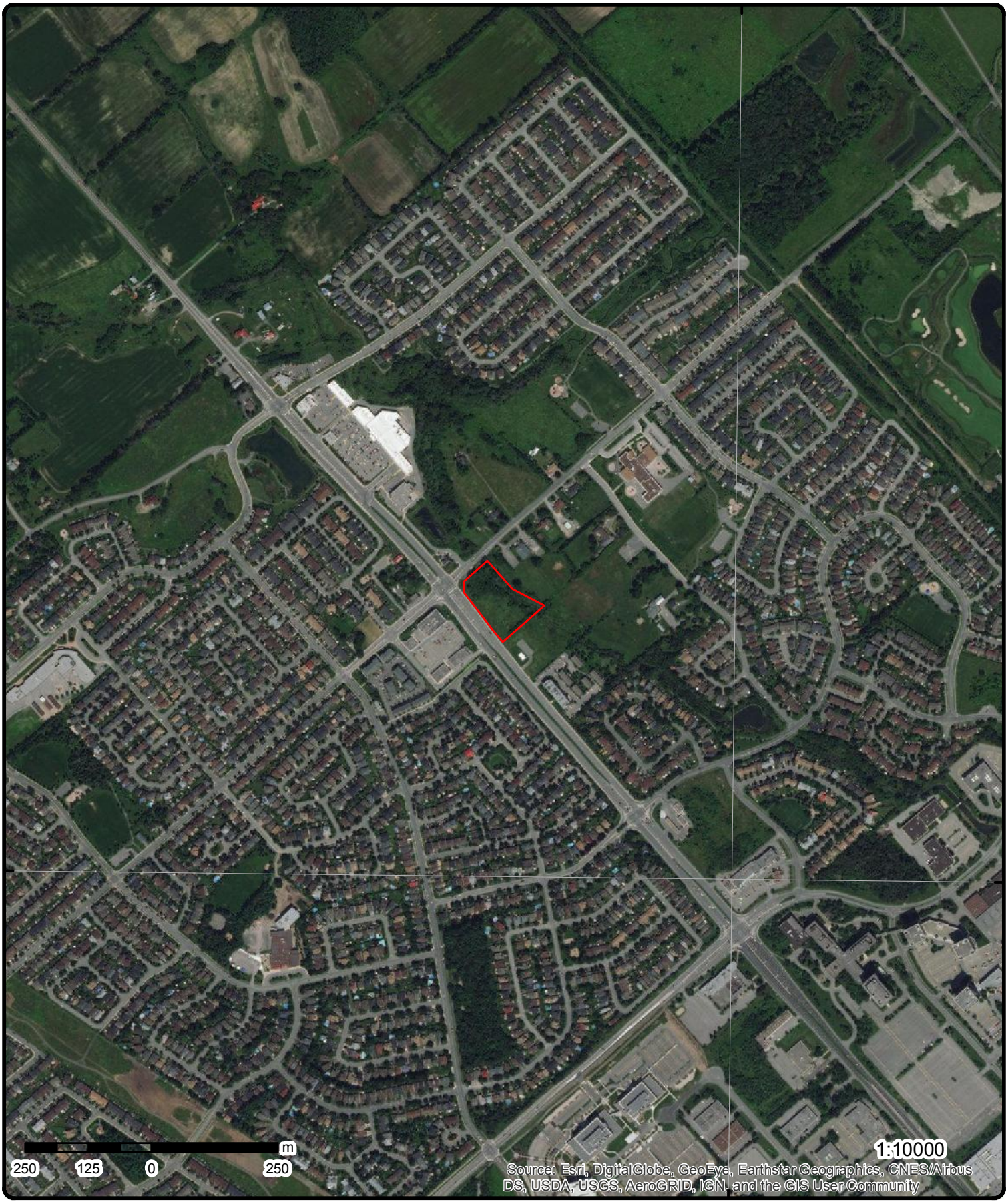
Address: 788 March Road, Kanata, ON, K2K 1X7

ERIS ENVIRONMENTAL RISK INFORMATION SERVICES

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Expressway
- Principal Highway
- Secondary Highway
- Major Road
- Local road
- Trail
- Proposed Road
- Ferry Route/Ice Road
- Industrial and Resource - Regions
- Main Line
- Sidetrack
- Transit Line
- Abandoned Line
- National Park
- Provincial or Territorial Park
- Other Park
- Golf Course or Driving Range
- Park or Sports Field
- Other Recreation Area

75°55'30"W

45°21'N



45°21'N

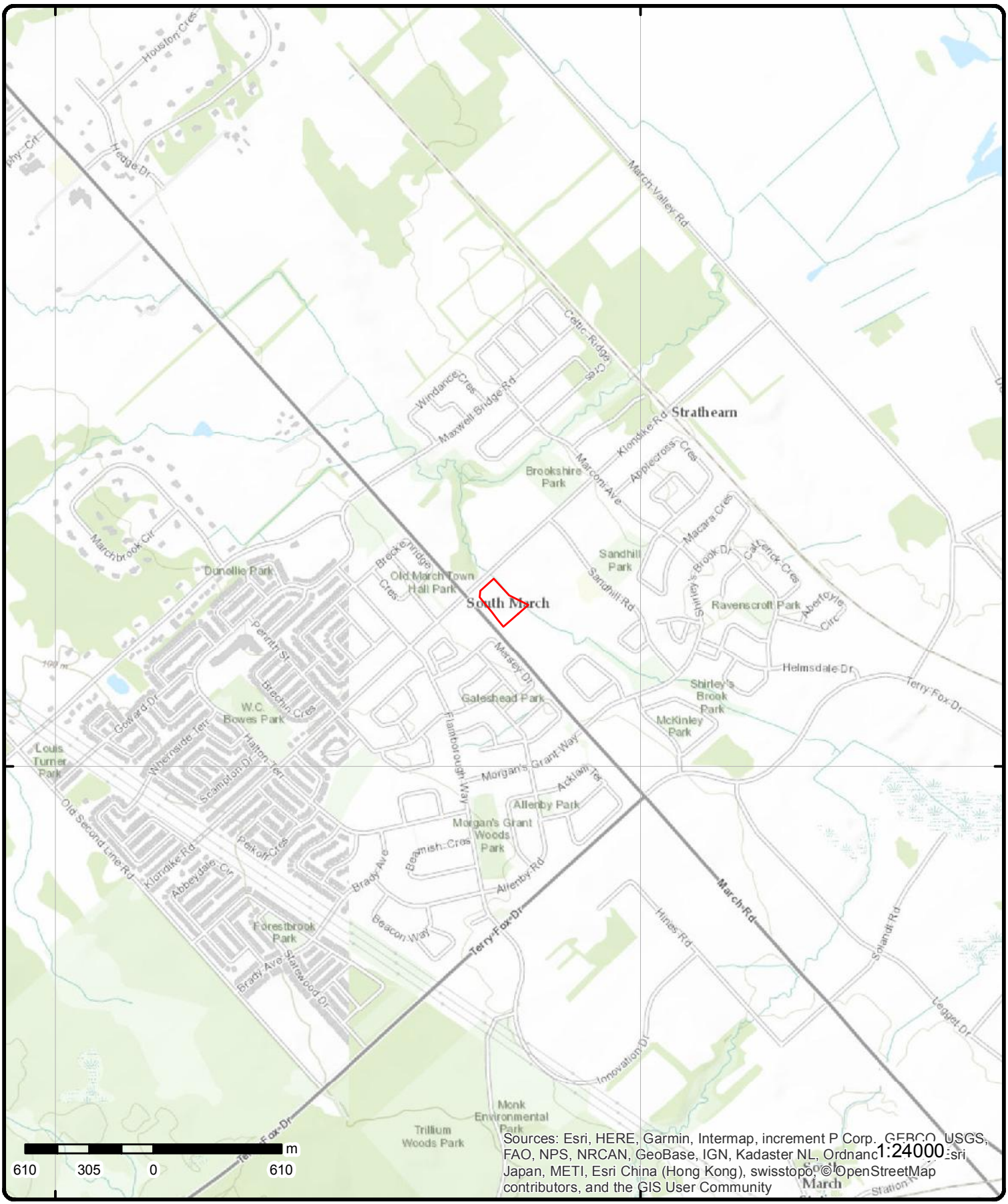
Aerial (2017)

Address: 788 March Road, Kanata, ON, K2K 1X7

Source: ESRI World Imagery

Order No: 20180618029

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



Topographic Map

Address: 788 March Road, Kanata, ON, K2K 1X7

Source: ESRI World Topographic Map

Order No: 20180618029

ENVIRONMENTAL RISK INFORMATION SERVICES

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 2	-/0.0	73.5 / -0.64	Ottawa ON	WWIS

Well ID: 7128487
Construction Date:
Primary Water Use: Monitoring
Sec. Water Use:
Final Well Status: Test Hole
Water Type:
Casing Material:
Audit No: M04496
Tag: A074647
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: 8/31/2009
Selected Flag: Yes
Abandonment Rec:
Contractor: 1844
Form Version: 5
Owner:
Street Name: 788 MARCH ROAD
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: 1002697162
DP2BR:
Spatial Status:
Code OB:
Code OB Desc:
Open Hole: N
Cluster Kind:
Date Completed: 18-JUN-09
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation: 75.6
Elevrc:
Zone: 18
East83: 427003
Org CS: UTM83
North83: 5022819
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: wwr

Overburden and Bedrock Materials Interval

Formation ID: 1002817527
Layer: 3
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 11
Other Materials: GRAVEL

Mat3:
Other Materials:
Formation Top Depth: 1.8
Formation End Depth: 5.7
Formation End Depth UOM: m

Formation ID: 1002817525
Layer: 1
Color: 6
General Color: BROWN
Mat1: 02
Most Common Material: TOPSOIL
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: .2
Formation End Depth UOM: m

Formation ID: 1002817526
Layer: 2
Color: 6
General Color: BROWN
Mat1: 06
Most Common Material: SILT
Mat2: 11
Other Materials: GRAVEL
Mat3: 61
Other Materials: CLAYEY
Formation Top Depth: .2
Formation End Depth: 1.8
Formation End Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1002817529
Layer: 1
Plug From: 0
Plug To: 2
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1002817533
Method Construction Code: F
Method Construction: H.S.A.
Other Method Construction:

Pipe Information

Pipe ID: 1002817524
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1002817530
Layer: 1

Material:	5
Open Hole or Material:	PLASTIC
Depth From:	0
Depth To:	2.7
Casing Diameter:	5.1
Casing Diameter UOM:	cm
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1002817531
Layer:	1
Slot:	10
Screen Top Depth:	
Screen End Depth:	
Screen Material:	5
Screen Depth UOM:	m
Screen Diameter UOM:	cm
Screen Diameter:	5.8

Hole Diameter

Hole ID:	1002817528
Diameter:	20
Depth From:	0
Depth To:	5.7
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Bore Hole Information

Bore Hole ID:	1002817506	***Elevation:***	76.39
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:		***East83:***	427078
Code OB Desc:		***Org CS:***	UTM83
Open Hole:		***North83:***	5022728
Cluster Kind:	This is a record from cluster log sheet	***UTMRC:***	3
Date Completed:	18-JUN-09	***UTMRC Desc:***	margin of error : 10 - 30 m
Remarks:		***Location Method:***	wwr

Elevrc Desc:	
Location Source Date:	
Improvement Location Source:	
Improvement Location Method:	
Source Revision Comment:	
Supplier Comment:	

Annular Space/Abandonment Sealing Record

Plug ID:	1002817510
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1002817509
Method Construction Code:	
Method Construction:	

Other Method Construction: HSA

Pipe Information

Pipe ID: 1002817511
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1002817513
Layer:
Material: 5
Open Hole or Material: PLASTIC
Depth From:
Depth To: 2.8
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM: m

Construction Record - Screen

Screen ID: 1002817512
Layer:
Slot:
Screen Top Depth: 2.8
Screen End Depth: 5.8
Screen Material:
Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pump Test ID: 1002817514
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1002817508
Diameter: 20
Depth From:
Depth To: 5.8
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID:	1002817515	***Elevation:***	72.84
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:		***East83:***	427059
Code OB Desc:		***Org CS:***	UTM83
Open Hole:		***North83:***	5022822
Cluster Kind:	This is a record from cluster log sheet	***UTMRC:***	3
Date Completed:	19-JUN-09	***UTMRC Desc:***	margin of error : 10 - 30 m
Remarks:		***Location Method:***	wwr

Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Annular Space/Abandonment Sealing Record

Plug ID:	1002817519
Layer:	
Plug From:	
Plug To:	
Plug Depth UOM:	

Method of Construction & Well Use

Method Construction ID:	1002817518
Method Construction Code:	
Method Construction:	
Other Method Construction:	HSA

Pipe Information

Pipe ID:	1002817520
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1002817522
Layer:	
Material:	5
Open Hole or Material:	PLASTIC
Depth From:	
Depth To:	2.6
Casing Diameter:	
Casing Diameter UOM:	
Casing Depth UOM:	m

Construction Record - Screen

Screen ID:	1002817521
Layer:	
Slot:	
Screen Top Depth:	2.6
Screen End Depth:	5.7
Screen Material:	

Screen Depth UOM: m
Screen Diameter UOM:
Screen Diameter:

Results of Well Yield Testing

Pump Test ID: 1002817523
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM:
Rate UOM:
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Hole Diameter

Hole ID: 1002817517
Diameter: 20
Depth From:
Depth To: 5.7
Hole Depth UOM: m
Hole Diameter UOM: cm

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1 | 2 of 2 | -/0.0 | 73.5 / -0.64 | KANATA ON | WWIS

Well ID: 7141731
Construction Date:
Primary Water Use:
Sec. Water Use:
Final Well Status: Abandoned Monitoring and Test Hole
Water Type:
Casing Material:
Audit No: M05569
Tag: A074647
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: 3/19/2010
Selected Flag: Yes
Abandonment Rec:
Contractor: 1844
Form Version: 5
Owner:
Street Name: 788 MARCH RD
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot:
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 1002951127
DP2BR:
Spatial Status:

Elevation: 75.6
Elevrc:
Zone: 18

Code OB:		***East83:***	427003
Code OB Desc:		***Org CS:***	UTM83
Open Hole:	N	***North83:***	5022819
Cluster Kind:		***UTMRC:***	4
Date Completed:	15-FEB-10	***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:

Annular Space/Abandonment Sealing Record

Plug ID: 1003285106
Layer: 1
Plug From: 0
Plug To: 5.7
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1003285107
Method Construction Code:
Method Construction:
Other Method Construction:

Hole Diameter

Hole ID: 1003285105
Diameter: 20
Depth From: 0
Depth To: 5.7
Hole Depth UOM: m
Hole Diameter UOM: cm

Bore Hole Information

Bore Hole ID:	1003285101	***Elevation:***	72.84
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:		***East83:***	427059
Code OB Desc:		***Org CS:***	UTM83
Open Hole:		***North83:***	5022822
Cluster Kind:	This is a record from cluster log sheet	***UTMRC:***	4
Date Completed:	15-FEB-10	***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:

Method of Construction & Well Use

Method Construction ID: 1003285104
Method Construction Code:

Method Construction:
Other Method Construction:

Hole Diameter

Hole ID: 1003285103
Diameter:
Depth From:
Depth To: 5.7
Hole Depth UOM: m
Hole Diameter UOM:

Bore Hole Information

Bore Hole ID:	1003285096	***Elevation:***	76.39
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:		***East83:***	427078
Code OB Desc:		***Org CS:***	UTM83
Open Hole:		***North83:***	5022728
Cluster Kind:	This is a record from cluster log sheet	***UTMRC:***	4
Date Completed:	15-FEB-10	***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:

Annular Space/Abandonment Sealing Record

Plug ID: 1003285100
Layer:
Plug From:
Plug To:
Plug Depth UOM:

Method of Construction & Well Use

Method Construction ID: 1003285099
Method Construction Code:
Method Construction:
Other Method Construction:

Hole Diameter

Hole ID: 1003285098
Diameter:
Depth From:
Depth To: 5.8
Hole Depth UOM: m
Hole Diameter UOM:

2	***1 of 1***	***-/0.0***	***75.5 / 1.37***	***Imperial Oil Limited*** ***1092 Klondike Road and 788 March Road,*** ***Kanata, Ontario K2K 1X7*** ***Kanata ON K2K 1X7***	***RSC***

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Reg No:	63910	**Cert Date:**	25-Jun-09
RA No:		**Cert Prop Use No:**	No CPU
RSC Type:		**Intended Prop Use:**	Community
Curr Property Use:	Agriculture/Other	**Nm of Qual. Person:**	Ed Charlton
District Office:	OTTAWA	**Stratified (Y/N):**	
Date Submitted:	29-Jan-10	**Audit (Y/N):**	
Date Ack:		**Entire Leg Prop. (Y/N):**	No
Date Returned:		**Accuracy Estimate:**	21 to 100 meters
Restoration Type:		**Telephone:**	416-4417389
Soil Type:		**Fax:**	416-4417400
Criteria:		**Email:**	ed.m.charlton@esso.ca
CPU Issued Sect 1686:	No		

Asmt Roll No: 06-14-300-816-22700
Prop. ID No: 04517-0801(LT)
Property Municipal Address: 1092 Klondike Road and 788 March Road, Kanata, Ontario K2K 1X7
Mailing Address: 90 WYNFORD AVE, TORONTO, ON, M3C 1K5
Latitude & Latitude: 45.35480640N 75.93137370W (converted from UTM)
UTM Coordinates: NAD83 18-427048-5022788
Consultant:
Filing Owner:
Legal Desc: Entire Legal Description: Part of Lot 10, Concession 4, as in N6B1746, save and except Part 1, Plan 4D95; Kanata. RSC Legal Description: Part of Lot 10, Concession 4, Geographic Township of March, being Part 1, 4R-24176, Ottawa.
Measurement Method: Digitized from a map
Applicable Standards: Full Depth Site Conditions Standard, with Potable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use
RSC PDF:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
3	1 of 1	-/0.0	75.8 / 1.66	788 March Road Kanata ON	EHS

Order ID:	164958	**Date Received:**	6/1/2009
Order No:	20090601011	**Lot/Building Size:**	
Customer ID:	77347	**Municipality:**	
Company ID:	268	**Client Prov/State:**	ON
Status:	C	**Search Radius (km):**	0.25
Report Code:	3CAN	**Large Radius:**	2
Report Type:	Standard Report	**X:**	-75.931602
Report Date:	6/4/2009	**Y:**	45.355116

Report Requested by: O'Connor Associates
Nearest Intersection:
Previous Site Name:
Additional Info Ordered: Fire Insur. Maps and/or Sire Plans

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
4	1 of 1	NNW/18.6	71.7 / -2.46	Klondike Rd & March Rd Ottawa ON	EHS

Order ID:	428037	**Date Received:**	07-OCT-15
Order No:	20151007070	**Lot/Building Size:**	
Customer ID:	67187	**Municipality:**	
Company ID:	56	**Client Prov/State:**	ON
Status:	C	**Search Radius (km):**	.25
Report Code:	3CAN	**Large Radius:**	.3
Report Type:	Standard Report	**X:**	-75.931431
Report Date:	09-OCT-15	**Y:**	45.355755

Report Requested by: Stantec Consulting Ltd.
Nearest Intersection:
Previous Site Name:
Additional Info Ordered:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
5	1 of 1	W/23.0	80.6 / 6.45	lot 10 con 4 ON	WWIS

Well ID:	1503411	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	3/5/1956
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	3705
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	010
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	10025454	**Elevation:**	76.52
DP2BR:	18	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	427000.6
Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5022792
Cluster Kind:		**UTMRC:**	9
Date Completed:	02-NOV-55	**UTMRC Desc:**	unknown UTM
Remarks:		**Location Method:**	p9
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	930996768
Layer:	1
Color:	
General Color:	
Mat1:	05
Most Common Material:	CLAY
Mat2:	02
Other Materials:	TOPSOIL
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	18
Formation End Depth UOM:	ft

Formation ID:	930996769
Layer:	2
Color:	
General Color:	

Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 18
Formation End Depth: 80
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961503411
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10574024
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930043658
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 80
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930043657
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 35
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991503411
Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method:

Pumping Duration HR:
Pumping Duration MIN:
Flowing: Y

Water Details

Water ID: 933456315
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 60
Water Found Depth UOM: ft

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6 ***1 of 2*** ***WSW/27.1*** ***80.6 / 6.45*** ***ON*** ***BORE***

Borehole ID: 609813
Use:
Drill Method::
Easting:: 427011
Location Accuracy::
Elev. Reliability Note::
Total Depth m:: 20.4
Township::
Lot::
Completion Date:: APR-1971
Primary Water Use::

Type: Borehole
Status::
UTM Zone:: 18
Northing:: 5022772
Orig. Ground Elev m:: 77.7
DEM Ground Elev m:: 76.1
Primary Name::
Concession::
Municipality:
Static Water Level:: -13
Sec. Water Use::

--Details--

Stratum ID: 218384154
Bottom Depth(m): 0.9
Top Depth(m): 0.0
Stratum Desc: SOIL.

Stratum ID: 218384155
Bottom Depth(m): 6.1
Top Depth(m): 0.9
Stratum Desc: CLAY.

Stratum ID: 218384156
Bottom Depth(m): 6.4
Top Depth(m): 6.1
Stratum Desc: GRAVEL.

Stratum ID: 218384157
Bottom Depth(m): 20.4
Top Depth(m): 6.4
Stratum Desc: SANDSTONE. WHITE. 00067. WATER STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTONE.

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6 ***2 of 2*** ***WSW/27.1*** ***80.6 / 6.45*** ***lot 10 con 4 ON*** ***WWIS***

Well ID: 1511120
Construction Date:
Primary Water Use: Domestic
Sec. Water Use: 0
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No:
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:

Data Entry Status:
Data Src: 1
Date Received: 4/21/1971
Selected Flag: Yes
Abandonment Rec:
Contractor: 3504
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 010
Concession: 04
Concession Name: CON
Easting NAD83:

Static Water Level:
Flowing (Y/N):
Flow Rate:
Clear/Cloudy:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID:	10033117	***Elevation:***	76.09
DP2BR:	21	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	427010.6
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	5022772
Cluster Kind:		***UTMRC:***	4
Date Completed:	02-APR-71	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	p4
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931016739
Layer:	4
Color:	1
General Color:	WHITE
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	21
Formation End Depth:	67
Formation End Depth UOM:	ft

Formation ID:	931016738
Layer:	3
Color:	
General Color:	
Mat1:	11
Most Common Material:	GRAVEL
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	20
Formation End Depth:	21
Formation End Depth UOM:	ft

Formation ID:	931016736
Layer:	1
Color:	
General Color:	
Mat1:	02
Most Common Material:	TOPSOIL
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	

Formation Top Depth: 0
Formation End Depth: 3
Formation End Depth UOM: ft

Formation ID: 931016737
Layer: 2
Color:
General Color:
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 3
Formation End Depth: 20
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961511120
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10581687
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930058765
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 67
Casing Diameter:
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930058764
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 24
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991511120
Pump Set At:
Static Level: 0
Final Level After Pumping: 5
Recommended Pump Depth: 30

Pumping Rate: 12
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 2
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934097658
Test Type: Recovery
Test Duration: 15
Test Level: 0
Test Level UOM: ft

Pump Test Detail ID: 934380671
Test Type: Recovery
Test Duration: 30
Test Level: 0
Test Level UOM: ft

Pump Test Detail ID: 934899728
Test Type: Recovery
Test Duration: 60
Test Level: 0
Test Level UOM: ft

Pump Test Detail ID: 934642804
Test Type: Recovery
Test Duration: 45
Test Level: 0
Test Level UOM: ft

Water Details

Water ID: 933466196
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 62
Water Found Depth UOM: ft

Water ID: 933466197
Layer: 2
Kind Code: 1
Kind: FRESH
Water Found Depth: 67
Water Found Depth UOM: ft

7	*1 of 1*	*W/50.5*	*80.2 / 6.04*	***R.M. OF OTTAWA-CARLETON MARCH RD./KLONDIKE RD. (SWM) KANATA CITY ON***	*CA*

Certificate #: 3-0836-97-
Application Year: 97
Issue Date: 8/11/1997
Approval Type: Municipal sewage
Status: Approved

Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

---

8 **1 of 2** **NNW/62.7** **71.7 / -2.49** **ON** **BORE**

Borehole ID:	609816	**Type:**	Borehole
Use:		**Status::**	
Drill Method::		**UTM Zone::**	18
Easting::	427011	**Northing::**	5022922
Location Accuracy::		**Orig. Ground Elev m::**	79.2
Elev. Reliability Note::		**DEM Ground Elev m::**	71.1
Total Depth m::	19.2	**Primary Name::**	
Township::		**Concession::**	
Lot::		**Municipality:**	
Completion Date::	AUG-1969	**Static Water Level::**	-11
Primary Water Use::		**Sec. Water Use::**	

--Details--

Stratum ID:	218384161	**Top Depth(m):**	0.0
Bottom Depth(m):	9.1	**Stratum Desc:**	CLAY. BROWN.
Stratum ID:	218384162	**Top Depth(m):**	9.1
Bottom Depth(m):	15.2	**Stratum Desc:**	SANDSTONE. BROWN.
Stratum ID:	218384163	**Top Depth(m):**	15.2
Bottom Depth(m):	19.2	**Stratum Desc:**	LIMESTONE. WHITE. 00060STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTONE. BLACK.

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8 **2 of 2** **NNW/62.7** **71.7 / -2.49** **lot 11 con 4** **ON** **WWIS**

Well ID:	1510450	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	1/21/1970
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	4724
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	10032478	**Elevation:**	71.1
DP2BR:	30	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	427010.6
Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5022922
Cluster Kind:		**UTMRC:**	4
Date Completed:	26-AUG-69	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	p4
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931014923
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	05
Most Common Material:	CLAY
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	30
Formation End Depth UOM:	ft

Formation ID:	931014925
Layer:	3
Color:	1
General Color:	WHITE
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	50
Formation End Depth:	63
Formation End Depth UOM:	ft

Formation ID:	931014924
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	30
Formation End Depth:	50
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID: 961510450
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10581048
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930057543
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 30
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991510450
Pump Set At:
Static Level: 20
Final Level After Pumping: 30
Recommended Pump Depth:
Pumping Rate: 12
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 2
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934097101
Test Type: Draw Down
Test Duration: 15
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934640578
Test Type: Draw Down
Test Duration: 45
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934897501
Test Type: Draw Down
Test Duration: 60
Test Level: 30

Test Level UOM: ft

Pump Test Detail ID: 934378445
Test Type: Draw Down
Test Duration: 30
Test Level: 30
Test Level UOM: ft

Water Details

Water ID: 933465442
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 49
Water Found Depth UOM: ft

Water ID: 933465443
Layer: 2
Kind Code: 1
Kind: FRESH
Water Found Depth: 60
Water Found Depth UOM: ft

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9 | ***1 of 1*** | ***NW/63.7*** | ***75.5 / 1.34*** | ***lot 11 con 4 KANATA ON*** | ***WWIS***

Well ID: 1536815
Construction Date:
Primary Water Use:
Sec. Water Use:
Final Well Status: Abandoned-Other
Water Type:
Casing Material:
Audit No: Z47085
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: 11/17/2006
Selected Flag: Yes
Abandonment Rec: Yes
Contractor: 1558
Form Version: 3
Owner:
Street Name: MARCH RD
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession: 04
Concession Name: CON
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 11691909
DP2BR:
Spatial Status:
Code OB: _
Code OB Desc: No formation data
Open Hole:
Cluster Kind:
Date Completed: 26-SEP-06
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:

Elevation: 74
Elevrc:
Zone: 18
East83: 426982
Org CS: UTM83
North83: 5022898
UTMRC: 3
UTMRC Desc: margin of error : 10 - 30 m
Location Method: wwr

Source Revision Comment:
Supplier Comment:

Annular Space/Abandonment Sealing Record

Plug ID: 933286605
Layer: 1
Plug From: 11.12
Plug To: 0
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 961536815
Method Construction Code:
Method Construction:
Other Method Construction:

Pipe Information

Pipe ID: 11696775
Casing No: 1
Comment:
Alt Name:

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10 | ***1 of 1*** | ***W/80.4*** | ***80.1 / 5.97*** | ***lot 11 con 3 ON*** | ***WWIS***

Well ID: 1518190
Construction Date:
Primary Water Use: Municipal
Sec. Water Use: 0
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No:
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: 1
Date Received: 4/5/1983
Selected Flag: Yes
Abandonment Rec:
Contractor: 1504
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession: 03
Concession Name: CON
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10040060
DP2BR: 20
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 14-JUN-82
Remarks:

Elevation: 77.22
Elevrc:
Zone: 18
East83: 426929.6
Org CS:
North83: 5022821
UTMRC: 4
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: p4

Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 931037654
Layer: 2
Color: 2
General Color: GREY
Mat1: 11
Most Common Material: GRAVEL
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 18
Formation End Depth: 20
Formation End Depth UOM: ft

Formation ID: 931037653
Layer: 1
Color: 5
General Color: YELLOW
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 18
Formation End Depth UOM: ft

Formation ID: 931037655
Layer: 3
Color: 1
General Color: WHITE
Mat1: 21
Most Common Material: GRANITE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 20
Formation End Depth: 35
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961518190
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 10588630

Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930069954
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 35
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930069953
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 24
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991518190
Pump Set At:
Static Level: 11
Final Level After Pumping: 30
Recommended Pump Depth: 30
Pumping Rate: 80
Flowing Rate:
Recommended Pump Rate: 80
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934103509
Test Type: Recovery
Test Duration: 15
Test Level: 11
Test Level UOM: ft

Pump Test Detail ID: 934378261
Test Type: Recovery
Test Duration: 30
Test Level: 11
Test Level UOM: ft

Pump Test Detail ID: 934897363
Test Type: Recovery
Test Duration: 60
Test Level: 11

Test Level UOM:	ft
Pump Test Detail ID:	934639319
Test Type:	Recovery
Test Duration:	45
Test Level:	11
Test Level UOM:	ft

Water Details

Water ID:	933474849
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	35
Water Found Depth UOM:	ft

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11 | ***1 of 1*** | ***NNE/81.1*** | ***77.2 / 3.06*** | ***lot 10 con 4 ON*** | ***WWIS***

Well ID:	1519081	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	8/7/1984
Sec. Water Use:	0	***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1558
Casing Material:		***Form Version:***	1
Audit No:		***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
Well Depth:		***Concession:***	04
Overburden/Bedrock:		***Concession Name:***	CON
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:	10040951	***Elevation:***	76.36
DP2BR:	31	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	427129.6
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	5022921
Cluster Kind:		***UTMRC:***	4
Date Completed:	10-JUL-84	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	p4
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931040536
Layer:	2
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	28
Other Materials:	SAND
Mat3:	12
Other Materials:	STONES
Formation Top Depth:	8
Formation End Depth:	31
Formation End Depth UOM:	ft

Formation ID:	931040537
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	78
Other Materials:	MEDIUM-GRAINED
Mat3:	85
Other Materials:	SOFT
Formation Top Depth:	31
Formation End Depth:	81
Formation End Depth UOM:	ft

Formation ID:	931040535
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	77
Other Materials:	LOOSE
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	8
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961519081
Method Construction Code:	1
Method Construction:	Cable Tool
Other Method Construction:	

Pipe Information

Pipe ID:	10589521
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930071494
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE

Depth From:	
Depth To:	81
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft
Casing ID:	930071493
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	32
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pump Test ID:	991519081
Pump Set At:	
Static Level:	17
Final Level After Pumping:	30
Recommended Pump Depth:	50
Pumping Rate:	20
Flowing Rate:	
Recommended Pump Rate:	5
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	2
Pumping Duration HR:	1
Pumping Duration MIN:	0
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934651620
Test Type:	Draw Down
Test Duration:	45
Test Level:	30
Test Level UOM:	ft
Pump Test Detail ID:	934901149
Test Type:	Draw Down
Test Duration:	60
Test Level:	30
Test Level UOM:	ft
Pump Test Detail ID:	934106901
Test Type:	Draw Down
Test Duration:	15
Test Level:	30
Test Level UOM:	ft
Pump Test Detail ID:	934381642
Test Type:	Draw Down
Test Duration:	30
Test Level:	30
Test Level UOM:	ft

Water Details

Water ID:	933475962
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	77
Water Found Depth UOM:	ft

12 **1 of 1** **NW/87.3** **72.7 / -1.45** **lot 11 con 4 KANATA ON** **WWIS**

Well ID:	7147352	**Data Entry Status:**	
Construction Date:		**Data Src:**	
Primary Water Use:	Domestic	**Date Received:**	6/25/2010
Sec. Water Use:		**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	1119
Casing Material:		**Form Version:**	7
Audit No:	Z108317	**Owner:**	
Tag:	A093683	**Street Name:**	1095 KLONDIKE RD
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	1003074984	**Elevation:**	72.31
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:		**East83:**	426979
Code OB Desc:		**Org CS:**	UTM83
Open Hole:		**North83:**	5022927
Cluster Kind:		**UTMRC:**	4
Date Completed:	30-APR-10	**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:			

Overburden and Bedrock Materials Interval

Formation ID:	1003194962
Layer:	3
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	18

Formation End Depth: 28
Formation End Depth UOM: ft

Formation ID: 1003194961
Layer: 2
Color:
General Color:
Mat1: 28
Most Common Material: SAND
Mat2: 11
Other Materials: GRAVEL
Mat3: 13
Other Materials: BOULDERS
Formation Top Depth: 10
Formation End Depth: 18
Formation End Depth UOM: ft

Formation ID: 1003194960
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 11
Other Materials: GRAVEL
Mat3: 13
Other Materials: BOULDERS
Formation Top Depth: 0
Formation End Depth: 10
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003194965
Layer: 2
Plug From: 10
Plug To: 0
Plug Depth UOM: ft

Plug ID: 1003194964
Layer: 1
Plug From: 20
Plug To: 10
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1003194986
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 1003194958
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID:	1003194968
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE
Depth From:	20
Depth To:	28
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Casing ID:	1003194967
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	2
Depth To:	20
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003194969
Layer:	
Slot:	
Screen Top Depth:	
Screen End Depth:	
Screen Material:	
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	

Results of Well Yield Testing

Pump Test ID:	1003194959
Pump Set At:	20
Static Level:	9.417
Final Level After Pumping:	15.667
Recommended Pump Depth:	20
Pumping Rate:	12
Flowing Rate:	
Recommended Pump Rate:	10
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	0
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	1
Pumping Duration MIN:	
Flowing:	

Draw Down & Recovery

Pump Test Detail ID:	1003194971
Test Type:	Recovery
Test Duration:	1
Test Level:	9.417
Test Level UOM:	ft

Pump Test Detail ID:	1003194974
Test Type:	Draw Down
Test Duration:	4

Test Level: 13.583
Test Level UOM: ft

Pump Test Detail ID: 1003194978
Test Type: Draw Down
Test Duration: 20
Test Level: 15.5
Test Level UOM: ft

Pump Test Detail ID: 1003194981
Test Type: Draw Down
Test Duration: 40
Test Level: 15.583
Test Level UOM: ft

Pump Test Detail ID: 1003194982
Test Type: Draw Down
Test Duration: 50
Test Level: 15.583
Test Level UOM: ft

Pump Test Detail ID: 1003194983
Test Type: Draw Down
Test Duration: 60
Test Level: 15.667
Test Level UOM: ft

Pump Test Detail ID: 1003194973
Test Type: Draw Down
Test Duration: 3
Test Level: 13.583
Test Level UOM: ft

Pump Test Detail ID: 1003194979
Test Type: Draw Down
Test Duration: 25
Test Level: 15.5
Test Level UOM: ft

Pump Test Detail ID: 1003194970
Test Type: Draw Down
Test Duration: 1
Test Level: 13.583
Test Level UOM: ft

Pump Test Detail ID: 1003194984
Test Type: Recovery
Test Duration: 60
Test Level: 9.417
Test Level UOM: ft

Pump Test Detail ID: 1003194975
Test Type: Draw Down
Test Duration: 5
Test Level: 13.583
Test Level UOM: ft

Pump Test Detail ID: 1003194976
Test Type: Draw Down
Test Duration: 10
Test Level: 13.667
Test Level UOM: ft

Pump Test Detail ID: 1003194977
Test Type: Draw Down
Test Duration: 15

Test Level:	15.167
Test Level UOM:	ft
Pump Test Detail ID:	1003194980
Test Type:	Draw Down
Test Duration:	30
Test Level:	15.5
Test Level UOM:	ft
Pump Test Detail ID:	1003194972
Test Type:	Draw Down
Test Duration:	2
Test Level:	13.583
Test Level UOM:	ft

Water Details

Water ID:	1003194966
Layer:	1
Kind Code:	8
Kind:	Untested
Water Found Depth:	23
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003194963
Diameter:	6
Depth From:	0
Depth To:	28
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

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13 ***1 of 2*** ***WNW/87.5*** ***79.9 / 5.69*** ***ON*** ***BORE***

Borehole ID:	609814	**Type:**	Borehole
Use:		**Status::**	
Drill Method::		**UTM Zone::**	18
Easting::	426931	**Northing::**	5022872
Location Accuracy::		**Orig. Ground Elev m::**	78
Elev. Reliability Note::		**DEM Ground Elev m::**	77.3
Total Depth m::	14.6	**Primary Name::**	
Township::		**Concession::**	
Lot::		**Municipality:**	
Completion Date::	NOV-1955	**Static Water Level::**	-12
Primary Water Use::		**Sec. Water Use::**	

--Details--

Stratum ID:	218384158	**Top Depth(m):**	0.0
Bottom Depth(m):	0.3	**Stratum Desc:**	SOIL.
Stratum ID:	218384159	**Top Depth(m):**	0.3
Bottom Depth(m):	5.5	**Stratum Desc:**	CLAY. BLUE.
Stratum ID:	218384160	**Top Depth(m):**	5.5
Bottom Depth(m):	14.6	**Stratum Desc:**	SANDSTONE. GREY. 000400067. WATER STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTO

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	2 of 2	WNW/87.5	79.9 / 5.69	lot 11 con 4 ON	WWIS

Well ID: 1503412
Construction Date:
Primary Water Use: Domestic
Sec. Water Use: 0
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No:
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: 1
Date Received: 11/24/1955
Selected Flag: Yes
Abandonment Rec:
Contractor: 2415
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession: 04
Concession Name: CON
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10025455
DP2BR: 18
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 12-NOV-55
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation: 77.33
Elevrc:
Zone: 18
East83: 426930.6
Org CS:
North83: 5022872
UTMRC: 5
UTMRC Desc: margin of error : 100 m - 300 m
Location Method: p5

Overburden and Bedrock Materials Interval

Formation ID: 930996770
Layer: 1
Color:
General Color:
Mat1: 02
Most Common Material: TOPSOIL
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 1
Formation End Depth UOM: ft

Formation ID: 930996771
Layer: 2
Color: 3
General Color: BLUE
Mat1: 05

Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 1
Formation End Depth: 18
Formation End Depth UOM: ft

Formation ID: 930996772
Layer: 3
Color: 2
General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 18
Formation End Depth: 48
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961503412
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10574025
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930043660
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 48
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930043659
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 21
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Pump Test ID:	991503412
Pump Set At:	
Static Level:	6
Final Level After Pumping:	22
Recommended Pump Depth:	
Pumping Rate:	5
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	0
Pumping Duration MIN:	30
Flowing:	N

Water Details

Water ID:	933456316
Layer:	1
Kind Code:	5
Kind:	Not stated
Water Found Depth:	28
Water Found Depth UOM:	ft

Water ID:	933456317
Layer:	2
Kind Code:	5
Kind:	Not stated
Water Found Depth:	40
Water Found Depth UOM:	ft

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	1 of 2	W/89.4	80.1 / 5.97	J TIERNEY JIMS GAS BAR 1111 KLONDIKE RD LOT 11 CON 3 KANATA ON P7B 6C2	EXP

Instance No:	9818157
Instance ID:	
Instance Type:	FS Facility
Description:	
Status:	EXPIRED
TSSA Program Area:	
Maximum Hazard Rank:	
Facility Type:	
Expired Date:	12/2/2009 13:34

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	2 of 2	W/89.4	80.1 / 5.97	J TIERNEY JIMS GAS BAR 1111 KLONDIKE RD LOT 11 CON 3 KANATA ON	PRT

Location ID:	6727
Type:	retail
Expiry Date:	1990-12-31
Capacity (L):	0
Licence #:	0055662001

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	1 of 5	W/102.2	81.9 / 7.69	2325225 Ontario Inc. 1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Generator No.: ON8411031
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 446110
SIC Description: 446110

PO Box No.:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: NASTRAN NAJAFI-FARD
Phone No. Admin: 4164931120 Ext.3218

--Details--
Waste Code: 261
Waste Description: PHARMACEUTICALS

Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	2 of 5	W/102.2	81.9 / 7.69	2325225 Ontario Inc. 1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	GEN

Generator No.: ON8411031
Status: Registered
Approval Years: As of Dec 2017
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No.:
Country: Canada
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 261 A
Waste Description: Pharmaceuticals

Waste Code: 312 P
Waste Description: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	3 of 5	W/102.2	81.9 / 7.69	G.G. Pharmacy Inc. 1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	GEN

Generator No.: ON8411031
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 446110
SIC Description: 446110

PO Box No.:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: NASTRAN NAJAFI-FARD
Phone No. Admin: 4164931120 Ext.3218

--Details--
Waste Code: 261
Waste Description: PHARMACEUTICALS

Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	4 of 5	W/102.2	81.9 / 7.69	G.G PHARMACY INC. 1102 KLONDIKE RD KANATA ON K2K1X7	PES

Licence No: 14783

Operator Box:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Detail Licence No:		**Operator Class:**		
Licence Type Code:	23	**Operator No:**		
Licence Type:	Active Limited Vendors	**Operator Type:**		
Licence Class:	01	**Operator Lot:**		
Licence Control:		**Oper Concession:**		
Trade Name:		**Operator Region:**		
Post Office Box:		**Operator District:**		
Lot:		**Operator County:**		
Concession:		**Oper Phone Area Cd:**	613	
Region:		**Ext:**		
District:		**Oper Phone No:**	5926010	
County:		**Proponent Ext:**		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
15	5 of 5	W/102.2	81.9 / 7.69	G.G PHARMACY INC. 1102 KLONDIKE RD KANATA ON K2K 0G1	PES

Licence No:		**Operator Box:**		
Detail Licence No:		**Operator Class:**		
Licence Type Code:		**Operator No:**		
Licence Type:	Vendor	**Operator Type:**		
Licence Class:		**Operator Lot:**		
Licence Control:		**Oper Concession:**		
Trade Name:		**Operator Region:**		
Post Office Box:		**Operator District:**		
Lot:		**Operator County:**		
Concession:		**Oper Phone Area Cd:**		
Region:		**Ext:**		
District:		**Oper Phone No:**		
County:		**Proponent Ext:**		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
16	1 of 1	WSW/120.9	83.3 / 9.11	lot 10 con 3 ON	WWIS

Well ID:	1503347	**Data Entry Status:**		
Construction Date:		**Data Src:**	1	
Primary Water Use:	Commerical	**Date Received:**	3/28/1966	
Sec. Water Use:	0	**Selected Flag:**	Yes	
Final Well Status:	Water Supply	**Abandonment Rec:**		
Water Type:		**Contractor:**	4216	
Casing Material:		**Form Version:**	1	
Audit No:		**Owner:**		
Tag:		**Street Name:**		
Construction Method:		**County:**	OTTAWA-CARLETON	
Elevation (m):		**Municipality:**	MARCH TOWNSHIP	
Elevation Reliability:		**Site Info:**		
Depth to Bedrock:		**Lot:**	010	
Well Depth:		**Concession:**	03	
Overburden/Bedrock:		**Concession Name:**	CON	
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:	10025390	**Elevation:**	78.03
DP2BR:	5	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	426915.6

Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5022742
Cluster Kind:		**UTMRC:**	5
Date Completed:	25-FEB-66	**UTMRC Desc:**	margin of error : 100 m - 300 m
Remarks:		**Location Method:**	p5
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	930996634
Layer:	1
Color:	
General Color:	
Mat1:	05
Most Common Material:	CLAY
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	5
Formation End Depth UOM:	ft

Formation ID:	930996635
Layer:	2
Color:	
General Color:	
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	5
Formation End Depth:	82
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961503347
Method Construction Code:	1
Method Construction:	Cable Tool
Other Method Construction:	

Pipe Information

Pipe ID:	10573960
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930043532
Layer:	1

Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 10
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930043533
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 82
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991503347
Pump Set At:
Static Level: 35
Final Level After Pumping: 40
Recommended Pump Depth: 75
Pumping Rate: 10
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Water Details

Water ID: 933456241
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 82
Water Found Depth UOM: ft

17	*1 of 11*	*SW/127.5*	*83.2 / 9.00*	***Activecare klondike medical centre*** ***1108 klondike rd.*** ***ottawa ON K2K0G1***	***GEN***

Generator No.: ON9298734
Status: Registered
Approval Years: As of Dec 2017
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No.:
Country: Canada
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312 P
Waste Description: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
17	2 of 11	SW/127.5	83.2 / 9.00	INVIVA McKesson Pharma 1108 Klondike Road Unit A Kanata ON K2K 0G1	GEN

Generator No.: ON3526988
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 621390
SIC Description: OFFICES OF ALL OTHER HEALTH PRACTITIONERS

PO Box No.:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin: na na
Phone No. Admin: na Ext.

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

Waste Code: 261
Waste Description: PHARMACEUTICALS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
17	3 of 11	SW/127.5	83.2 / 9.00	INVIVA McKesson Pharma INVIVA 1108 Klondike Road Unit A Kanata ON K2K 0G1	GEN

Generator No.: ON3526988
Status: Registered
Approval Years: As of Dec 2017
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No.:
Country: Canada
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 261 A
Waste Description: Pharmaceuticals

Waste Code: 312 P
Waste Description: Pathological wastes

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
17	4 of 11	SW/127.5	83.2 / 9.00	INVIVA McKesson Pharma 1108 Klondike Road Unit A Kanata ON K2K 0G1	GEN

Generator No.: ON3526988
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 621390
SIC Description: OFFICES OF ALL OTHER HEALTH PRACTITIONERS

PO Box No.:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin: na na
Phone No. Admin: na Ext.

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
17	5 of 11	SW/127.5	83.2 / 9.00	Activecare klondike medical centre 1108 klondike rd. ottawa ON K2K0G1	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Generator No.: ON9298734
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 621110
SIC Description: OFFICES OF PHYSICIANS

PO Box No.:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

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17 **6 of 11** **SW/127.5** **83.2 / 9.00**

Activecare klondike medical centre
1108 klondike rd.
ottawa ON K2K0G1

GEN

Generator No.: ON9298734
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 621110
SIC Description: OFFICES OF PHYSICIANS

PO Box No.:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

---

17 **7 of 11** **SW/127.5** **83.2 / 9.00**

Activecare klondike medical centre
1108 klondike rd.
ottawa ON K2K0G1

GEN

Generator No.: ON9298734
Status:
Approval Years: 2014
Contam. Facility: No
MHSW Facility: No
SIC Code: 621110
SIC Description: OFFICES OF PHYSICIANS

PO Box No.:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

---

17 **8 of 11** **SW/127.5** **83.2 / 9.00**

Activecare klondike medical centre
1108 klondike rd.
ottawa ON K2K0G1

GEN

Generator No.: ON9298734
Status:
Approval Years: 2010
Contam. Facility:
MHSW Facility:
SIC Code: 621110
SIC Description: Offices of Physicians

PO Box No.:
Country:
Choice of Contact:
Co Admin:
Phone No. Admin:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

17	*9 of 11*	*SW/127.5*	*83.2 / 9.00*	***Activecare klondike medical centre*** ***1108 klondike rd.*** ***ottawa ON***	***GEN***

Generator No.: ON9298734
Status:
Approval Years: 2013
Contam. Facility:
MHSW Facility:
SIC Code: 621110
SIC Description: OFFICES OF PHYSICIANS

PO Box No.:
Country:
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

17	*10 of 11*	*SW/127.5*	*83.2 / 9.00*	***Activecare klondike medical centre*** ***1108 klondike rd.*** ***ottawa ON K2K0G1***	***GEN***

Generator No.: ON9298734
Status:
Approval Years: 2012
Contam. Facility:
MHSW Facility:
SIC Code: 621110
SIC Description: Offices of Physicians

PO Box No.:
Country:
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

17	*11 of 11*	*SW/127.5*	*83.2 / 9.00*	***Activecare klondike medical centre*** ***1108 klondike rd.*** ***ottawa ON K2K0G1***	***GEN***

Generator No.: ON9298734
Status:
Approval Years: 2011
Contam. Facility:
MHSW Facility:
SIC Code: 621110
SIC Description: Offices of Physicians

PO Box No.:
Country:
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 312
Waste Description: PATHOLOGICAL WASTES

18	*1 of 1*	*SSE/131.5*	*77.3 / 3.14*	***Blue Heron Co-operative Homes Inc.*** ***750, 760 March Rd Kanata*** ***Ottawa ON K2K 2W4***	***ECA***

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Approval No:	8636-6D4KSW	**SWP Area Name:**	
Approval Date:	2005-06-14	**MOE District:**	
Status:	Approved	**City:**	Ottawa
Record Type:	ECA	**Longitude:**	
Link Source:	IDS	**Latitude:**	
Approval Type:	ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS		
Project Type:	MUNICIPAL AND PRIVATE SEWAGE WORKS		
Address:	750, 760 March Rd Kanata		
Full Address:			
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/6597-6CCPXM-14.pdf		

19	1 of 1	NW/134.3	73.9 / -0.31	lot 11 con 4 KANATA ON	WWIS

Well ID:	7147353	**Data Entry Status:**	
Construction Date:		**Data Src:**	
Primary Water Use:	Domestic	**Date Received:**	6/25/2010
Sec. Water Use:		**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	1119
Casing Material:		**Form Version:**	7
Audit No:	Z108340	**Owner:**	
Tag:	A093682	**Street Name:**	1095 KLONDIKE RD
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	1003074986	**Elevation:**	74.55
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:		**East83:**	426923
Code OB Desc:		**Org CS:**	UTM83
Open Hole:		**North83:**	5022940
Cluster Kind:		**UTMRC:**	4
Date Completed:	30-APR-10	**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:			

Overburden and Bedrock Materials Interval

Formation ID:	1003195010
Layer:	2
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE

Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 16
Formation End Depth: 23
Formation End Depth UOM: ft

Formation ID: 1003195009
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 11
Other Materials: GRAVEL
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 16
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 1003195013
Layer: 1
Plug From: 18
Plug To: 0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 1003195034
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 1003195007
Casing No: 0
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 1003195015
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From: 2
Depth To: 18
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 1003195016
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE

Depth From:	18
Depth To:	23
Casing Diameter:	5.6825
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003195017
Layer:	
Slot:	
Screen Top Depth:	
Screen End Depth:	
Screen Material:	
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	

Results of Well Yield Testing

Pump Test ID:	1003195008
Pump Set At:	18
Static Level:	13.417
Final Level After Pumping:	13.667
Recommended Pump Depth:	18
Pumping Rate:	20
Flowing Rate:	
Recommended Pump Rate:	20
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	0
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	1
Pumping Duration MIN:	
Flowing:	

Draw Down & Recovery

Pump Test Detail ID:	1003195027
Test Type:	Draw Down
Test Duration:	25
Test Level:	13.667
Test Level UOM:	ft

Pump Test Detail ID:	1003195028
Test Type:	Draw Down
Test Duration:	30
Test Level:	13.667
Test Level UOM:	ft

Pump Test Detail ID:	1003195030
Test Type:	Draw Down
Test Duration:	50
Test Level:	13.667
Test Level UOM:	ft

Pump Test Detail ID:	1003195022
Test Type:	Draw Down
Test Duration:	4
Test Level:	13.5
Test Level UOM:	ft

Pump Test Detail ID: 1003195023
Test Type: Draw Down
Test Duration: 5
Test Level: 13.583
Test Level UOM: ft

Pump Test Detail ID: 1003195026
Test Type: Draw Down
Test Duration: 20
Test Level: 13.667
Test Level UOM: ft

Pump Test Detail ID: 1003195021
Test Type: Draw Down
Test Duration: 3
Test Level: 13.5
Test Level UOM: ft

Pump Test Detail ID: 1003195025
Test Type: Draw Down
Test Duration: 15
Test Level: 13.667
Test Level UOM: ft

Pump Test Detail ID: 1003195032
Test Type: Recovery
Test Duration: 60
Test Level: 13.417
Test Level UOM: ft

Pump Test Detail ID: 1003195018
Test Type: Draw Down
Test Duration: 1
Test Level: 13.5
Test Level UOM: ft

Pump Test Detail ID: 1003195019
Test Type: Recovery
Test Duration: 1
Test Level: 13.417
Test Level UOM: ft

Pump Test Detail ID: 1003195024
Test Type: Draw Down
Test Duration: 10
Test Level: 13.583
Test Level UOM: ft

Pump Test Detail ID: 1003195020
Test Type: Draw Down
Test Duration: 2
Test Level: 13.5
Test Level UOM: ft

Pump Test Detail ID: 1003195029
Test Type: Draw Down
Test Duration: 40
Test Level: 13.667
Test Level UOM: ft

Pump Test Detail ID: 1003195031
Test Type: Draw Down
Test Duration: 60
Test Level: 13.667
Test Level UOM: ft

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Water Details

Water ID:	1003195014
Layer:	1
Kind Code:	8
Kind:	Untested
Water Found Depth:	21
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003195011
Diameter:	6
Depth From:	0
Depth To:	18
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Hole ID:	1003195012
Diameter:	5.625
Depth From:	18
Depth To:	23
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
20	*1 of 2*	*SSE/145.4*	*78.5 / 4.34*	***Blue Heron Co-operative Homes Inc.*** ***750, 760 March Road, Kanata*** ***Ottawa ON***	*CA*

Certificate #:	8636-6D4KSW
Application Year:	2005
Issue Date:	6/14/2005
Approval Type:	Municipal and Private Sewage Works
Status:	Approved
Application Type:	
Client Name::	
Client Address::	
Client City::	
Client Postal Code::	
Project Description::	
Contaminants::	
Emission Control::	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
20	*2 of 2*	*SSE/145.4*	*78.5 / 4.34*	***Blue Heron Co-operative Homes Inc.*** ***750, 760 March Road, Kanata*** ***Ottawa ON***	*CA*

Certificate #:	1156-6DFHK5
Application Year:	2005
Issue Date:	6/29/2005
Approval Type:	Municipal and Private Sewage Works
Status:	Approved
Application Type:	
Client Name::	
Client Address::	
Client City::	
Client Postal Code::	
Project Description::	
Contaminants::	
Emission Control::	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
21	1 of 1	WNW/150.8	78.8 / 4.61	lot 10 con 3 KANATA ON	WWIS

Well ID:	1536169	**Data Entry Status:**	
Construction Date:		**Data Src:**	
Primary Water Use:		**Date Received:**	1/13/2006
Sec. Water Use:		**Selected Flag:**	Yes
Final Well Status:		**Abandonment Rec:**	Yes
Water Type:		**Contractor:**	1558
Casing Material:		**Form Version:**	3
Audit No:	Z39220	**Owner:**	
Tag:		**Street Name:**	821 MARCH ROAD
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	010
Well Depth:		**Concession:**	03
Overburden/Bedrock:		**Concession Name:**	CON
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:	11550235	**Elevation:**	77.53
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	_	**East83:**	426870
Code OB Desc:	No formation data	**Org CS:**	UTM83
Open Hole:		**North83:**	5022891
Cluster Kind:		**UTMRC:**	3
Date Completed:	29-NOV-05	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	wwr
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	933294848
Layer:	1
Plug From:	10.97
Plug To:	0
Plug Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	961536169
Method Construction Code:	
Method Construction:	
Other Method Construction:	

Pipe Information

Pipe ID: 11559842
Casing No: 1
Comment:
Alt Name:

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22 **1 of 1** **ENE/160.9** **79.9 / 5.75** **351 Sandhill Rd**
Ottawa ON K2K1X7 **EHS**

Order ID: 487628
Order No: 20161118096
Customer ID: 88789
Company ID: 25907
Status: C
Report Code: 2CAN
Report Type: Standard Select Report
Report Date: 25-NOV-16
Report Requested by: LRL Associates Ltd.
Nearest Intersection:
Previous Site Name:
Additional Info Ordered: Fire Insur. Maps and/or Site Plans; Title Searches; Topographic Maps; City Directory

Date Received: 18-NOV-16
Lot/Building Size: 2.02 acres
Municipality:
Client Prov/State: ON
Search Radius (km): .25
Large Radius: .3
X: -75.928572
Y: 45.355996

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23 **1 of 1** **SSE/161.8** **78.0 / 3.81** **Blue Heron Co-operative Homes Inc.**
750 March Rd Kanata
Ottawa ON K2K 2W4 **ECA**

Approval No: 1156-6DFHK5
Approval Date: 2005-06-29
Status: Approved
Record Type: ECA
Link Source: IDS
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Address: 750 March Rd Kanata
Full Address:
Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/9690-6CCPZL-14.pdf

SWP Area Name:
MOE District:
City: Ottawa
Longitude:
Latitude:

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24 **1 of 1** **NW/171.4** **72.8 / -1.36** **lot 11 con 4**
KANATA ON **WWIS**

Well ID: 7147354
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: Z108342
Tag: A095989
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: 6/25/2010
Selected Flag: Yes
Abandonment Rec:
Contractor: 1119
Form Version: 7
Owner:
Street Name: 1095 KLONDIKE RD
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession: 04
Concession Name: CON
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID:	1003075040	**Elevation:**	72.53
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:		**East83:**	426929
Code OB Desc:		**Org CS:**	UTM83
Open Hole:		**North83:**	5022995
Cluster Kind:		**UTMRC:**	4
Date Completed:	30-APR-10	**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:			

Overburden and Bedrock Materials Interval

Formation ID:	1003195081
Layer:	1
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	11
Other Materials:	GRAVEL
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	19
Formation End Depth UOM:	ft

Formation ID:	1003195082
Layer:	2
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	19
Formation End Depth:	29
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003195085
Layer:	1
Plug From:	22
Plug To:	0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1003195106
Method Construction Code:	5
Method Construction:	Air Percussion

Other Method Construction:

Pipe Information

Pipe ID:	1003195079
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003195087
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	2
Depth To:	22
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Casing ID:	1003195088
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE
Depth From:	22
Depth To:	29
Casing Diameter:	5.6825
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003195089
Layer:	
Slot:	
Screen Top Depth:	
Screen End Depth:	
Screen Material:	
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	

Results of Well Yield Testing

Pump Test ID:	1003195080
Pump Set At:	20
Static Level:	17.667
Final Level After Pumping:	21.25
Recommended Pump Depth:	20
Pumping Rate:	20
Flowing Rate:	
Recommended Pump Rate:	20
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	0
Water State After Test:	
Pumping Test Method:	0
Pumping Duration HR:	1
Pumping Duration MIN:	
Flowing:	

Draw Down & Recovery

Pump Test Detail ID: 1003195093
Test Type: Draw Down
Test Duration: 3
Test Level: 19.667
Test Level UOM: ft

Pump Test Detail ID: 1003195096
Test Type: Draw Down
Test Duration: 10
Test Level: 21.083
Test Level UOM: ft

Pump Test Detail ID: 1003195102
Test Type: Draw Down
Test Duration: 50
Test Level: 21.167
Test Level UOM: ft

Pump Test Detail ID: 1003195104
Test Type: Recovery
Test Duration: 60
Test Level: 17.667
Test Level UOM: ft

Pump Test Detail ID: 1003195091
Test Type: Recovery
Test Duration: 1
Test Level: 17.667
Test Level UOM: ft

Pump Test Detail ID: 1003195103
Test Type: Draw Down
Test Duration: 60
Test Level: 21.25
Test Level UOM: ft

Pump Test Detail ID: 1003195092
Test Type: Draw Down
Test Duration: 2
Test Level: 19.667
Test Level UOM: ft

Pump Test Detail ID: 1003195095
Test Type: Draw Down
Test Duration: 5
Test Level: 19.667
Test Level UOM: ft

Pump Test Detail ID: 1003195097
Test Type: Draw Down
Test Duration: 15
Test Level: 21.083
Test Level UOM: ft

Pump Test Detail ID: 1003195099
Test Type: Draw Down
Test Duration: 25
Test Level: 21.167
Test Level UOM: ft

Pump Test Detail ID: 1003195100
Test Type: Draw Down
Test Duration: 30
Test Level: 21.167

Test Level UOM:	ft
Pump Test Detail ID:	1003195094
Test Type:	Draw Down
Test Duration:	4
Test Level:	19.667
Test Level UOM:	ft
Pump Test Detail ID:	1003195090
Test Type:	Draw Down
Test Duration:	1
Test Level:	19.583
Test Level UOM:	ft
Pump Test Detail ID:	1003195098
Test Type:	Draw Down
Test Duration:	20
Test Level:	21.083
Test Level UOM:	ft
Pump Test Detail ID:	1003195101
Test Type:	Draw Down
Test Duration:	40
Test Level:	21.167
Test Level UOM:	ft

Water Details

Water ID:	1003195086
Layer:	1
Kind Code:	8
Kind:	Untested
Water Found Depth:	22
Water Found Depth UOM:	ft

Hole Diameter

Hole ID:	1003195084
Diameter:	.3125
Depth From:	22
Depth To:	29
Hole Depth UOM:	ft
Hole Diameter UOM:	inch
Hole ID:	1003195083
Diameter:	6
Depth From:	0
Depth To:	22
Hole Depth UOM:	ft
Hole Diameter UOM:	inch

25 ***1 of 1*** ***NNW/188.5*** ***80.7 / 6.50*** ***1055 & 1075 Klondike Rd Ottawa ON*** ***EHS***

Order ID:	434245	***Date Received:***	20-NOV-15
Order No:	20151120038	***Lot/Building Size:***	
Customer ID:	77170	***Municipality:***	
Company ID:	97	***Client Prov/State:***	ON
Status:	C	***Search Radius (km):***	.25
Report Code:	4CAN	***Large Radius:***	.3
Report Type:	Custom Report	***X:***	-75.931738
Report Date:	26-NOV-15	***Y:***	45.357299
Report Requested by:	exp Services Inc.		

Nearest Intersection:
Previous Site Name:
Additional Info Ordered: City Directory

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26 **1 of 2** **NE/193.5** **79.9 / 5.72** **ON** **BORE**

Borehole ID:	609817	**Type:**	Borehole
Use:		**Status::**	
Drill Method::		**UTM Zone::**	18
Easting::	427226	**Northing::**	5022982
Location Accuracy::		**Orig. Ground Elev m::**	76.2
Elev. Reliability Note::		**DEM Ground Elev m::**	75.8
Total Depth m::	15.2	**Primary Name::**	
Township::		**Concession::**	
Lot::		**Municipality:**	
Completion Date::	AUG-1968	**Static Water Level::**	-14
Primary Water Use::		**Sec. Water Use::**	

--Details--

Stratum ID:	218384164	**Top Depth(m):**	0.0
Bottom Depth(m):	2.7	**Stratum Desc:**	SAND.
Stratum ID:	218384165	**Top Depth(m):**	2.7
Bottom Depth(m):	8.5	**Stratum Desc:**	CLAY. BLUE.
Stratum ID:	218384166	**Top Depth(m):**	8.5
Bottom Depth(m):	15.2	**Stratum Desc:**	SANDSTONE. 00047E. WHITE. 00060STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTO

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26 **2 of 2** **NE/193.5** **79.9 / 5.72** **lot 10 con 4 ON** **WWIS**

Well ID:	1509908	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	11/8/1968
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	3553
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	010
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	10031940	**Elevation:**	75.78
DP2BR:	28	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	427225.6

Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	5022982
Cluster Kind:		***UTMRC:***	4
Date Completed:	27-AUG-68	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	p4
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931013370
Layer:	2
Color:	3
General Color:	BLUE
Mat1:	05
Most Common Material:	CLAY
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	9
Formation End Depth:	28
Formation End Depth UOM:	ft

Formation ID:	931013371
Layer:	3
Color:	
General Color:	
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	28
Formation End Depth:	50
Formation End Depth UOM:	ft

Formation ID:	931013369
Layer:	1
Color:	
General Color:	
Mat1:	09
Most Common Material:	MEDIUM SAND
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	9
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961509908
Method Construction Code:	1
Method Construction:	Cable Tool
Other Method Construction:	

Pipe Information

Pipe ID:	10580510
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930056508
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	31
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Casing ID:	930056509
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE
Depth From:	
Depth To:	50
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pump Test ID:	991509908
Pump Set At:	
Static Level:	18
Final Level After Pumping:	25
Recommended Pump Depth:	30
Pumping Rate:	8
Flowing Rate:	
Recommended Pump Rate:	6
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	1
Pumping Duration MIN:	0
Flowing:	N

Water Details

Water ID:	933464803
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	47
Water Found Depth UOM:	ft

27	***1 of 1***	***NE/197.2***	***79.9 / 5.73***	***lot 10 con 4 KANATA ON***	***WWIS***

Well ID: 1536259 ***Data Entry Status:***

Construction Date:		***Data Src:***	
Primary Water Use:	Domestic	***Date Received:***	3/20/2006
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1558
Casing Material:		***Form Version:***	3
Audit No:	Z39252	***Owner:***	
Tag:	A035430	***Street Name:***	351 SANDHILL RD
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
Well Depth:		***Concession:***	04
Overburden/Bedrock:		***Concession Name:***	CON
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:	11550325	***Elevation:***	75.39
DP2BR:	32	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	427282
Code OB Desc:	Bedrock	***Org CS:***	UTM83
Open Hole:		***North83:***	5022953
Cluster Kind:		***UTMRC:***	3
Date Completed:	01-FEB-06	***UTMRC Desc:***	margin of error : 10 - 30 m
Remarks:		***Location Method:***	wwr
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	933044822
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	05
Most Common Material:	CLAY
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	3.65
Formation End Depth UOM:	m

Formation ID:	933044824
Layer:	3
Color:	2
General Color:	GREY
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	

Other Materials:
Formation Top Depth: 9.75
Formation End Depth: 38.09
Formation End Depth UOM: m

Formation ID: 933044823
Layer: 2
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 12
Other Materials: STONES
Mat3:
Other Materials:
Formation Top Depth: 3.65
Formation End Depth: 9.75
Formation End Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 933288174
Layer: 1
Plug From: 11.88
Plug To: 0
Plug Depth UOM: m

Plug ID: 933288175
Layer: 2
Plug From:
Plug To:
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 961536259
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 11559932
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930875664
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From: -.45
Depth To: 11.88
Casing Diameter: 15.86
Casing Diameter UOM: cm
Casing Depth UOM: m

Casing ID: 930875665

Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From: 11.88
Depth To: 38.09
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Results of Well Yield Testing

Pump Test ID: 11569389
Pump Set At: 22.85
Static Level: 2.45
Final Level After Pumping: 4.02
Recommended Pump Depth: 22.85
Pumping Rate: 54.6
Flowing Rate:
Recommended Pump Rate: 45.5
Levels UOM: m
Rate UOM: LPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method:
Pumping Duration HR: 2
Pumping Duration MIN: 0
Flowing:

Draw Down & Recovery

Pump Test Detail ID: 11593807
Test Type: Recovery
Test Duration: 3
Test Level: 2.97
Test Level UOM: m

Pump Test Detail ID: 11593809
Test Type: Recovery
Test Duration: 4
Test Level: 2.85
Test Level UOM: m

Pump Test Detail ID: 11593825
Test Type: Recovery
Test Duration: 50
Test Level: 2.51
Test Level UOM: m

Pump Test Detail ID: 11593826
Test Type: Draw Down
Test Duration: 60
Test Level: 4.01
Test Level UOM: m

Pump Test Detail ID: 11593814
Test Type: Draw Down
Test Duration: 15
Test Level: 3.81
Test Level UOM: m

Pump Test Detail ID: 11593820
Test Type: Draw Down
Test Duration: 30
Test Level: 3.93

Test Level UOM: m

Pump Test Detail ID: 11593817
Test Type: Recovery
Test Duration: 20
Test Level: 2.83
Test Level UOM: m

Pump Test Detail ID: 11593822
Test Type: Draw Down
Test Duration: 40
Test Level: 3.99
Test Level UOM: m

Pump Test Detail ID: 11593815
Test Type: Recovery
Test Duration: 15
Test Level: 2.55
Test Level UOM: m

Pump Test Detail ID: 11593816
Test Type: Draw Down
Test Duration: 20
Test Level: 3.88
Test Level UOM: m

Pump Test Detail ID: 11593823
Test Type: Recovery
Test Duration: 40
Test Level: 2.51
Test Level UOM: m

Pump Test Detail ID: 11593824
Test Type: Draw Down
Test Duration: 50
Test Level: 4.01
Test Level UOM: m

Pump Test Detail ID: 11593806
Test Type: Draw Down
Test Duration: 3
Test Level: 3.43
Test Level UOM: m

Pump Test Detail ID: 11593808
Test Type: Draw Down
Test Duration: 4
Test Level: 3.55
Test Level UOM: m

Pump Test Detail ID: 11593821
Test Type: Recovery
Test Duration: 30
Test Level: 2.52
Test Level UOM: m

Pump Test Detail ID: 11593803
Test Type: Recovery
Test Duration: 1
Test Level: 3.34
Test Level UOM: m

Pump Test Detail ID: 11593810
Test Type: Draw Down
Test Duration: 5
Test Level: 3.64

Test Level UOM: m

Pump Test Detail ID: 11593811
Test Type: Recovery
Test Duration: 5
Test Level: 2.71
Test Level UOM: m

Pump Test Detail ID: 11593812
Test Type: Draw Down
Test Duration: 10
Test Level: 3.73
Test Level UOM: m

Pump Test Detail ID: 11593818
Test Type: Draw Down
Test Duration: 25
Test Level: 3.91
Test Level UOM: m

Pump Test Detail ID: 11593805
Test Type: Recovery
Test Duration: 2
Test Level: 3.12
Test Level UOM: m

Pump Test Detail ID: 11593813
Test Type: Recovery
Test Duration: 10
Test Level: 2.61
Test Level UOM: m

Pump Test Detail ID: 11593802
Test Type: Draw Down
Test Duration: 1
Test Level: 3.3
Test Level UOM: m

Pump Test Detail ID: 11593804
Test Type: Draw Down
Test Duration: 2
Test Level: 3.38
Test Level UOM: m

Pump Test Detail ID: 11593819
Test Type: Recovery
Test Duration: 25
Test Level: 2.52
Test Level UOM: m

Pump Test Detail ID: 11593827
Test Type: Recovery
Test Duration: 60
Test Level: 2.51
Test Level UOM: m

Water Details

Water ID: 934073909
Layer: 2
Kind Code:
Kind:
Water Found Depth: 27.43
Water Found Depth UOM: m

Water ID:	934073908
Layer:	1
Kind Code:	
Kind:	
Water Found Depth:	22.24
Water Found Depth UOM:	m
Water ID:	934073910
Layer:	3
Kind Code:	
Kind:	
Water Found Depth:	36.87
Water Found Depth UOM:	m

Hole Diameter

Hole ID:	11681004
Diameter:	22.75
Depth From:	0
Depth To:	11.88
Hole Depth UOM:	m
Hole Diameter UOM:	cm
Hole ID:	11681005
Diameter:	15.23
Depth From:	11.88
Depth To:	38.09
Hole Depth UOM:	m
Hole Diameter UOM:	cm

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28 **1 of 1** **WSW/204.6** **84.1 / 9.92** **lot 11 con 3 ON** **WWIS**

Well ID:	1517710	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	2/11/1982
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	3504
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	03
Overburden/Bedrock:		**Concession Name:**	CON
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:	10039582	**Elevation:**	80.34
DP2BR:	8	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	426829.6
Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5022721
Cluster Kind:		**UTMRC:**	4

Date Completed: 15-SEP-81
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:
UTMRC Desc: margin of error : 30 m - 100 m
Location Method: p4

Overburden and Bedrock Materials Interval

Formation ID: 931036052
Layer: 1
Color:
General Color:
Mat1: 28
Most Common Material: SAND
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 8
Formation End Depth UOM: ft

Formation ID: 931036053
Layer: 2
Color:
General Color:
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 8
Formation End Depth: 75
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961517710
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 10588152
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930069186
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:

Depth To:	22
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pump Test ID:	991517710
Pump Set At:	
Static Level:	32
Final Level After Pumping:	70
Recommended Pump Depth:	60
Pumping Rate:	10
Flowing Rate:	
Recommended Pump Rate:	8
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	0
Pumping Duration MIN:	30
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934646378
Test Type:	Recovery
Test Duration:	45
Test Level:	32
Test Level UOM:	ft
Pump Test Detail ID:	934895653
Test Type:	Recovery
Test Duration:	60
Test Level:	32
Test Level UOM:	ft
Pump Test Detail ID:	934376125
Test Type:	Recovery
Test Duration:	30
Test Level:	32
Test Level UOM:	ft

Water Details

Water ID:	933474237
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	70
Water Found Depth UOM:	ft

29 ***1 of 2*** ***WSW/217.0*** ***84.3 / 10.08*** ***ON*** ***BORE***

Borehole ID:	609810	**Type:**	Borehole
Use:		**Status::**	
Drill Method::		**UTM Zone::**	18
Easting::	426811	**Northing::**	5022732
Location Accuracy::		**Orig. Ground Elev m::**	80.8
Elev. Reliability Note::		**DEM Ground Elev m::**	80.9

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Total Depth m::	20.7	**Primary Name::**	
Township::		**Concession::**	
Lot::		**Municipality:**	
Completion Date::	NOV-1953	**Static Water Level::**	-10
Primary Water Use::		**Sec. Water Use::**	

--Details--

Stratum ID:	218384147	**Top Depth(m):**	0.0
Bottom Depth(m):	0.3	**Stratum Desc:**	SOIL.
Stratum ID:	218384148	**Top Depth(m):**	0.3
Bottom Depth(m):	20.7	**Stratum Desc:**	SANDSTONE. FACE. BEDROCK,SANDSTONE. WATER STABLE AT 298.0 FEET.BLACK. LIMESTONE.

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29 | ***2 of 2*** | ***WSW/217.0*** | ***84.3 / 10.08*** | ***lot 11 con 3 ON*** | ***WWIS***

Well ID:	1503348	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	3/1/1954
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	4825
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	03
Overburden/Bedrock:		**Concession Name:**	CON
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:	10025391	**Elevation:**	80.86
DP2BR:	1	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	426810.6
Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5022732
Cluster Kind:		**UTMRC:**	9
Date Completed:	03-NOV-53	**UTMRC Desc:**	unknown UTM
Remarks:		**Location Method:**	p9
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	930996636
Layer:	1

Color:
General Color:
Mat1: 02
Most Common Material: TOPSOIL
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 1
Formation End Depth UOM: ft

Formation ID: 930996637
Layer: 2
Color:
General Color:
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 1
Formation End Depth: 68
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961503348
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10573961
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930043534
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 42
Casing Diameter: 4
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930043535
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 68
Casing Diameter: 4
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID:	991503348
Pump Set At:	
Static Level:	35
Final Level After Pumping:	60
Recommended Pump Depth:	
Pumping Rate:	5
Flowing Rate:	
Recommended Pump Rate:	
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	0
Pumping Duration MIN:	30
Flowing:	N

Water Details

Water ID:	933456242
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	55
Water Found Depth UOM:	ft

30 ***1 of 1*** ***NE/217.0*** ***79.1 / 4.90*** ***lot 10 con 4 KANATA ON*** ***WWIS***

Well ID:	1536260	***Data Entry Status:***	
Construction Date:		***Data Src:***	
Primary Water Use:	Domestic	***Date Received:***	3/20/2006
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1558
Casing Material:		***Form Version:***	3
Audit No:	Z39253	***Owner:***	
Tag:	A035438	***Street Name:***	351 SAND HILL RD
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
Well Depth:		***Concession:***	04
Overburden/Bedrock:		***Concession Name:***	CON
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:	11550326	***Elevation:***	75.21
DP2BR:	31	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	427298
Code OB Desc:	Bedrock	***Org CS:***	UTM83
Open Hole:		***North83:***	5022966
Cluster Kind:		***UTMRC:***	3
Date Completed:	01-FEB-06	***UTMRC Desc:***	margin of error : 10 - 30 m

Remarks: ***Location Method:*** wwr
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 933041309
Layer: 1
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 3.35
Formation End Depth UOM: m

Formation ID: 933041311
Layer: 3
Color: 2
General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 9.44
Formation End Depth: 38.09
Formation End Depth UOM: m

Formation ID: 933041310
Layer: 2
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 3.35
Formation End Depth: 9.44
Formation End Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 933288529
Layer: 1
Plug From: 11.88
Plug To: 0
Plug Depth UOM: m

Plug ID: 933288530
Layer: 2

Plug From:
Plug To:
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 961536260
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 11559933
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930875938
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From: -.45
Depth To: 11.88
Casing Diameter: 15.86
Casing Diameter UOM: cm
Casing Depth UOM: m

Casing ID: 930875939
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From: 11.88
Depth To: 38.09
Casing Diameter:
Casing Diameter UOM: cm
Casing Depth UOM: m

Results of Well Yield Testing

Pump Test ID: 11569390
Pump Set At: 22.85
Static Level: 2.13
Final Level After Pumping: 3.56
Recommended Pump Depth: 22.85
Pumping Rate: 54.6
Flowing Rate:
Recommended Pump Rate: 45.5
Levels UOM: m
Rate UOM: LPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method:
Pumping Duration HR: 2
Pumping Duration MIN: 0
Flowing:

Draw Down & Recovery

Pump Test Detail ID: 11594101
Test Type: Draw Down
Test Duration: 3
Test Level: 3.17
Test Level UOM: m

Pump Test Detail ID: 11594105
Test Type: Draw Down
Test Duration: 5
Test Level: 3.24
Test Level UOM: m

Pump Test Detail ID: 11594163
Test Type: Recovery
Test Duration: 10
Test Level: 2.22
Test Level UOM: m

Pump Test Detail ID: 11594172
Test Type: Draw Down
Test Duration: 40
Test Level: 3.52
Test Level UOM: m

Pump Test Detail ID: 11594099
Test Type: Draw Down
Test Duration: 2
Test Level: 3.11
Test Level UOM: m

Pump Test Detail ID: 11594103
Test Type: Draw Down
Test Duration: 4
Test Level: 3.21
Test Level UOM: m

Pump Test Detail ID: 11594164
Test Type: Draw Down
Test Duration: 15
Test Level: 3.42
Test Level UOM: m

Pump Test Detail ID: 11594166
Test Type: Draw Down
Test Duration: 20
Test Level: 3.47
Test Level UOM: m

Pump Test Detail ID: 11594177
Test Type: Recovery
Test Duration: 60
Test Level: 2.14
Test Level UOM: m

Pump Test Detail ID: 11594097
Test Type: Draw Down
Test Duration: 1
Test Level: 3
Test Level UOM: m

Pump Test Detail ID: 11594100
Test Type: Recovery
Test Duration: 2
Test Level: 2.58
Test Level UOM: m

Pump Test Detail ID: 11594161
Test Type: Recovery
Test Duration: 5
Test Level: 2.3
Test Level UOM: m

Pump Test Detail ID: 11594168
Test Type: Draw Down
Test Duration: 25
Test Level: 3.48
Test Level UOM: m

Pump Test Detail ID: 11594171
Test Type: Recovery
Test Duration: 30
Test Level: 2.14
Test Level UOM: m

Pump Test Detail ID: 11594102
Test Type: Recovery
Test Duration: 3
Test Level: 2.47
Test Level UOM: m

Pump Test Detail ID: 11594169
Test Type: Recovery
Test Duration: 25
Test Level: 2.14
Test Level UOM: m

Pump Test Detail ID: 11594175
Test Type: Recovery
Test Duration: 50
Test Level: 2.14
Test Level UOM: m

Pump Test Detail ID: 11594176
Test Type: Draw Down
Test Duration: 60
Test Level: 3.53
Test Level UOM: m

Pump Test Detail ID: 11594104
Test Type: Recovery
Test Duration: 4
Test Level: 2.36
Test Level UOM: m

Pump Test Detail ID: 11594167
Test Type: Recovery
Test Duration: 20
Test Level: 2.15
Test Level UOM: m

Pump Test Detail ID: 11594170
Test Type: Draw Down
Test Duration: 30
Test Level: 3.5
Test Level UOM: m

Pump Test Detail ID: 11594174
Test Type: Draw Down
Test Duration: 50
Test Level: 3.53
Test Level UOM: m

Pump Test Detail ID:	11594098
Test Type:	Recovery
Test Duration:	1
Test Level:	2.69
Test Level UOM:	m
Pump Test Detail ID:	11594165
Test Type:	Recovery
Test Duration:	15
Test Level:	2.11
Test Level UOM:	m
Pump Test Detail ID:	11594162
Test Type:	Draw Down
Test Duration:	10
Test Level:	3.33
Test Level UOM:	m
Pump Test Detail ID:	11594173
Test Type:	Recovery
Test Duration:	40
Test Level:	2.14
Test Level UOM:	m

Water Details

Water ID:	934073911
Layer:	3
Kind Code:	
Kind:	
Water Found Depth:	37.18
Water Found Depth UOM:	m
Water ID:	934073912
Layer:	2
Kind Code:	
Kind:	
Water Found Depth:	28.04
Water Found Depth UOM:	m
Water ID:	934073913
Layer:	1
Kind Code:	
Kind:	
Water Found Depth:	14.62
Water Found Depth UOM:	m

Hole Diameter

Hole ID:	11681006
Diameter:	15.23
Depth From:	11.88
Depth To:	38.09
Hole Depth UOM:	m
Hole Diameter UOM:	cm
Hole ID:	11681007
Diameter:	22.75
Depth From:	0
Depth To:	11.88
Hole Depth UOM:	m
Hole Diameter UOM:	cm

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
31	1 of 1	NE/222.2	79.4 / 5.24	lot 11 con 4 ON	WWIS

Well ID:	1518467	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	9/16/1983
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	5411
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	10040337	**Elevation:**	74.84
DP2BR:	15	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	427229.6
Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5023021
Cluster Kind:		**UTMRC:**	4
Date Completed:	27-AUG-83	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	p4
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931038530
Layer:	1
Color:	3
General Color:	BLUE
Mat1:	05
Most Common Material:	CLAY
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	15
Formation End Depth UOM:	ft

Formation ID:	931038532
Layer:	3
Color:	6
General Color:	BROWN
Mat1:	18

Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	64
Formation End Depth:	70
Formation End Depth UOM:	ft
Formation ID:	931038531
Layer:	2
Color:	1
General Color:	WHITE
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	15
Formation End Depth:	64
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961518467
Method Construction Code:	1
Method Construction:	Cable Tool
Other Method Construction:	

Pipe Information

Pipe ID:	10588907
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930070420
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	22
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft
Casing ID:	930070421
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE
Depth From:	
Depth To:	70
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pump Test ID:	991518467
Pump Set At:	
Static Level:	7
Final Level After Pumping:	9
Recommended Pump Depth:	65
Pumping Rate:	40
Flowing Rate:	
Recommended Pump Rate:	8
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	1
Pumping Duration MIN:	0
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934103782
Test Type:	Recovery
Test Duration:	15
Test Level:	7
Test Level UOM:	ft

Water Details

Water ID:	933475188
Layer:	2
Kind Code:	1
Kind:	FRESH
Water Found Depth:	64
Water Found Depth UOM:	ft

Water ID:	933475187
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	33
Water Found Depth UOM:	ft

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32 | ***1 of 1*** | ***WNW/240.7*** | ***80.9 / 6.69*** | ***lot 11 con 3 ON*** | ***WWIS***

Well ID:	1530397	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	12/1/1998
Sec. Water Use:		**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	4875
Casing Material:		**Form Version:**	1
Audit No:	198116	**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	011
Well Depth:		**Concession:**	03
Overburden/Bedrock:		**Concession Name:**	CON
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:	10051932	***Elevation:***	78.1
DP2BR:	0	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	426787.6
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	5022927
Cluster Kind:		***UTMRC:***	5
Date Completed:	21-OCT-98	***UTMRC Desc:***	margin of error : 100 m - 300 m
Remarks:		***Location Method:***	gis

Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID:	931075367
Layer:	2
Color:	8
General Color:	BLACK
Mat1:	21
Most Common Material:	GRANITE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	90
Formation End Depth:	160
Formation End Depth UOM:	ft

Formation ID:	931075366
Layer:	1
Color:	1
General Color:	WHITE
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	90
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	933115542
Layer:	1
Plug From:	18
Plug To:	0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID: 961530397
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10600502
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930090549
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 18
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930090550
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 160
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991530397
Pump Set At:
Static Level: 12
Final Level After Pumping: 50
Recommended Pump Depth: 140
Pumping Rate: 6
Flowing Rate:
Recommended Pump Rate: 5
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934393372
Test Type: Draw Down
Test Duration: 30
Test Level: 43
Test Level UOM: ft

Pump Test Detail ID: 934118384
Test Type: Draw Down
Test Duration: 15
Test Level: 36
Test Level UOM: ft

Pump Test Detail ID: 934662522
Test Type: Draw Down
Test Duration: 45
Test Level: 47
Test Level UOM: ft

Pump Test Detail ID: 934902109
Test Type: Draw Down
Test Duration: 60
Test Level: 50
Test Level UOM: ft

Water Details

Water ID: 933490511
Layer: 1
Kind Code: 5
Kind: Not stated
Water Found Depth: 36
Water Found Depth UOM: ft

Water ID: 933490512
Layer: 2
Kind Code: 5
Kind: Not stated
Water Found Depth: 88
Water Found Depth UOM: ft

Water ID: 933490513
Layer: 3
Kind Code: 5
Kind: Not stated
Water Found Depth: 145
Water Found Depth UOM: ft

33	*1 of 1*	*NW/276.4*	*79.8 / 5.61*	***Riotrin Properties (March Road) Inc.*** ***830 March Rd 1095 Klondike Road*** ***Ottawa ON***	*CA*

Certificate #: 5973-8DVJXN
Application Year: 2011
Issue Date: 2/28/2011
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

34	*1 of 2*	*E/282.5*	*79.9 / 5.69*	*ON*	*BORE*

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Borehole ID:	609812	**Type:**	Borehole
Use:		**Status::**	
Drill Method::		**UTM Zone::**	18
Easting::	427451	**Northing::**	5022752
Location Accuracy::		**Orig. Ground Elev m::**	73.2
Elev. Reliability Note::		**DEM Ground Elev m::**	75.9
Total Depth m::	18	**Primary Name::**	
Township::		**Concession::**	
Lot::		**Municipality:**	
Completion Date::	MAR-1972	**Static Water Level::**	-17
Primary Water Use::		**Sec. Water Use::**	

--Details--

Stratum ID:	218384151	**Top Depth(m):**	0.0
Bottom Depth(m):	6.1	**Stratum Desc:**	CLAY. BLUE.
Stratum ID:	218384152	**Top Depth(m):**	6.1
Bottom Depth(m):	12.2	**Stratum Desc:**	GRAVEL,HARDPAN.
Stratum ID:	218384153	**Top Depth(m):**	12.2
Bottom Depth(m):	18.0	**Stratum Desc:**	SANDSTONE. 00057E. WATER STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTONE. BLACK

34	2 of 2	E/282.5	79.9 / 5.69	lot 10 con 4 ON	WWIS

Well ID:	1511768	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	5/19/1972
Sec. Water Use:	0	**Selected Flag:**	Yes
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	3504
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	OTTAWA-CARLETON
Elevation (m):		**Municipality:**	MARCH TOWNSHIP
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	010
Well Depth:		**Concession:**	04
Overburden/Bedrock:		**Concession Name:**	CON
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:	10033762	**Elevation:**	75.85
DP2BR:	40	**Elevrc:**	
Spatial Status:		**Zone:**	18
Code OB:	r	**East83:**	427450.6
Code OB Desc:	Bedrock	**Org CS:**	
Open Hole:		**North83:**	5022752
Cluster Kind:		**UTMRC:**	4
Date Completed:	30-MAR-72	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	p4
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			

Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID:	931018679
Layer:	3
Color:	
General Color:	
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	40
Formation End Depth:	59
Formation End Depth UOM:	ft

Formation ID:	931018677
Layer:	1
Color:	3
General Color:	BLUE
Mat1:	05
Most Common Material:	CLAY
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	20
Formation End Depth UOM:	ft

Formation ID:	931018678
Layer:	2
Color:	
General Color:	
Mat1:	11
Most Common Material:	GRAVEL
Mat2:	14
Other Materials:	HARDPAN
Mat3:	
Other Materials:	
Formation Top Depth:	20
Formation End Depth:	40
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961511768
Method Construction Code:	1
Method Construction:	Cable Tool
Other Method Construction:	

Pipe Information

Pipe ID:	10582332
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930059982
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	43
Casing Diameter:	5
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Casing ID:	930059983
Layer:	2
Material:	4
Open Hole or Material:	OPEN HOLE
Depth From:	
Depth To:	59
Casing Diameter:	
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pump Test ID:	991511768
Pump Set At:	
Static Level:	8
Final Level After Pumping:	12
Recommended Pump Depth:	30
Pumping Rate:	10
Flowing Rate:	
Recommended Pump Rate:	10
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	2
Water State After Test:	CLOUDY
Pumping Test Method:	2
Pumping Duration HR:	2
Pumping Duration MIN:	0
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934645094
Test Type:	Recovery
Test Duration:	45
Test Level:	8
Test Level UOM:	ft

Pump Test Detail ID:	934383934
Test Type:	Recovery
Test Duration:	30
Test Level:	8
Test Level UOM:	ft

Pump Test Detail ID:	934894224
Test Type:	Recovery
Test Duration:	60
Test Level:	8
Test Level UOM:	ft

Pump Test Detail ID:	934098418

Test Type:	Recovery
Test Duration:	15
Test Level:	8
Test Level UOM:	ft

Water Details

Water ID:	933467025
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	57
Water Found Depth UOM:	ft

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35 | ***1 of 1*** | ***NNE/286.6*** | ***77.3 / 3.10*** | ***Klondike Rd. and Sandhill Rd. Kanata ON*** | ***EHS***

Order ID:	96639	**Date Received:**	3/7/2007
Order No:	20070307016	**Lot/Building Size:**	5 acres approximately
Customer ID:	44007	**Municipality:**	
Company ID:	86	**Client Prov/State:**	
Status:	C	**Search Radius (km):**	0.25
Report Code:	3CAN	**Large Radius:**	2
Report Type:	CAN - Complete Report	**X:**	-75.928947
Report Date:	3/15/2007	**Y:**	45.357632
Report Requested by:	SLR Consulting (Canada) Ltd.		
Nearest Intersection:	Klondike and Sandhill NE corner		
Previous Site Name:			
Additional Info Ordered:			

Unplottable Summary

Total: 91 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
AAGR		Lot 8/11 Con 4/5	Kanata ON	
AAGR		Lot 10 Con 3	Nepean ON	
AAGR		Lot 11 Con 3	Kanata ON	
CA	Riotrin Properties (March Road) Inc.		Ottawa ON	
CA	KNL Developments Inc.	Former Township of March	Ottawa ON	
CA	Morgan's Grant Subdivision Phase 5B	Lot 10, Concession 3	Kanata ON	
CA	Morgan's Grant Subdivision Phase 6, 7 & 8	Lot 10, Concession 3	Ottawa ON	
CA	Tenth Line Development Inc.	Sandhill Rd Kanata	Ottawa ON	
CA	R.M. OF OTTAWA-CARLETON	MARCH ROAD RECON., SWM FAC.	KANATA CITY ON	
CA	R.M. OF OTTAWA-CARLETON	ONT.HYDRO ESMT/KLONDIKE RD.	KANATA CITY ON	
CA	COSCAN DEVELOPMENT CORP.	BRIARBROOK SUBD/INVERARY DR.	KANATA CITY ON	
CA	COSCAN DEVELOPMENT CORPORATION	BRIARBROOK SUBD/INVERARY DR.	KANATA CITY ON	
CA	Klondike Developments Inc.	870 March St and 1001 Klondike Road	Ottawa ON	
CA		Pt. Lots 7, 8, 9, 10, 11, Conc. 4	Nepean ON	
CA	Briarridge Subdivision	Part of Lots 9 and 10, Concession 4, Plan 4M-755	Ottawa ON	
CA	Briarridge Subdivision	Part of Lots 9 and 10, Concession 4, Plan 4M-755	Ottawa ON	
CA	Briarridge Subdivision	Part of Lots 9 and 10, Concession 4, Plan 4M-755	Ottawa ON	

CA	West Carleton Sand & Gravel Inc.	Part of Lots 11 and 12, Concession 4	Ottawa ON	
CA	Morgan's Grant	Part of Lot 11, Concession 3	Ottawa ON	
CA		Part of Lot 10, Concession 3	Kanata ON	
CA		Part of Lot 10, Concession 3	Kanata ON	
CA	Morgan's Grant Subdivision Phase 5B	Lot 10, Concession 3	Kanata ON	
CA	Shirleys Brooke Drive	Lot 10, Concession 3	Kanata ON	
CA	Morgan's Grant Subdivision Phase 9	Lot 10, Concession 3	Ottawa ON	
CA		Lot 10, Concession 3	Kanata ON	
CA	Morgan's Grant Subdivision Phase 6, 7 & 8	Lot 10, Concession 3	Ottawa ON	
CA	Morgan's Grant Subdivision Phase 9	Lot 10, Concession 3	Ottawa ON	
CA		Lot 10, Concession 3	Kanata ON	
CONV	IMPERIAL OIL LIMITED		DON MILLS ON	
CONV	IMPERIAL OIL LIMITED		NORTH YORK ON	
EBR	West Carleton Sand & Gravel	McGee Pit Ottawa Ontario Lot 11 and 12, Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA	ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	

EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	
EXP	CITY OF KANATA	KLONDIKE RD	KANATA ON	K2L 2N3
GEN	E.B. EDDY FOREST PRODUCTS LTD. 14-802	LOT 10, CONC. 3, CAMP 12 F.OP SITE IVY TWP., C/0 1335 CARLING AVE.	OTTAWA ON	K1Z 8N8
GEN	E.B. EDDY FOREST PRODUCTS LTD.	LOT 10, CONC. 3, CAMP 12 F.OP SITE IVY TWP., C/0 1335 CARLING AVE.	OTTAWA ON	K1Z 8N8
GEN	IMPERIAL OIL LTD	ESSO PETROLEUM CANADA OTTAWA INTERNATIONAL AIRPORT	OTTAWA ON	M5W 1K3
LIMO	The Corporation of the Township of Rideau	Part of Lot 11, Concession 3	City of Ottawa ON	
NCPL	West Carleton Sand & Gravel Inc.	Lot 11-14, Conc 4	Ottawa ON	
NPCB	ONTARIO HYDRO	R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S.	Kanata ON	
PRT	CITY OF KANATA	KLONDIKE RD	KANATA ON	
PRT	CITY OF KANATA	KLONDIKE RD	KANATA ON	
PTTW	Kanata Research Park Corporation	Lots 8, 9 and 10, Concession 4, Ottawa, geographic area of Kanata CITY OF OTTAWA	ON	
PTTW	West Carleton Sand & Gravel	Lots 11 and 12, Concession 4 CITY OF OTTAWA	ON	
PTTW	Mattamy (Half Moon Bay) Limited	Lot: 10-12, Concession: 3, Original Geographic Township of Nepean, City of Ottawa Lot 8-9 and Concession 3, Original Geographic Township of Nepean, City	of Ottawa CITY OF OTTAWA Nepean ON	
PTTW	Mattamy (Half Moon Bay) Limited	Lots 8,9,10,11,12, Concession 3 Ottawa, Ontario CITY OF OTTAWA Nepean	ON	
PTTW	Mattamy (Half Moon Bay) Limited	Lot 11, 12, Concession 3, Ottawa, City CITY OF OTTAWA	ON	

SPL	OTTAWA-CARLETON TRANSIT	MARCH ROAD, SOUTH OF CARLING	OTTAWA CITY ON
SPL	ONTARIO HYDRO	SOUTH MARCH TRANSFORMER STATION, MARCH ROAD TRANSFORMER	KANATA CITY ON
SPL	ESSO PETROLEUM CANADA	BULK STATION	OTTAWA CITY ON
SPL	Esso Petroleum Canada, A Division of Imperial Oil Limited	Nepean	Ottawa ON
SPL	ESSO PETROLEUM CANADA	SERVICE STATION	NEPEAN CITY ON
SPL	ESSO PETROLEUM CANADA	TANK TRUCK (CARGO)	OTTAWA CITY ON
SPL	IMPERIAL OIL	TANK TRUCK (CARGO)	NEPEAN CITY ON
SPL	ESSO PETROLEUM CANADA	TRANSPORT TRUCK (CARGO)	OTTAWA CITY ON
SPL	ESSO PETROLEUM CANADA	ESSO DISTRIBUTION STATION BULK STATION	OTTAWA CITY ON
WWIS		lot 11	ON
WWIS		lot 11	ON
WWIS		lot 11	ON
WWIS		lot 11	ON
WWIS		lot 11	ON
WWIS		lot 11	ON
WWIS		lot 11	ON
WWIS		lot 100	ON
WWIS		lot 10	ON
WWIS		lot 10	ON
WWIS		lot 10	ON
WWIS		lot 10	ON
WWIS		lot 10	ON
WWIS		lot 10	ON

WWIS	lot 10	ON
WWIS	lot 10	ON
WWIS	lot 10	ON
WWIS	con 4	ON
WWIS	lot 10	ON
WWIS	lot 10	ON
WWIS	lot 10	ON

Unplottable Report

Site:
Lot 8/11 Con 4/5 Kanata ON

Database: ***AAGR***

Type:
Region/County: Ottawa-Carleton
Township: Kanata
Concession:: 4/5
Lot:: 8/11
Size (ha)::
Landuse::
Comments::

Site:
Lot 10 Con 3 Nepean ON

Database: ***AAGR***

Type: Pit
Region/County: Ottawa-Carleton
Township: Nepean
Concession:: 3
Lot:: 10
Size (ha):: 11
Landuse::
Comments::

Site:
Lot 11 Con 3 Kanata ON

Database: ***AAGR***

Type: Quarry
Region/County: Ottawa-Carleton
Township: Kanata
Concession:: 3
Lot:: 11
Size (ha):: 0.5
Landuse::
Comments::

Site: ***Riotrin Properties (March Road) Inc.***
Ottawa ON

Database: ***CA***

Certificate #: 1369-7TZJGG
Application Year: 2009
Issue Date: 8/5/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***KNL Developments Inc.***
Former Township of March Ottawa ON

Database: ***CA***

Certificate #: 3666-7FFRAG
Application Year: 2008
Issue Date: 8/28/2008
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***Morgan's Grant Subdivision Phase 5B***
Lot 10, Concession 3 Kanata ON

Database: ***CA***

Certificate #: 8843-4Q7RKV
Application Year: 00
Issue Date: 10/25/00
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Ave. West
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Watermains to be constructed in Morgan's Grant Subdivision Phase 5B in the City of Kanata.
Contaminants::
Emission Control::

Site: ***Morgan's Grant Subdivision Phase 6, 7 & 8***
Lot 10, Concession 3 Ottawa ON

Database: ***CA***

Certificate #: 8414-53CPMC
Application Year: 01
Issue Date: 10/11/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Avenue West, Suite 300
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Construction of Watermains for Residential Development in Morgan's Grant Subdivision Phase 6, 7 & 8.
Contaminants::
Emission Control::

Site: ***Tenth Line Development Inc.***
Sandhill Rd Kanata Ottawa ON

Database: ***CA***

Certificate #: 6996-7TWQND
Application Year: 2009
Issue Date: 7/14/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::

Project Description::
Contaminants::
Emission Control::

Site: ***R.M. OF OTTAWA-CARLETON***
MARCH ROAD RECON., SWM FAC. KANATA CITY ON

Database: ***CA***

Certificate #: 3-0372-96-
Application Year: 96
Issue Date: 6/20/1996
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***R.M. OF OTTAWA-CARLETON***
ONT.HYDRO ESMT/KLONDIKE RD. KANATA CITY ON

Database: ***CA***

Certificate #: 3-0927-95-
Application Year: 95
Issue Date: 7/19/1995
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***COSCAN DEVELOPMENT CORP.***
BRIARBROOK SUBD/INVERARY DR. KANATA CITY ON

Database: ***CA***

Certificate #: 7-1466-90-
Application Year: 90
Issue Date: 9/28/1990
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***COSCAN DEVELOPMENT CORPORATION***
BRIARBROOK SUBD/INVERARY DR. KANATA CITY ON

Database: ***CA***

Certificate #: 3-1809-90-
Application Year: 90
Issue Date: 9/28/1990
Approval Type: Municipal sewage

Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***Klondike Developments Inc.***
870 March St and 1001 Klondike Road Ottawa ON

Database: ***CA***

Certificate #: 0048-79MQC5
Application Year: 2007
Issue Date: 12/6/2007
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site:
Pt. Lots 7, 8, 9, 10, 11, Conc. 4 Nepean ON

Database: ***CA***

Certificate #:
Application Year: 00
Issue Date: 11/30/00
Approval Type: Municipal & Private sewage
Status: Cancelled
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:: Review of proposed environmental assessment terms of reference for Region of Ottawa-Carleton Trail Waste Facility Landfill optimization/expansion project.
Contaminants::
Emission Control::

Site: ***Briarridge Subdivision***
Part of Lots 9 and 10, Concession 4, Plan 4M-755 Ottawa ON

Database: ***CA***

Certificate #: 2874-4UNSJN
Application Year: 01
Issue Date: 3/10/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Tenth Line Development Inc.
Client Address:: 210 Gladstone Avenue, Suite 2001
Client City:: Ottawa
Client Postal Code:: K2P 0Y6
Project Description:: Storm and Sanitary Sewage Construction on Shirley Brook Drive and Catterick Crescent.
Contaminants::
Emission Control::

Site: ***Briarridge Subdivision***
Part of Lots 9 and 10, Concession 4, Plan 4M-755 Ottawa ON

Database: ***CA***

Certificate #: 5513-4VBK22
Application Year: 01
Issue Date: 4/2/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Tenth Line Development Inc.
Client Address:: 210 Gladstone Avenue, Suite 2001
Client City:: Ottawa
Client Postal Code:: K2P 0Y6
Project Description:: Watermains Construction in Briarridge Subdivision.
Contaminants::
Emission Control::

Site: ***Briarridge Subdivision***
Part of Lots 9 and 10, Concession 4, Plan 4M-755 Ottawa ON

Database: ***CA***

Certificate #: 8454-4UNSYA
Application Year: 01
Issue Date: 3/10/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: Amended CofA
Client Name:: Tenth Line Development Inc.
Client Address:: 210 Gladstone Avenue, Suite 2001
Client City:: Ottawa
Client Postal Code:: K2P 0Y6
Project Description:: Watermains Construction in Briarridge Subdivision
Contaminants::
Emission Control::

Site: ***West Carleton Sand & Gravel Inc.***
Part of Lots 11 and 12, Concession 4 Ottawa ON

Database: ***CA***

Certificate #: 5875-6BDFW7
Application Year: 2006
Issue Date: 4/28/2006
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: ***Morgan's Grant***
Part of Lot 11, Concession 3 Ottawa ON

Database: ***CA***

Certificate #: 8692-54QSUG
Application Year: 01
Issue Date: 12/21/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Avenue West, Suite 300
Client City:: Ottawa
Client Postal Code:: K1R 7Y2

Project Description:: Stormwater management facility providing water quantity and quality control.
Contaminants::
Emission Control::

Site: ***Database:*** ***CA***
Part of Lot 10, Concession 3 Kanata ON

Certificate #: 7072-4LFPRF
Application Year: 00
Issue Date: 6/21/00
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Ave. West
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Sotrm and sanitary sewers to be constructed in Morgan's Grant Subdivision Phase 5C in the City of Kanata.
Contaminants::
Emission Control::

Site: ***Database:*** ***CA***
Part of Lot 10, Concession 3 Kanata ON

Certificate #: 0081-4LFQ7S
Application Year: 00
Issue Date: 6/21/00
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Ave. West
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Watermains to be constructed in Morgan's Grant Subdivision Phase 5C in the City of Kanata.
Contaminants::
Emission Control::

Site: ***Morgan's Grant Subdivision Phase 5B*** ***Database:*** ***CA***
Lot 10, Concession 3 Kanata ON

Certificate #: 3314-4Q7RF4
Application Year: 00
Issue Date: 10/25/00
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Ave. West
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Storm and sanitary sewers to be constructed in Morgan's Grant Subdivision Phase 5B in the City of Kanata.
Contaminants::
Emission Control::

Site: ***Shirleys Brooke Drive*** ***Database:*** ***CA***
Lot 10, Concession 3 Kanata ON

Certificate #: 4041-4PSKY2
Application Year: 00
Issue Date: 10/5/00
Approval Type: Municipal & Private sewage

Status: Approved
Application Type: New Certificate of Approval
Client Name:: Shell Canada Limited
Client Address:: 90 Sheppard Ave. E.
Client City:: Toronto
Client Postal Code:: M2N 6Y2
Project Description:: Construction of sanitary sewers on Shirleys Brook Drive from Inverary Drive to approximately 85 m east of March Road in the City of Kanata.
Contaminants::
Emission Control::

Site: ***Morgan's Grant Subdivision Phase 9***
Lot 10, Concession 3 Ottawa ON

Database: ***CA***

Certificate #: 1411-4UMSZM
Application Year: 01
Issue Date: 3/10/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Avenue West, Suite 300
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Installation of watermains on Klondike Road, Piekoff Crescent, Wallsend Avenue and Rayburn Street.
Contaminants::
Emission Control::

Site:
Lot 10, Concession 3 Kanata ON

Database: ***CA***

Certificate #: 8141-4Q2Q3S
Application Year: 00
Issue Date: 10/13/00
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Ave. West
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Construction of a watermian in Morgan's Grant Subdivision Phase 2, Block 223 in the City of Kanata, on Street No. 1.
Contaminants::
Emission Control::

Site: ***Morgan's Grant Subdivision Phase 6, 7 & 8***
Lot 10, Concession 3 Ottawa ON

Database: ***CA***

Certificate #: 8761-53CPYZ
Application Year: 01
Issue Date: 10/11/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Avenue West, Suite 300
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Construction of Storm and Sanitary Sewers for Residential Development Morgan's Grant Subdivision Phase 6, 7, & 8
Contaminants::
Emission Control::

Site: ***Morgan's Grant Subdivision Phase 9***
Lot 10, Concession 3 Ottawa ON

Database: ***CA***

Certificate #: 0828-4UMQX6
Application Year: 01
Issue Date: 3/10/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Avenue West, Suite 300
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Installation of storm and sanitary sewers in Morgan's Grant Subdivision Phase 9, on Klondike Road, Piekoff Crescent, Wallsend Avenue and Rayburn Street.
Contaminants::
Emission Control::

Site:
Lot 10, Concession 3 Kanata ON

Database: ***CA***

Certificate #: 3520-4Q2R3G
Application Year: 00
Issue Date: 10/13/00
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Minto Developments Inc.
Client Address:: 427 Laurier Ave. West
Client City:: Ottawa
Client Postal Code:: K1R 7Y2
Project Description:: Construction of sanitary and storm sewers in Morgan's Subdivision Phase 2, Block 223, in the City of Kanata, on Goulbourn Road and Street No. 1 (Cul-de-sac).
Contaminants::
Emission Control::

Site: ***IMPERIAL OIL LIMITED***
DON MILLS ON

Database: ***CONV***

File No.:
Publication Title:
Publication City:
Url:
Crown Brief No.:
Ministry District:
Region: EASTERN REGION
Description: FAILED TO COMPLY WITH CONDITIONS OF C. OF A.

--Details--
Publication Date:
Count: 1
Act: OWRA
Regulation:
Section: 66(3)
Act/Regulation/Section: OWRA- -66(3)
Date Charged: 6/4/93
Charge Disposition:
Fine: $6,000

Publication Date:
Count: 1
Act: OWRA
Regulation:

Section: 66(3)
Act/Regulation/Section: OWRA- -66(3)
Date Charged: 6/4/93
Charge Disposition:
Fine: $6,000

Site: ***IMPERIAL OIL LIMITED NORTH YORK ON***

Database: ***CONV***

File No.:
Publication Title:
Publication City:
Url:
Crown Brief No.:
Ministry District:
Region: EASTERN REGION
Description: FAILED TO INSPECT OIL/WATER SEPARATOR WEEKLY & MAINTAIN LOG BOOK AT SITE

--Details--
Publication Date:
Count: 1
Act: OWRA
Regulation:
Section: 66(3)
Act/Regulation/Section: OWRA- -66(3)
Date Charged: 6/4/93
Charge Disposition:
Fine: $1,000

Publication Date:
Count: 1
Act: OWRA
Regulation:
Section: 66(3)
Act/Regulation/Section: OWRA- -66(3)
Date Charged: 6/4/93
Charge Disposition:
Fine: $4,000

Site: ***West Carleton Sand & Gravel McGee Pit Ottawa Ontario Lot 11 and 12, Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA ON***

Database: ***EBR***

Company Name: West Carleton Sand & Gravel
EBR Registry No.: IA05E0467
Ministry Ref. No.: 9797-6ASMMB
Notice Type: Instrument Decision
Notice Date: April 28, 2006
Proposal Date: April 11, 2005
Year: 2005
Proponent Address: 3725 Carp Road, P.O Box 264, Carp Ontario, K0A 1L0
Instrument Type: (OWRA s. 53(1)) - Approval for sewage works
Location Other:

Location:

McGee Pit Ottawa Ontario Lot 11 and 12, Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA

Site: ***CITY OF KANATA KLONDIKE RD KANATA ON***

Database: ***EXP***

Instance No: 10797969

Instance ID: 41197
Instance Type: FS Piping
Description: FS Piping
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10797960
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description:
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date: 8/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10798026
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description:
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date: 12/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10797978
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type: FS Liquid Fuel Tank
Expired Date: 8/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***EXP***

Instance No: 10798032
Instance ID: 39407
Instance Type: FS Piping
Description: FS Piping
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***EXP***

Instance No: 10797999
Instance ID: 40770
Instance Type: FS Piping
Description: FS Piping
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10798008
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type: FS Liquid Fuel Tank
Expired Date: 12/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10797990
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type: FS Liquid Fuel Tank
Expired Date: 8/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***EXP***

Instance No: 10798017
Instance ID: 41890
Instance Type: FS Piping
Description: FS Piping
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***EXP***

Instance No: 10797984
Instance ID: 41317
Instance Type: FS Piping
Description: FS Piping
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:

Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10797960
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type: FS Liquid Fuel Tank
Expired Date: 8/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10797978
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description:
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date: 8/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10798026
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type: FS Liquid Fuel Tank
Expired Date: 12/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***EXP***

Instance No: 9319126
Instance ID: 384893
Instance Type: FS Facility
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10797990
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description:

Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date: 8/29/1990

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***EXP***

Instance No: 9392489
Instance ID: 380134
Instance Type: FS Facility
Description: Fuels Safety Private Fuel Outlet - Self Serve
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON K2L 2N3

Database: ***EXP***

Instance No: 10798008
Instance ID:
Instance Type: FS Liquid Fuel Tank
Description:
Status: EXPIRED
TSSA Program Area:
Maximum Hazard Rank:
Facility Type:
Expired Date: 12/29/1990

Site: ***E.B. EDDY FOREST PRODUCTS LTD. 14-802***
LOT 10, CONC. 3, CAMP 12 F.OP SITE IVY TWP., C/0 1335 CARLING AVE. OTTAWA ON K1Z 8N8

Database: ***GEN***

Generator No.: ON0009805
Status:
Approval Years: 94,95,96
Contam. Facility:
MHSW Facility:
SIC Code: 2599
SIC Description: OTHER WOOD IND.

PO Box No.:
Country:
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

Site: ***E.B. EDDY FOREST PRODUCTS LTD.***
LOT 10, CONC. 3, CAMP 12 F.OP SITE IVY TWP., C/0 1335 CARLING AVE. OTTAWA ON K1Z 8N8

Database: ***GEN***

Generator No.: ON0009805
Status:
Approval Years: 90
Contam. Facility:
MHSW Facility:
SIC Code: 2599
SIC Description: OTHER WOOD IND.

PO Box No.:
Country:
Choice of Contact:
Co Admin:
Phone No. Admin:

--Details--
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

Site: ***IMPERIAL OIL LTD***
ESSO PETROLEUM CANADA OTTAWA INTERNATIONAL AIRPORT OTTAWA ON M5W 1K3

Database: ***GEN***

Generator No.:	ON0000713	***PO Box No.:***	
Status:		***Country:***	
Approval Years:	86,87,88,89,90	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No. Admin:***	
SIC Code:	4523		
SIC Description:	AIRCRAFT SEVICING		

--Details--

Waste Code:	251
Waste Description:	OIL SKIMMINGS & SLUDGES

Site: ***The Corporation of the Township of Rideau***
Part of Lot 11, Concession 3 City of Ottawa ON

Database: ***LIMO***

C of A No:	A461201	***Site County:***	Ottawa
C of A Issue Date:	11/17/1971	***MOE Region:***	Eastern
C of A Issued to:		***MOE District:***	Ottawa
Operation Status:	Closed	***Easting:***	
Landfill Type:		***Northing:***	
Total Site Area:		***Latitude:***	
Footprint:		***Longitude:***	
Tot Apprvd Capac:		***UTM Zone:***	
Tot Aprv Cp Unit:		***Data Source:***	small landfills
Fill Rate:		***Cntm Attn Zn:***	
Fill Rate Unit:		***Grndwtr Mntr:***	
Est Remain Cap:		***Surf Wtr Mntr:***	
ERC Volume Unit:		***Lst Rprting Yr:***	
ERC Methodology:		***Fin Assrnce:***	
ERC Dt Last Det:		***Nat Attnuatn:***	
Total Waste Rec:		***Liners:***	
TWR Unit:		***Cvr Material:***	
TWR Methodology:			
Site Name:	Pierces Corners Landfill		
Air Emmis Monitor:			
Leachate Off-Site:			
Leachate On Site:			
Landfill Gas Manag (P):			
Landfill Gas Manag (F):			
Landfill Gas Manag (E):			
Req Col Lndfll Gas:			
Lndfll Gas Cllcted:			
Lndfll Gas Mntr:			
Service Area:			
Approved Waste Type:			

Site: ***West Carleton Sand & Gravel Inc.***
Lot 11-14, Conc 4 Ottawa ON

Database: ***NCPL***

Year:	2006
Discharge Type:	Industrial Sewage
Sector:	Miscellaneous
District Area:	Ottawa
Type of Concern:	C of A/Permit Non-Compliance
Contaminant:	SUSPENDED SOLIDS
Status Report:	

--Details--

Incident Date: 10/5/2006
Incident Start Date: 10/5/2006
Incident End Date: 10/5/2006
Limit/Unit/Freq: 25 mg/L
Quantity Min/Max: 32/32
Ministry Action: Voluntary Abatement Program Underway
Facility Action: Operational Process Modification

Site: ***ONTARIO HYDRO***
R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S. Kanata ON

Database: ***NPCB***

Company Code: O0941
Industry: Utility
Site Status: Stored for Disposal
Transaction Date: 11/9/1989
Inspection Date:

--Details--
Label:
Serial No.:
PCB Type/Code: Askarel/Inerteen
Location:
Item/State:
No. of Items:
Manufacturer:
Status: Stored for disposal
Contents:

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***PRT***

Location ID: 6728
Type: retail
Expiry Date:
Capacity (L): 22730
Licence #: 0001052484

Site: ***CITY OF KANATA***
KLONDIKE RD KANATA ON

Database: ***PRT***

Location ID: 6728
Type: private
Expiry Date:
Capacity (L): 36368.00
Licence #: 0001031141

Site: ***Kanata Research Park Corporation***
Lots 8, 9 and 10, Concession 4, Ottawa, geographic area of Kanata CITY OF OTTAWA ON

Database: ***PTTW***

EBR Registry No.: IA05E1015
Ministry Ref. No.: ER-3083-67XPBX
Notice Type: Instrument Decision
Notice Date: November 02, 2005
Proposal Date: June 29, 2005
Year: 2005
Proponent Address: 555 Legget Drive, Kanata Ontario, K2K 2X3
Instrument Type: (OWRA s. 34) - Permit to Take Water
Location Other:

Location:

Lots 8, 9 and 10, Concession 4, Ottawa, geographic area of Kanata CITY OF OTTAWA

Site: ***West Carleton Sand & Gravel***
Lots 11 and 12, Concession 4 CITY OF OTTAWA ON

Database: ***PTTW***

EBR Registry No.: IA05E0281
Ministry Ref. No.: ER-2284-69WM7D
Notice Type: Instrument Decision
Notice Date: June 03, 2005
Proposal Date: March 07, 2005
Year: 2005
Proponent Address: 3725 Carp Road, P.O Box 264, Carp Ontario, K0A 1L0
Instrument Type: (OWRA s. 34) - Permit to Take Water
Location Other:

Location:

Lots 11 and 12, Concession 4 CITY OF OTTAWA

Site: ***Mattamy (Half Moon Bay) Limited***
Lot: 10-12, Concession: 3, Original Geographic Township of Nepean, City of Ottawa Lot 8-9 and Concession 3, Original Geographic Township of Nepean, City of Ottawa CITY OF OTTAWA Nepean ON

Database: ***PTTW***

EBR Registry No.: 012-5618
Ministry Ref. No.: 6071-A3PQPJ
Notice Type: Instrument Decision
Notice Date: February 01, 2016
Proposal Date: November 03, 2015
Year: 2015
Proponent Address: 2360 Bristol Circle, Oakville Ontario, Canada L6H 6M5
Instrument Type: (OWRA s. 34) - Permit to Take Water
Location Other:

Location:

Lot: 10-12, Concession: 3, Original Geographic Township of Nepean, City of Ottawa Lot 8-9 and Concession 3, Original Geographic Township of Nepean, City of Ottawa CITY OF OTTAWA Nepean

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Site: ***Mattamy (Half Moon Bay) Limited***
Lots 8,9,10,11,12, Concession 3 Ottawa, Ontario CITY OF OTTAWA Nepean ON

Database: ***PTTW***

EBR Registry No.: 010-4784
Ministry Ref. No.: 6623-7JUKMA
Notice Type: Instrument Decision
Notice Date: April 29, 2009
Proposal Date: October 08, 2008
Year: 2008
Proponent Address: 123 Huntmar Drive, Ottawa Ontario, Canada K2S 1B9
Instrument Type: (OWRA s. 34) - Permit to Take Water
Location Other:

Location:

Lots 8,9,10,11,12, Concession 3 Ottawa, Ontario CITY OF OTTAWA Nepean

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Site: ***Mattamy (Half Moon Bay) Limited***
Lot 11, 12, Concession 3, Ottawa, City CITY OF OTTAWA ON

Database: ***PTTW***

EBR Registry No.: 010-5959
Ministry Ref. No.: 8783-7PCUC4

Notice Type: Instrument Decision
Notice Date: June 26, 2009
Proposal Date: February 20, 2009
Year: 2009
Proponent Address: 123 Huntmar Drive, Ottawa Ontario, Canada K2S 1B9
Instrument Type: (OWRA s. 34) - Permit to Take Water
Location Other:

Location:

Lot 11, 12, Concession 3, Ottawa, City CITY OF OTTAWA

Site: ***OTTAWA-CARLETON TRANSIT***
MARCH ROAD, SOUTH OF CARLING OTTAWA CITY ON

Database: ***SPL***

Ref No:	222088	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	2/25/2002	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	OTHER CONTAINER LEAK	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	POSSIBLE	***Site Municipality:***	20107
Nature of Impact:	Water course or lake	***Site Lot:***	
Receiving Medium:	LAND / WATER	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	2/25/2002	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			

Incident Reason: MATERIAL FAILURE
Incident Summary: OC TRANSIT: 2L OF ANTIFREEZE IN THE SEWER, CLEANING

Site: ***ONTARIO HYDRO***
SOUTH MARCH TRANSFORMER STATION, MARCH ROAD TRANSFORMER KANATA CITY ON

Database: ***SPL***

Ref No:	128700	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	6/26/1996	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	COOLING SYSTEM LEAK	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	CONFIRMED	***Site Municipality:***	20103
Nature of Impact:	Soil contamination	***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	EPS
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	7/3/1996	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			

Incident Reason: OTHER
Incident Summary: ONTARIO HYDRO: 250 ML OF PCB OIL (200 PPM) TO SOILCONTAINED AND CLEANED UP.

Site: ***ESSO PETROLEUM CANADA***
BULK STATION OTTAWA CITY ON

Database: ***SPL***

Ref No:	155190	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	5/1/1998	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	OTHER CAUSE (N.O.S.)	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	NOT ANTICIPATED	***Site Municipality:***	20101
Nature of Impact:		***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	5/1/1998	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			

Incident Reason: NEGLIGENCE (APPARENT)
Incident Summary: ESSO-156 L DIESEL TO LOT,LOADING ARM NOT IN TRUCKSCOMPARTMENT,PUMP STARTED.

Site: ***Esso Petroleum Canada, A Division of Imperial Oil Limited***
Nepean Ottawa ON

Database: ***SPL***

Ref No:	0874-78WNRU	***Discharger Report:***	
Site No:		***Material Group:***	Oil
Incident Dt:		***Client Type:***	
Year:		***Sector Type:***	Tank Truck
Incident Cause:	Pipe Or Hose Leak	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:	13	***Site Name:***	1961 Merivale Rd<UNOFFICIAL>
Contaminant Name:	DIESEL FUEL	***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:	8 L	***Site Region:***	
Environment Impact:	Confirmed	***Site Municipality:***	Ottawa
Nature of Impact:	soil contamiination	***Site Lot:***	
Receiving Medium:	Land	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:	No Field Response	***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	11/13/2007	***Site Map Datum:***	
Dt Document Closed:	11/16/2007		
SAC Action Class:			

Incident Reason: Equipment Failure
Incident Summary: Errentom Tanklines - 8L diesel to grd

Site: ***ESSO PETROLEUM CANADA***
SERVICE STATION NEPEAN CITY ON

Database: ***SPL***

Ref No:	65520	***Discharger Report:***	
Site No:		***Material Group:***	

Incident Dt:	12/23/1991	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	CONTAINER OVERFLOW	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	NOT ANTICIPATED	***Site Municipality:***	20104
Nature of Impact:		***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	MCCR
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	12/24/1991	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			
Incident Reason:	ERROR		
Incident Summary:	ESSO/TRW PETROLEUM: 30 L GASOLINE TO GROUND WHEN TANK OVERFILLED		

Site: ***ESSO PETROLEUM CANADA***
TANK TRUCK (CARGO) OTTAWA CITY ON

Database: ***SPL***

Ref No:	47843	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	3/19/1991	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	PIPE/HOSE LEAK	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	NOT ANTICIPATED	***Site Municipality:***	20101
Nature of Impact:		***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	3/20/1991	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			
Incident Reason:	ERROR		
Incident Summary:	ESSO HOME COMFORT - TANK TRUCK SPILLED APPROX 1 L.HEATING OIL ON GROUND		

Site: ***IMPERIAL OIL***
TANK TRUCK (CARGO) NEPEAN CITY ON

Database: ***SPL***

Ref No:	35439	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	5/29/1990	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	CONTAINER OVERFLOW	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	

Environment Impact:	NOT ANTICIPATED	***Site Municipality:***	20104
Nature of Impact:		***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	5/29/1990	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			
Incident Reason:	ERROR		
Incident Summary:	IMPERIAL OIL - 10 L GASO- LINE TO CONCRETE. CLEAN UP COMPLETED.		

Site: ***ESSO PETROLEUM CANADA***
TRANSPORT TRUCK (CARGO) OTTAWA CITY ON

Database: ***SPL***

Ref No:	59519	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	11/7/1991	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	PIPE/HOSE LEAK	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	NOT ANTICIPATED	***Site Municipality:***	20101
Nature of Impact:		***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	11/7/1991	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			
Incident Reason:	ERROR		
Incident Summary:	ESSO-3 LITRES DIESEL FUELTO GRND UNDER LOADING RACK,COUPLING NOT CLOSED		

Site: ***ESSO PETROLEUM CANADA***
ESSO DISTRIBUTION STATION BULK STATION OTTAWA CITY ON

Database: ***SPL***

Ref No:	46877	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	2/21/1991	***Client Type:***	
Year:		***Sector Type:***	
Incident Cause:	CONTAINER OVERFLOW	***Source Type:***	
Incident Event:		***Nearest Watercourse:***	
Contaminant Code:		***Site Name:***	
Contaminant Name:		***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site County/District:***	
Contaminant UN No 1:		***Site Postal Code:***	
Contaminant Qty:		***Site Region:***	
Environment Impact:	NOT ANTICIPATED	***Site Municipality:***	20101
Nature of Impact:		***Site Lot:***	
Receiving Medium:	LAND	***Site Conc:***	
Receiving Env:		***Northing:***	
Health/Env Conseq:		***Easting:***	
MOE Response:		***Site Geo Ref Accu:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Meth:***	
MOE Reported Dt:	2/21/1991	***Site Map Datum:***	
Dt Document Closed:			
SAC Action Class:			

Incident Reason: ERROR
Incident Summary: ESSO DISTRIB. STATION - 50 L FURNACE OIL SPILLED TO LOADING DOCK. OV/FILL.

Site:
lot 11 ON

Database: ***WWIS***

Well ID: 1524142
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 56282
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: 1
Date Received: 1/26/1990
Selected Flag: Yes
Abandonment Rec:
Contractor: 3644
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10045914
DP2BR: 1
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 30-AUG-89
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931056979
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 11
Other Materials: GRAVEL
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 1
Formation End Depth UOM: ft

Formation ID: 931056980
Layer: 2
Color: 2

General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 1
Formation End Depth: 100
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961524142
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10594484
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930080381
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930080382
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 100
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991524142
Pump Set At:
Static Level: 6
Final Level After Pumping: 40
Recommended Pump Depth: 40
Pumping Rate: 30
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0

Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934652922
Test Type:
Test Duration: 45
Test Level: 40
Test Level UOM: ft

Pump Test Detail ID: 934107723
Test Type:
Test Duration: 15
Test Level: 40
Test Level UOM: ft

Pump Test Detail ID: 934391952
Test Type:
Test Duration: 30
Test Level: 40
Test Level UOM: ft

Pump Test Detail ID: 934910122
Test Type:
Test Duration: 60
Test Level: 40
Test Level UOM: ft

Water Details

Water ID: 933482687
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 63
Water Found Depth UOM: ft

Water ID: 933482688
Layer: 2
Kind Code: 1
Kind: FRESH
Water Found Depth: 95
Water Found Depth UOM: ft

Site:
lot 11 ON

Database: ***WWIS***

Well ID: 1526861
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: NA
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:

Data Entry Status:
Data Src: 1
Date Received: 10/20/1992
Selected Flag: Yes
Abandonment Rec:
Contractor: 3323
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Clear/Cloudy:

Bore Hole Information

Bore Hole ID:	10048549	***Elevation:***	
DP2BR:	7	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	26-NOV-86	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931065377
Layer:	3
Color:	7
General Color:	RED
Mat1:	21
Most Common Material:	GRANITE
Mat2:	73
Other Materials:	HARD
Mat3:	
Other Materials:	
Formation Top Depth:	125
Formation End Depth:	135
Formation End Depth UOM:	ft

Formation ID:	931065376
Layer:	2
Color:	2
General Color:	GREY
Mat1:	21
Most Common Material:	GRANITE
Mat2:	73
Other Materials:	HARD
Mat3:	
Other Materials:	
Formation Top Depth:	7
Formation End Depth:	125
Formation End Depth UOM:	ft

Formation ID:	931065375
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	02
Most Common Material:	TOPSOIL
Mat2:	81
Other Materials:	SANDY
Mat3:	02
Other Materials:	TOPSOIL
Formation Top Depth:	0
Formation End Depth:	7
Formation End Depth UOM:	ft

Annular Space/Abandonment

Sealing Record

Plug ID:	933112005
Layer:	1
Plug From:	0
Plug To:	18
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	961526861
Method Construction Code:	5
Method Construction:	Air Percussion
Other Method Construction:	

Pipe Information

Pipe ID:	10597119
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930085001
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	22
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Results of Well Yield Testing

Pump Test ID:	991526861
Pump Set At:	
Static Level:	6
Final Level After Pumping:	130
Recommended Pump Depth:	70
Pumping Rate:	30
Flowing Rate:	
Recommended Pump Rate:	10
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	
Pumping Duration MIN:	
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934109025
Test Type:	
Test Duration:	15
Test Level:	8
Test Level UOM:	ft

Pump Test Detail ID:	934910782
Test Type:	
Test Duration:	60

Test Level: 6
Test Level UOM: ft

Pump Test Detail ID: 934653172
Test Type:
Test Duration: 45
Test Level: 6
Test Level UOM: ft

Pump Test Detail ID: 934392659
Test Type:
Test Duration: 30
Test Level: 6
Test Level UOM: ft

Water Details

Water ID: 933486311
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 130
Water Found Depth UOM: ft

Site:
lot 11 ON

Database:
WWIS

Well ID: 1534269
Construction Date:
Primary Water Use: Not Used
Sec. Water Use:
Final Well Status: Not A Well
Water Type:
Casing Material:
Audit No: 265848
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: 1
Date Received: 11/17/2003
Selected Flag: Yes
Abandonment Rec:
Contractor: 6907
Form Version: 2
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: NEPEAN TOWNSHIP
Site Info:
Lot: 011
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 11097321
DP2BR:
Spatial Status:
Code OB: _
Code OB Desc: No formation data
Open Hole:
Cluster Kind:
Date Completed: 26-SEP-03
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Method of Construction & Well Use

Method Construction ID: 961534269
Method Construction Code: B
Method Construction: Other Method
Other Method Construction:

Pipe Information

Pipe ID: 11101036
Casing No: 1
Comment:
Alt Name:

Site:
lot 11 ON

Database: ***WWIS***

Well ID: 1520591
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: NA
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: 1
Date Received: 7/21/1986
Selected Flag: Yes
Abandonment Rec:
Contractor: 5222
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 011
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10042433
DP2BR: 7
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 02-JUL-86
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931045243
Layer: 2
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE

Mat2: 18
Other Materials: SANDSTONE
Mat3: 73
Other Materials: HARD
Formation Top Depth: 7
Formation End Depth: 35
Formation End Depth UOM: ft

Formation ID: 931045242
Layer: 1
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 81
Other Materials: SANDY
Mat3: 79
Other Materials: PACKED
Formation Top Depth: 0
Formation End Depth: 7
Formation End Depth UOM: ft

Formation ID: 931045244
Layer: 3
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 35
Formation End Depth: 55
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933109161
Layer: 1
Plug From: 0
Plug To: 22
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961520591
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10591003
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930074063
Layer: 2
Material: 4

Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 55
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930074062
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991520591
Pump Set At:
Static Level: 5
Final Level After Pumping: 30
Recommended Pump Depth: 30
Pumping Rate: 80
Flowing Rate:
Recommended Pump Rate: 25
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 2
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934112478
Test Type: Draw Down
Test Duration: 15
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934648364
Test Type: Draw Down
Test Duration: 45
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934906146
Test Type: Draw Down
Test Duration: 60
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934387341
Test Type: Draw Down
Test Duration: 30
Test Level: 30
Test Level UOM: ft

Water Details

Water ID: 933477877
Layer: 2

Kind Code:	1
Kind:	FRESH
Water Found Depth:	49
Water Found Depth UOM:	ft
Water ID:	933477876
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	33
Water Found Depth UOM:	ft

Site:
lot 11 ON

Database:
WWIS

Well ID:	1531176	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	6/12/2000
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	6006
Casing Material:		***Form Version:***	1
Audit No:	206814	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	011
Well Depth:		***Concession:***	
Overburden/Bedrock:		***Concession Name:***	CON
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:	10052710	***Elevation:***	
DP2BR:	25	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	26-MAY-00	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931077739
Layer:	2
Color:	2
General Color:	GREY
Mat1:	22
Most Common Material:	GREENSTONE
Mat2:	73
Other Materials:	HARD
Mat3:	

Other Materials:
Formation Top Depth: 25
Formation End Depth: 45
Formation End Depth UOM: ft

Formation ID: 931077738
Layer: 1
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 13
Other Materials: BOULDERS
Mat3: 85
Other Materials: SOFT
Formation Top Depth: 0
Formation End Depth: 25
Formation End Depth UOM: ft

Formation ID: 931077740
Layer: 3
Color: 1
General Color: WHITE
Mat1: 21
Most Common Material: GRANITE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 45
Formation End Depth: 60
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933116347
Layer: 1
Plug From: 0
Plug To: 20
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961531176
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 10601280
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930092146
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 25

Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930092147
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 40
Casing Diameter: 5
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991531176
Pump Set At:
Static Level: 7
Final Level After Pumping: 50
Recommended Pump Depth: 55
Pumping Rate: 35
Flowing Rate:
Recommended Pump Rate: 15
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934665280
Test Type: Recovery
Test Duration: 45
Test Level: 7
Test Level UOM: ft

Pump Test Detail ID: 934396554
Test Type: Recovery
Test Duration: 30
Test Level: 7
Test Level UOM: ft

Pump Test Detail ID: 934913408
Test Type: Recovery
Test Duration: 60
Test Level: 7
Test Level UOM: ft

Pump Test Detail ID: 934121143
Test Type: Recovery
Test Duration: 15
Test Level: 7
Test Level UOM: ft

Water Details

Water ID: 933491539
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 30

Water Found Depth UOM:	ft
Water ID:	933491540
Layer:	2
Kind Code:	1
Kind:	FRESH
Water Found Depth:	45
Water Found Depth UOM:	ft

Site:
lot 11 ON

Database:
WWIS

Well ID:	1520592	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	7/21/1986
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Recharge Well	***Abandonment Rec:***	
Water Type:		***Contractor:***	5222
Casing Material:		***Form Version:***	1
Audit No:	NA	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	011
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:	10042434	***Elevation:***	
DP2BR:	4	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	02-JUL-86	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931045245
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	05
Most Common Material:	CLAY
Mat2:	81
Other Materials:	SANDY
Mat3:	79
Other Materials:	PACKED
Formation Top Depth:	0
Formation End Depth:	4

Formation End Depth UOM: ft

Formation ID: 931045246
Layer: 2
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 78
Other Materials: MEDIUM-GRAINED
Mat3: 73
Other Materials: HARD
Formation Top Depth: 4
Formation End Depth: 30
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933109162
Layer: 1
Plug From: 0
Plug To: 22
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961520592
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10591004
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930074065
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 30
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930074064
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991520592

Pump Set At:
Static Level: 4
Final Level After Pumping: 20
Recommended Pump Depth: 20
Pumping Rate: 30
Flowing Rate:
Recommended Pump Rate: 15
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 2
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934648365
Test Type: Draw Down
Test Duration: 45
Test Level: 20
Test Level UOM: ft

Pump Test Detail ID: 934387342
Test Type: Draw Down
Test Duration: 30
Test Level: 20
Test Level UOM: ft

Pump Test Detail ID: 934112479
Test Type: Draw Down
Test Duration: 15
Test Level: 20
Test Level UOM: ft

Pump Test Detail ID: 934906147
Test Type: Draw Down
Test Duration: 60
Test Level: 20
Test Level UOM: ft

Water Details

Water ID: 933477878
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 27
Water Found Depth UOM: ft

Site:
lot 11 ON

Database: ***WWIS***

Well ID: 1521489
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 07100
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:

Data Entry Status:
Data Src: 1
Date Received: 7/2/1987
Selected Flag: Yes
Abandonment Rec:
Contractor: 5222
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:

Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:
Clear/Cloudy:

Lot: 011
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10043311
DP2BR: 0
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 02-JUN-87
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931048222
Layer: 3
Color: 2
General Color: GREY
Mat1: 21
Most Common Material: GRANITE
Mat2: 46
Other Materials: QUARTZ
Mat3: 73
Other Materials: HARD
Formation Top Depth: 70
Formation End Depth: 115
Formation End Depth UOM: ft

Formation ID: 931048223
Layer: 4
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 115
Formation End Depth: 125
Formation End Depth UOM: ft

Formation ID: 931048221
Layer: 2
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 90
Other Materials: VERY
Mat3: 73

Other Materials: HARD
Formation Top Depth: 38
Formation End Depth: 70
Formation End Depth UOM: ft

Formation ID: 931048220
Layer: 1
Color: 6
General Color: BROWN
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 90
Other Materials: VERY
Mat3: 73
Other Materials: HARD
Formation Top Depth: 0
Formation End Depth: 38
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933109483
Layer: 1
Plug From: 0
Plug To: 22
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961521489
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10591881
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930075643
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930075644
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 125
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID:	991521489
Pump Set At:	
Static Level:	3
Final Level After Pumping:	55
Recommended Pump Depth:	55
Pumping Rate:	20
Flowing Rate:	
Recommended Pump Rate:	7
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	1
Pumping Duration HR:	2
Pumping Duration MIN:	0
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934390654
Test Type:	Draw Down
Test Duration:	30
Test Level:	55
Test Level UOM:	ft
Pump Test Detail ID:	934651798
Test Type:	Draw Down
Test Duration:	45
Test Level:	55
Test Level UOM:	ft
Pump Test Detail ID:	934106554
Test Type:	Draw Down
Test Duration:	15
Test Level:	55
Test Level UOM:	ft
Pump Test Detail ID:	934908889
Test Type:	Draw Down
Test Duration:	60
Test Level:	55
Test Level UOM:	ft

Water Details

Water ID:	933479075
Layer:	2
Kind Code:	1
Kind:	FRESH
Water Found Depth:	117
Water Found Depth UOM:	ft
Water ID:	933479074
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	70
Water Found Depth UOM:	ft

Site:
lot 100 ON

Database:
WWIS

Well ID: 1525686
Construction Date:

Data Entry Status:
Data Src: 1

Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 68566
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:

Date Received: 10/21/1991
Selected Flag: Yes
Abandonment Rec:
Contractor: 3644
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 100
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10047421
DP2BR: 0
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 04-APR-91
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931062012
Layer: 1
Color: 8
General Color: BLACK
Mat1: 21
Most Common Material: GRANITE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 263
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961525686
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10595991

Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930083010
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 263
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930083009
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991525686
Pump Set At:
Static Level: 40
Final Level After Pumping: 255
Recommended Pump Depth: 255
Pumping Rate: 2
Flowing Rate:
Recommended Pump Rate: 5
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934388720
Test Type:
Test Duration: 30
Test Level: 255
Test Level UOM: ft

Pump Test Detail ID: 934105061
Test Type:
Test Duration: 15
Test Level: 255
Test Level UOM: ft

Pump Test Detail ID: 934649258
Test Type:
Test Duration: 45
Test Level: 255
Test Level UOM: ft

Pump Test Detail ID: 934906438

Test Type:
Test Duration: 60
Test Level: 255
Test Level UOM: ft

Water Details

Water ID: 933484743
Layer: 2
Kind Code: 1
Kind: FRESH
Water Found Depth: 258
Water Found Depth UOM: ft

Water ID: 933484742
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 160
Water Found Depth UOM: ft

Site:
lot 10 ON

Database:
WWIS

Well ID: 1518764
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No:
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: 1
Date Received: 1/10/1984
Selected Flag: Yes
Abandonment Rec:
Contractor: 3644
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: NEPEAN TOWNSHIP
Site Info:
Lot: 010
Concession:
Concession Name: CON
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10040634
DP2BR: 88
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 25-NOV-83
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931039483
Layer: 2
Color: 2
General Color: GREY
Mat1: 14
Most Common Material: HARDPAN
Mat2: 11
Other Materials: GRAVEL
Mat3:
Other Materials:
Formation Top Depth: 44
Formation End Depth: 88
Formation End Depth UOM: ft

Formation ID: 931039484
Layer: 3
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2: 82
Other Materials: SHALY
Mat3:
Other Materials:
Formation Top Depth: 88
Formation End Depth: 105
Formation End Depth UOM: ft

Formation ID: 931039482
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 44
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961518764
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10589204
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930070942
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 90
Casing Diameter: 6

Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930070943
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 105
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991518764
Pump Set At:
Static Level: 0
Final Level After Pumping: 20
Recommended Pump Depth: 20
Pumping Rate: 20
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934103240
Test Type:
Test Duration: 15
Test Level: 20
Test Level UOM: ft

Pump Test Detail ID: 934380498
Test Type:
Test Duration: 30
Test Level: 20
Test Level UOM: ft

Pump Test Detail ID: 934650481
Test Type:
Test Duration: 45
Test Level: 20
Test Level UOM: ft

Pump Test Detail ID: 934900018
Test Type:
Test Duration: 60
Test Level: 20
Test Level UOM: ft

Water Details

Water ID: 933475561
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 100
Water Found Depth UOM: ft

Site:

lot 10 ON

Database:
WWIS

Well ID:	1521613	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	8/17/1987
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	07137	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10043435	***Elevation:***	
DP2BR:	98	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	29-MAY-87	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931048632
Layer:	2
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Other Materials:	STONES
Mat3:	
Other Materials:	
Formation Top Depth:	48
Formation End Depth:	98
Formation End Depth UOM:	ft

Formation ID:	931048631
Layer:	1
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY

Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 48
Formation End Depth UOM: ft

Formation ID: 931048634
Layer: 4
Color: 2
General Color: GREY
Mat1: 17
Most Common Material: SHALE
Mat2: 90
Other Materials: VERY
Mat3: 85
Other Materials: SOFT
Formation Top Depth: 180
Formation End Depth: 225
Formation End Depth UOM: ft

Formation ID: 931048633
Layer: 3
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 98
Formation End Depth: 180
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961521613
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10592005
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930075880
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 225
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930075879
Layer: 1
Material: 1

Open Hole or Material: STEEL
Depth From:
Depth To: 100
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991521613
Pump Set At:
Static Level: 25
Final Level After Pumping: 210
Recommended Pump Depth: 210
Pumping Rate: 2
Flowing Rate:
Recommended Pump Rate: 5
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934107088
Test Type:
Test Duration: 15
Test Level: 210
Test Level UOM: ft

Pump Test Detail ID: 934390770
Test Type:
Test Duration: 30
Test Level: 210
Test Level UOM: ft

Pump Test Detail ID: 934909981
Test Type:
Test Duration: 60
Test Level: 210
Test Level UOM: ft

Pump Test Detail ID: 934652331
Test Type:
Test Duration: 45
Test Level: 210
Test Level UOM: ft

Water Details

Water ID: 933479252
Layer: 1
Kind Code: 5
Kind: Not stated
Water Found Depth: 190
Water Found Depth UOM: ft

Site:
lot 10 ON

Database: ***WWIS***

Well ID: 1521663
Construction Date:
Data Entry Status:
Data Src: 1

Primary Water Use:	Domestic	***Date Received:***	8/14/1987
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	08597	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	NEPEAN TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10043485	***Elevation:***	
DP2BR:	59	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	28-JUL-87	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931048779
Layer:	4
Color:	1
General Color:	WHITE
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	150
Formation End Depth:	225
Formation End Depth UOM:	ft

Formation ID:	931048778
Layer:	3
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	59
Formation End Depth:	150
Formation End Depth UOM:	ft

Formation ID: 931048777
Layer: 2
Color: 2
General Color: GREY
Mat1: 14
Most Common Material: HARDPAN
Mat2: 12
Other Materials: STONES
Mat3:
Other Materials:
Formation Top Depth: 45
Formation End Depth: 59
Formation End Depth UOM: ft

Formation ID: 931048776
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 45
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961521663
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10592055
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930075978
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 62
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930075979
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 225
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID:	991521663
Pump Set At:	
Static Level:	50
Final Level After Pumping:	220
Recommended Pump Depth:	220
Pumping Rate:	3
Flowing Rate:	
Recommended Pump Rate:	5
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	2
Water State After Test:	CLOUDY
Pumping Test Method:	1
Pumping Duration HR:	1
Pumping Duration MIN:	0
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934107556
Test Type:	
Test Duration:	15
Test Level:	220
Test Level UOM:	ft
Pump Test Detail ID:	934391799
Test Type:	
Test Duration:	30
Test Level:	220
Test Level UOM:	ft
Pump Test Detail ID:	934652800
Test Type:	
Test Duration:	45
Test Level:	220
Test Level UOM:	ft
Pump Test Detail ID:	934910031
Test Type:	
Test Duration:	60
Test Level:	220
Test Level UOM:	ft

Water Details

Water ID:	933479327
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	215
Water Found Depth UOM:	ft

Site:
lot 10 ON

Database:
WWIS

Well ID:	1524141	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	1/26/1990
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	49834	***Owner:***	
Tag:		***Street Name:***	

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:

County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 010
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10045913
DP2BR: 6
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 27-JUL-89
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931056978
Layer: 2
Color: 2
General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 90
Other Materials: VERY
Mat3: 73
Other Materials: HARD
Formation Top Depth: 6
Formation End Depth: 80
Formation End Depth UOM: ft

Formation ID: 931056977
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 12
Other Materials: STONES
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 6
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961524141
Method Construction Code: 5

Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10594483
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930080380
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 80
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930080379
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991524141
Pump Set At:
Static Level: 8
Final Level After Pumping: 40
Recommended Pump Depth: 40
Pumping Rate: 30
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934107722
Test Type:
Test Duration: 15
Test Level: 40
Test Level UOM: ft

Pump Test Detail ID: 934391951
Test Type:
Test Duration: 30
Test Level: 40
Test Level UOM: ft

Pump Test Detail ID:	934652921
Test Type:	
Test Duration:	45
Test Level:	40
Test Level UOM:	ft

Pump Test Detail ID:	934910121
Test Type:	
Test Duration:	60
Test Level:	40
Test Level UOM:	ft

Water Details

Water ID:	933482686
Layer:	2
Kind Code:	1
Kind:	FRESH
Water Found Depth:	75
Water Found Depth UOM:	ft

Water ID:	933482685
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	55
Water Found Depth UOM:	ft

Site:
lot 10 ON

Database:
WWIS

Well ID:	1524851	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	9/17/1990
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	68406	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10046594	***Elevation:***	
DP2BR:	0	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	h	***East83:***	
Code OB Desc:	Mixed in a Layer	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	12-JUL-90	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			

Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 931059281
Layer: 2
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 5
Formation End Depth: 18
Formation End Depth UOM: ft

Formation ID: 931059280
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 26
Other Materials: ROCK
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 5
Formation End Depth UOM: ft

Formation ID: 931059282
Layer: 3
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 73
Other Materials: HARD
Mat3:
Other Materials:
Formation Top Depth: 18
Formation End Depth: 63
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961524851
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10595164
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930081576
Layer: 1
Material:
Open Hole or Material:
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930081577
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 63
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991524851
Pump Set At:
Static Level: 10
Final Level After Pumping: 45
Recommended Pump Depth: 45
Pumping Rate: 25
Flowing Rate:
Recommended Pump Rate: 15
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934110030
Test Type:
Test Duration: 15
Test Level: 45
Test Level UOM: ft

Pump Test Detail ID: 934385439
Test Type:
Test Duration: 30
Test Level: 45
Test Level UOM: ft

Pump Test Detail ID: 934655217
Test Type:
Test Duration: 45
Test Level: 45
Test Level UOM: ft

Pump Test Detail ID: 934903594
Test Type:
Test Duration: 60
Test Level: 45
Test Level UOM: ft

Water Details

Water ID:	933483612
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	57
Water Found Depth UOM:	ft

Site:
lot 10 ON

Database:
WWIS

Well ID:	1524853	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	9/17/1990
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Recharge Well	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	68407	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10046596	***Elevation:***	
DP2BR:	5	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	12-JUL-90	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931059285
Layer:	1
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Other Materials:	STONES
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	5

Formation End Depth UOM: ft

Formation ID: 931059286
Layer: 2
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 5
Formation End Depth: 19
Formation End Depth UOM: ft

Formation ID: 931059287
Layer: 3
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 19
Formation End Depth: 75
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961524853
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10595166
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930081580
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930081581
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 75
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID:	991524853
Pump Set At:	
Static Level:	10
Final Level After Pumping:	50
Recommended Pump Depth:	50
Pumping Rate:	15
Flowing Rate:	
Recommended Pump Rate:	15
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	2
Water State After Test:	CLOUDY
Pumping Test Method:	1
Pumping Duration HR:	1
Pumping Duration MIN:	0
Flowing:	N

Draw Down & Recovery

Pump Test Detail ID:	934110032
Test Type:	
Test Duration:	15
Test Level:	50
Test Level UOM:	ft
Pump Test Detail ID:	934385441
Test Type:	
Test Duration:	30
Test Level:	50
Test Level UOM:	ft
Pump Test Detail ID:	934655219
Test Type:	
Test Duration:	45
Test Level:	50
Test Level UOM:	ft
Pump Test Detail ID:	934903596
Test Type:	
Test Duration:	60
Test Level:	50
Test Level UOM:	ft

Water Details

Water ID:	933483615
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	70
Water Found Depth UOM:	ft

Site:
lot 10 ON

Database:
WWIS

Well ID:	1524890	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	9/17/1990
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	56337	***Owner:***	

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:

Street Name:
County: OTTAWA-CARLETON
Municipality: NEPEAN TOWNSHIP
Site Info:
Lot: 010
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10046633
DP2BR: 106
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 25-APR-90
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931059404
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 10
Formation End Depth UOM: ft

Formation ID: 931059407
Layer: 4
Color: 2
General Color: GREY
Mat1: 26
Most Common Material: ROCK
Mat2: 71
Other Materials: FRACTURED
Mat3:
Other Materials:
Formation Top Depth: 106
Formation End Depth: 108
Formation End Depth UOM: ft

Formation ID: 931059406
Layer: 3
Color: 2
General Color: GREY
Mat1: 14

Most Common Material: HARDPAN
Mat2: 05
Other Materials: CLAY
Mat3:
Other Materials:
Formation Top Depth: 90
Formation End Depth: 106
Formation End Depth UOM: ft

Formation ID: 931059405
Layer: 2
Color: 3
General Color: BLUE
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 10
Formation End Depth: 90
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961524890
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10595203
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930081654
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 108
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991524890
Pump Set At:
Static Level: 0
Final Level After Pumping: 60
Recommended Pump Depth: 60
Pumping Rate: 20
Flowing Rate:
Recommended Pump Rate: 15
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1

Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934385896
Test Type:
Test Duration: 30
Test Level: 60
Test Level UOM: ft

Pump Test Detail ID: 934110488
Test Type:
Test Duration: 15
Test Level: 60
Test Level UOM: ft

Pump Test Detail ID: 934903633
Test Type:
Test Duration: 60
Test Level: 60
Test Level UOM: ft

Pump Test Detail ID: 934655256
Test Type:
Test Duration: 45
Test Level: 60
Test Level UOM: ft

Water Details

Water ID: 933483660
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 108
Water Found Depth UOM: ft

Site:
lot 10 ON

Database:
WWIS

Well ID: 1528729
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 153017
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: 1
Date Received: 9/21/1995
Selected Flag: Yes
Abandonment Rec:
Contractor: 3323
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot: 010
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10050265
Elevation:

DP2BR: 6
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 14-AUG-95
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931070612
Layer: 2
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2: 18
Other Materials: SANDSTONE
Mat3:
Other Materials:
Formation Top Depth: 6
Formation End Depth: 80
Formation End Depth UOM: ft

Formation ID: 931070611
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 01
Other Materials: FILL
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 6
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933113669
Layer: 1
Plug From: 7
Plug To: 20
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961528729
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10598835
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930087844
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 20
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991528729
Pump Set At:
Static Level: 6
Final Level After Pumping: 80
Recommended Pump Depth: 60
Pumping Rate: 50
Flowing Rate:
Recommended Pump Rate: 30
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code:
Water State After Test:
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934649367
Test Type: Recovery
Test Duration: 45
Test Level: 6
Test Level UOM: ft

Pump Test Detail ID: 934388850
Test Type: Recovery
Test Duration: 30
Test Level: 8
Test Level UOM: ft

Pump Test Detail ID: 934105224
Test Type: Recovery
Test Duration: 15
Test Level: 11
Test Level UOM: ft

Pump Test Detail ID: 934906549
Test Type: Recovery
Test Duration: 60
Test Level: 6
Test Level UOM: ft

Water Details

Water ID: 933488548

Layer: 2
Kind Code: 1
Kind: FRESH
Water Found Depth: 75
Water Found Depth UOM: ft

Water ID: 933488547
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 45
Water Found Depth UOM: ft

Site:
lot 10 ON

Database:
WWIS

Well ID: 1535825
Construction Date:
Primary Water Use:
Sec. Water Use:
Final Well Status:
Water Type:
Casing Material:
Audit No: Z17653
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: 9/29/2005
Selected Flag: Yes
Abandonment Rec:
Contractor: 6907
Form Version: 3
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: OTTAWA CITY
Site Info:
Lot: 010
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 11316364
DP2BR:
Spatial Status:
Code OB: u
Code OB Desc: all layers are unknown type
Open Hole:
Cluster Kind:
Date Completed: 22-SEP-05
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone:
East83:
Org CS:
North83:
UTMRC:
UTMRC Desc:
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 932997253
Layer: 1
Color:
General Color:
Mat1:
Most Common Material:
Mat2:
Other Materials:

Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 19
Formation End Depth UOM: ft

Formation ID: 932997254
Layer: 2
Color:
General Color:
Mat1:
Most Common Material:
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 19
Formation End Depth: 77
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961535825
Method Construction Code: B
Method Construction: Other Method
Other Method Construction:

Pipe Information

Pipe ID: 11331219
Casing No: 1
Comment:
Alt Name:

Results of Well Yield Testing

Pump Test ID: 11345704
Pump Set At: 75
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: LPM
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Site:
con 4 ON

Database: ***WWIS***

Well ID: 1530124
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 194690
Tag:

Data Entry Status:
Data Src: 1
Date Received: 8/14/1998
Selected Flag: Yes
Abandonment Rec:
Contractor: 1558
Form Version: 1
Owner:
Street Name:

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:

County: OTTAWA-CARLETON
Municipality: MARCH TOWNSHIP
Site Info:
Lot:
Concession: 04
Concession Name: CON
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10051659
DP2BR: 23
Spatial Status:
Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 23-JUL-98
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
Org CS:
North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931074585
Layer: 5
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 95
Formation End Depth: 105
Formation End Depth UOM: ft

Formation ID: 931074581
Layer: 1
Color: 6
General Color: BROWN
Mat1: 28
Most Common Material: SAND
Mat2: 01
Other Materials: FILL
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 4
Formation End Depth UOM: ft

Formation ID: 931074584
Layer: 4
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE

Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 23
Formation End Depth: 95
Formation End Depth UOM: ft

Formation ID: 931074583
Layer: 3
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 17
Formation End Depth: 23
Formation End Depth UOM: ft

Formation ID: 931074582
Layer: 2
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 79
Other Materials: PACKED
Mat3:
Other Materials:
Formation Top Depth: 4
Formation End Depth: 17
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933115250
Layer: 1
Plug From: 26
Plug To: 0
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961530124
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10600229
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930090016
Layer: 1
Material: 1

Open Hole or Material: STEEL
Depth From:
Depth To: 26
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930090017
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 105
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991530124
Pump Set At:
Static Level: 23
Final Level After Pumping: 100
Recommended Pump Depth: 85
Pumping Rate: 12
Flowing Rate:
Recommended Pump Rate: 5
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934392307
Test Type: Recovery
Test Duration: 30
Test Level: 23
Test Level UOM: ft

Pump Test Detail ID: 934117747
Test Type: Recovery
Test Duration: 15
Test Level: 25
Test Level UOM: ft

Pump Test Detail ID: 934661882
Test Type: Recovery
Test Duration: 45
Test Level: 23
Test Level UOM: ft

Pump Test Detail ID: 934910424
Test Type: Recovery
Test Duration: 60
Test Level: 23
Test Level UOM: ft

Water Details

Water ID: 933490175
Layer: 1

Kind Code:	5
Kind:	Not stated
Water Found Depth:	40
Water Found Depth UOM:	ft

Water ID:	933490176
Layer:	2
Kind Code:	5
Kind:	Not stated
Water Found Depth:	93
Water Found Depth UOM:	ft

Site:
lot 10 ON

Database:
WWIS

Well ID:	1521190	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	2/10/1987
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	02155	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	NEPEAN TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10043026	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	o	***East83:***	
Code OB Desc:	Overburden	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	28-NOV-86	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931047134
Layer:	2
Color:	2
General Color:	GREY
Mat1:	14
Most Common Material:	HARDPAN
Mat2:	11
Other Materials:	GRAVEL
Mat3:	

Other Materials:
Formation Top Depth: 54
Formation End Depth: 80
Formation End Depth UOM: ft

Formation ID: 931047133
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 54
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961521190
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10591596
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930075107
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 80
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991521190
Pump Set At:
Static Level: 2
Final Level After Pumping: 30
Recommended Pump Depth: 30
Pumping Rate: 20
Flowing Rate:
Recommended Pump Rate: 8
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID:	934908365
Test Type:	
Test Duration:	60
Test Level:	30
Test Level UOM:	ft
Pump Test Detail ID:	934389008
Test Type:	
Test Duration:	30
Test Level:	30
Test Level UOM:	ft
Pump Test Detail ID:	934105889
Test Type:	
Test Duration:	15
Test Level:	30
Test Level UOM:	ft
Pump Test Detail ID:	934651136
Test Type:	
Test Duration:	45
Test Level:	30
Test Level UOM:	ft

Water Details

Water ID:	933478678
Layer:	1
Kind Code:	1
Kind:	FRESH
Water Found Depth:	80
Water Found Depth UOM:	ft

Site:

lot 10 ON

Database: ***WWIS***

Well ID:	1522769	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	10/26/1988
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	3644
Casing Material:		***Form Version:***	1
Audit No:	27111	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10044578	***Elevation:***	
DP2BR:	5	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	

Open Hole:
Cluster Kind:
Date Completed: 16-SEP-88
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

North83:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931052522
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2: 12
Other Materials: STONES
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 5
Formation End Depth UOM: ft

Formation ID: 931052523
Layer: 2
Color: 1
General Color: WHITE
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 5
Formation End Depth: 60
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961522769
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10593148
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930077965
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 22

Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930077966
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 60
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991522769
Pump Set At:
Static Level: 6
Final Level After Pumping: 30
Recommended Pump Depth: 30
Pumping Rate: 30
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934647917
Test Type:
Test Duration: 45
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934111511
Test Type:
Test Duration: 15
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934905125
Test Type:
Test Duration: 60
Test Level: 30
Test Level UOM: ft

Pump Test Detail ID: 934386934
Test Type:
Test Duration: 30
Test Level: 30
Test Level UOM: ft

Water Details

Water ID: 933480789
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 55

Water Found Depth UOM: ft

Site:
lot 10 ON

Database:
WWIS

Well ID:	1532192	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	8/28/2001
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	4609
Casing Material:		***Form Version:***	1
Audit No:	234540	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	MARCH TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	010
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:	10516642	***Elevation:***	
DP2BR:	3	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***Org CS:***	
Open Hole:		***North83:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	19-JUL-01	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	932832124
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	28
Most Common Material:	SAND
Mat2:	77
Other Materials:	LOOSE
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	3
Formation End Depth UOM:	ft

Formation ID:	932832125
Layer:	2
Color:	2
General Color:	GREY
Mat1:	18

Most Common Material: SANDSTONE
Mat2: 74
Other Materials: LAYERED
Mat3:
Other Materials:
Formation Top Depth: 3
Formation End Depth: 60
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933219647
Layer: 1
Plug From: 0
Plug To: 20
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID: 961532192
Method Construction Code: 4
Method Construction: Rotary (Air)
Other Method Construction:

Pipe Information

Pipe ID: 11065212
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930094298
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To:
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Casing ID: 930094297
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To:
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991532192
Pump Set At:
Static Level: 10
Final Level After Pumping: 60
Recommended Pump Depth: 40
Pumping Rate: 20
Flowing Rate:
Recommended Pump Rate: 20

Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934115768
Test Type: Recovery
Test Duration: 15
Test Level: 15
Test Level UOM: ft

Pump Test Detail ID: 934917208
Test Type: Recovery
Test Duration: 60
Test Level: 10
Test Level UOM: ft

Pump Test Detail ID: 934660322
Test Type: Recovery
Test Duration: 45
Test Level: 11
Test Level UOM: ft

Pump Test Detail ID: 934399383
Test Type: Recovery
Test Duration: 30
Test Level: 12
Test Level UOM: ft

Water Details

Water ID: 934008317
Layer: 1
Kind Code: 5
Kind: Not stated
Water Found Depth: 50
Water Found Depth UOM: ft

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 AAGR

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-Apr 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-Apr 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-Mar 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 CO2 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-Aug 2010

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.

Government Publication Date: 1988-December 31, 2017

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 OGSR Library 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-Apr 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.

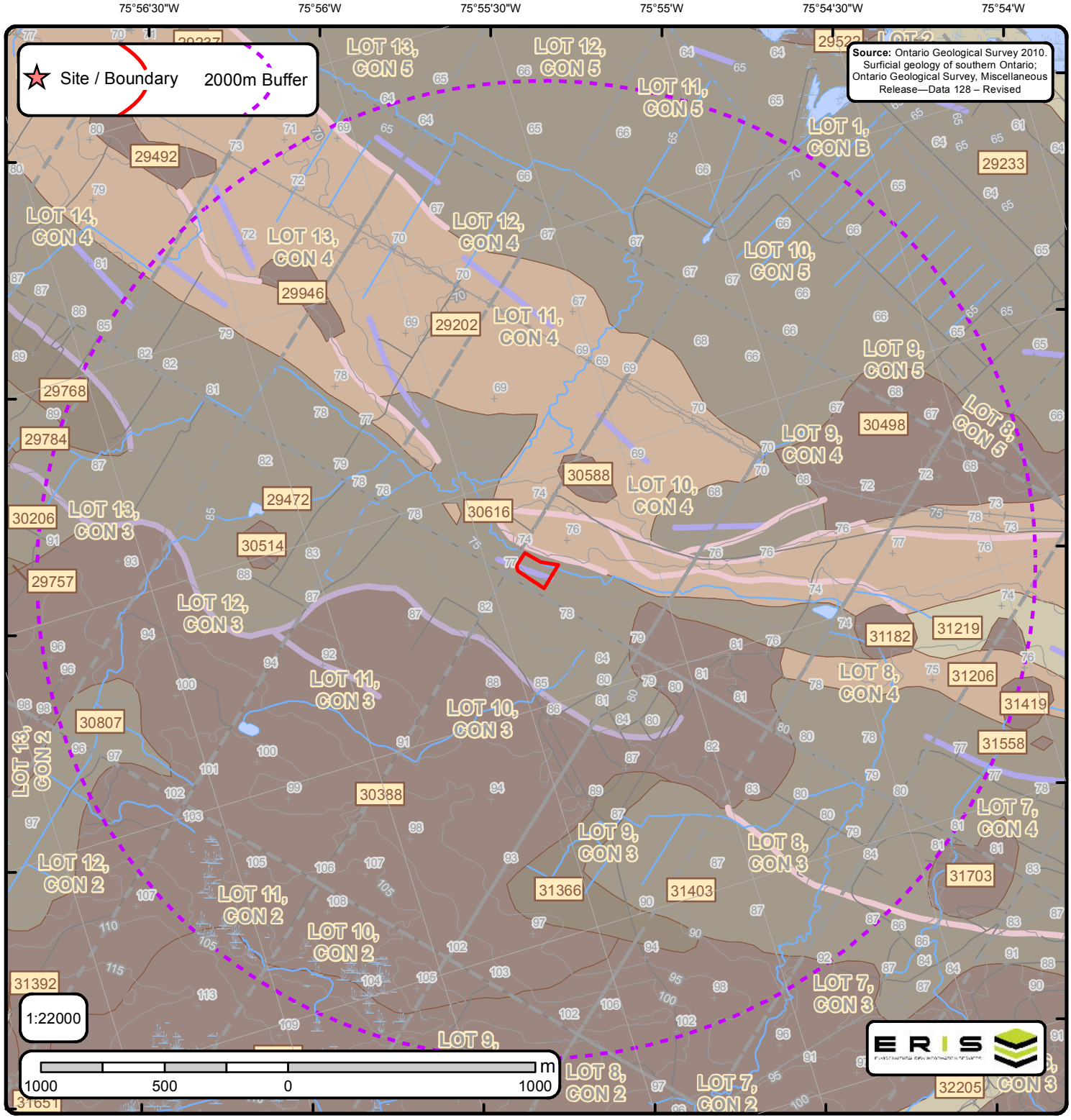
'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'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.



The Surficial Geology of Southern Ontario

Order No. 20180618029

Spot Height	Streams	Dune	Beach	Esker	karst	pitsg		
Waterbody	Contour Lines	Lake	Bluff	Esker ND	linfeat	popup		
Wetlands	Roads	Rib	Crevasse	Fluvial DL	megarip	ribl		
Airports	Railroads	Scab	Crest	fluvndl	mfluvdl	slidel		
Pit or Quarry	Morains	Slide	End	iceberg	mfluvndl	slumpb		
Lots		NOF Dune	Escarpment	icslope	moraine	terrace		

ID: 29202 | **Unit Name:** Alluvial deposits |
Deposit Type Code: 6b | **Deposit Age:** Recent | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** sand | **Primary Material Modifier:** | **Secondary Material:** silt | **Primary General:** fluvial | **Primary General Modifier:** abandoned floodplain | **Veneer:** | **Episode:** Hudson | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Medium grained stratified sand with some silt; in the form of fluvial terraces and channels

ID: 29233 | **Unit Name:** Offshore marine deposits |
Deposit Type Code: 3a | **Deposit Age:** Quaternary (Champlain Sea) | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** glaciomarine | **Primary General Modifier:** foreshore/basinal | **Veneer:** silt, sand | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Low | **Material Description:** Clay and silt underlying erosional terraces; upper part of marine deposits removed to variable depths by fluvial erosion so in places clay is uniform blue-grey; unit includes lenses, bars and channel fills to sand and pockets of nonmarine silt that were

ID: 29472 | **Unit Name:** Offshore marine deposits |
Deposit Type Code: 3a | **Deposit Age:** Quaternary (Champlain Sea) | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** glaciomarine | **Primary General Modifier:** foreshore/basinal | **Veneer:** silt, sand | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Low | **Material Description:** Clay and silt underlying erosional terraces; upper part of marine deposits removed to varia

ID: 29768 | **Unit Name:** Till |
Deposit Type Code: 1a | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** sandy silt to silty sand | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** N-NE | **Carbon Content:** | **Formation:** Undifferentiated silty-sandy till on Paleozoic terrain | **Permeability:** Low-Medium | **Material Description:** Sandy and silty compact diamicton, grey at depth but brown where oxidized; calcareous where derived from sedimentary rocks and not leached; consists dominantly of lodgment till. In areas that lie below marine limit (198 m a.s.l.) it is overlain by a disc

ID: 29784 | **Unit Name:** Offshore marine deposits |
Deposit Type Code: 3 | **Deposit Age:** Quaternary (Champlain Sea) | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt | **Primary Material Modifier:** | **Secondary Material:** sand | **Primary General:** glaciomarine | **Primary General Modifier:** foreshore/basinal | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Low | **Material Description:** Clay, silty clay and silt, commonly calcareous and fossiliferous; locally overlain by thin sands. Upper parts are generally mottled or laminated reddish brown and bluish grey and may contain lenses and pockets of sand, but at depth the clay is uniform a

ID: 29946 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 30206 | **Unit Name:** Offshore marine deposits |
Deposit Type Code: 3 | **Deposit Age:** Quaternary (Champlain Sea) | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt | **Primary Material Modifier:** | **Secondary Material:** sand | **Primary General:** glaciomarine | **Primary General Modifier:** foreshore/basinal | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Low | **Material Description:** Clay, silty clay and silt, commonly calcareous and fossiliferous; locally overlain by thin sands. Upper parts are generally mottled or laminated reddish brown and bluish grey and may contain lenses and pockets of sand, but at depth the clay is uniform a

ID: 30249 | **Unit Name:** Bedrock |
Deposit Type Code: Pr | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Precambrian Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Intrusive and metamorphic rocks (Precambrian); mainly bare, hummocky, rolling or hilly rock knob upland; includes areas thinly veneered by unconsolidated sediments up to 2 m thick.

ID: 30388 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 30498 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Paleozoic | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 30514 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 30588 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 30616 | **Unit Name:** Alluvial deposits |
Deposit Type Code: 6b | **Deposit Age:** Recent | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** sand | **Primary Material Modifier:** | **Secondary Material:** silt | **Primary General:** fluvial | **Primary General Modifier:** abandoned floodplain | **Veneer:** | **Episode:** Hudson | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Medium grained stratified sand with some silt; in the form of fluvial terraces and channels

ID: 30807 | **Unit Name:** Offshore marine deposits |
Deposit Type Code: 3 | **Deposit Age:** Quaternary (Champlain Sea) | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt | **Primary Material Modifier:** | **Secondary Material:** sand | **Primary General:** glaciomarine | **Primary General Modifier:** foreshore/basinal | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Low | **Material Description:** Clay, silty clay and silt, commonly calcareous and fossiliferous; locally overlain by thin sands. Upper parts are generally mottled or laminated reddish brown and bluish grey and may contain lenses and pockets of sand, but at depth the clay is uniform a

ID: 31182 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 31206 | **Unit Name:** Alluvial deposits |
Deposit Type Code: 6b | **Deposit Age:** Recent | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** sand | **Primary Material Modifier:** | **Secondary Material:** silt | **Primary General:** fluvial | **Primary General Modifier:** abandoned floodplain | **Veneer:** | **Episode:** Hudson | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Medium grained stratified sand with some silt; in the form of fluvial terraces and channels

ID: 31219 | **Unit Name:** Organic deposits |
Deposit Type Code: 7 | **Deposit Age:** Recent | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** organic deposits | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** wetland | **Primary General Modifier:** | **Veneer:** | **Episode:** Hudson | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** High | **Material Description:** Mainly muck and peat in bogs, fens, swamps and poorly drained areas.

ID: 31298 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 31366 | **Unit Name:** Till |
Deposit Type Code: 1a | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** sandy silt to silty sand | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** N-NE | **Carbon Content:** | **Formation:** Undifferentiated silty-sandy till on Paleozoic terrain | **Permeability:** Low-Medium | **Material Description:** Sandy and silty compact diamicton, grey at depth but brown where oxidized; calcareous where derived from sedimentary rocks and not leached; consists dominantly of lodgment till. In areas that lie below marine limit (198 m a.s.l.) it is overlain by a disc

ID: 31403 | **Unit Name:** Offshore marine deposits |
Deposit Type Code: 3 | **Deposit Age:** Quaternary (Champlain Sea) | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** clay, silt | **Primary Material Modifier:** | **Secondary Material:** sand | **Primary General:** glaciomarine | **Primary General Modifier:** foreshore/basinal | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Low | **Material Description:** Clay, silty clay and silt, commonly calcareous and fossiliferous; locally overlain by thin sands. Upper parts are generally mottled or laminated reddish brown and bluish grey and may contain lenses and pockets of sand, but at depth the clay is uniform a

ID: 31419 | **Unit Name:** Bedrock |
Deposit Type Code: Pa | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occuring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m (3 ft) thick.

ID: 31703 | **Unit Name:** Bedrock |
Deposit Type Code: Pr | **Deposit Age:** Quaternary | **Map Number:** of3103 | **Map Name:** Ottawa | **Source Map Scale:** 1:50 000 | **Primary Material:** Precambrian Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Intrusive and metamorphic rocks (Precambrian); mainly bare, hummocky, rolling or hilly rock knob upland; includes areas thinly veneered by unconsolidated sediments up to 2 m thick.

Surface Geology Report Metadata

Ontario Geological Survey 2010. Surficial geology of southern Ontario; Ontario Geological Survey, Miscellaneous Release - Data 128 - Revised.

ONTARIO MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY

ID - ID applied to the Unit

Unit Name - Name of deposit

Deposit Type Code - The geological unit number taken from the original map legend.

Deposit Age - to show the age when the sediments were deposited, e.g., Wisconsinan, postglacial or recent.

Map Number - Original map series number, eg., 'M2402' or 'P1973'. Each sgu_point feature is tagged to its original map.

Map Name - Usually NTS area where mapping was completed, e.g., 'Golden Lake'

Source Map Scale - The scale at which the original map was captured, e.g., '1:50 000'

Primary Material - This attribute provides the user with information regarding the most prevalent material present within a given area.

Primary Material Modifier- This attribute provides the user with a more refined description of the lithological classification of the primary material.

Secondary Material - This attribute provides the user with information regarding subordinate materials present within a given area.

Primary General - This attribute provides the user with an interpretation of the depositional environment within which the primary material was deposited.

Primary General Modifier - This attribute provides the user with a refined interpretation of the primary genetic modifier.

Veneer - This attribute provides the user with information regarding the type of material that forms a thin, discontinuous veneer over the primary material.

Sub Episode - A diachronic stratigraphic unit in a lower order than Episode and the proposed sequence-stratigraphic classification, consists in descending order of Michigan, Elgin and Ontario in the eastern and northern Great Lakes area in the Wisconsin Episode (Johnson et al. 1997; Karrow et al. 2000).

Sub Episode - A diachronic stratigraphic unit in a lower order than Episode and the proposed sequence-stratigraphic classification, consists in descending order of Michigan, Elgin and Ontario in the eastern and northern Great Lakes area in the Wisconsin Episode (Johnson et al. 1997; Karrow et al. 2000).

Phase - A diachronic stratigraphic unit in a lower order than Subepisode, and the proposed sequence-stratigraphic classification is listed in the following table in the eastern and northern Great Lakes area (Karrow et al. 2000)

Stratus Modifier - This attribute provides the user information regarding the stratigraphic position of the mapped unit (i.e., whether the unit occurs primarily on the surface or in the subsurface).

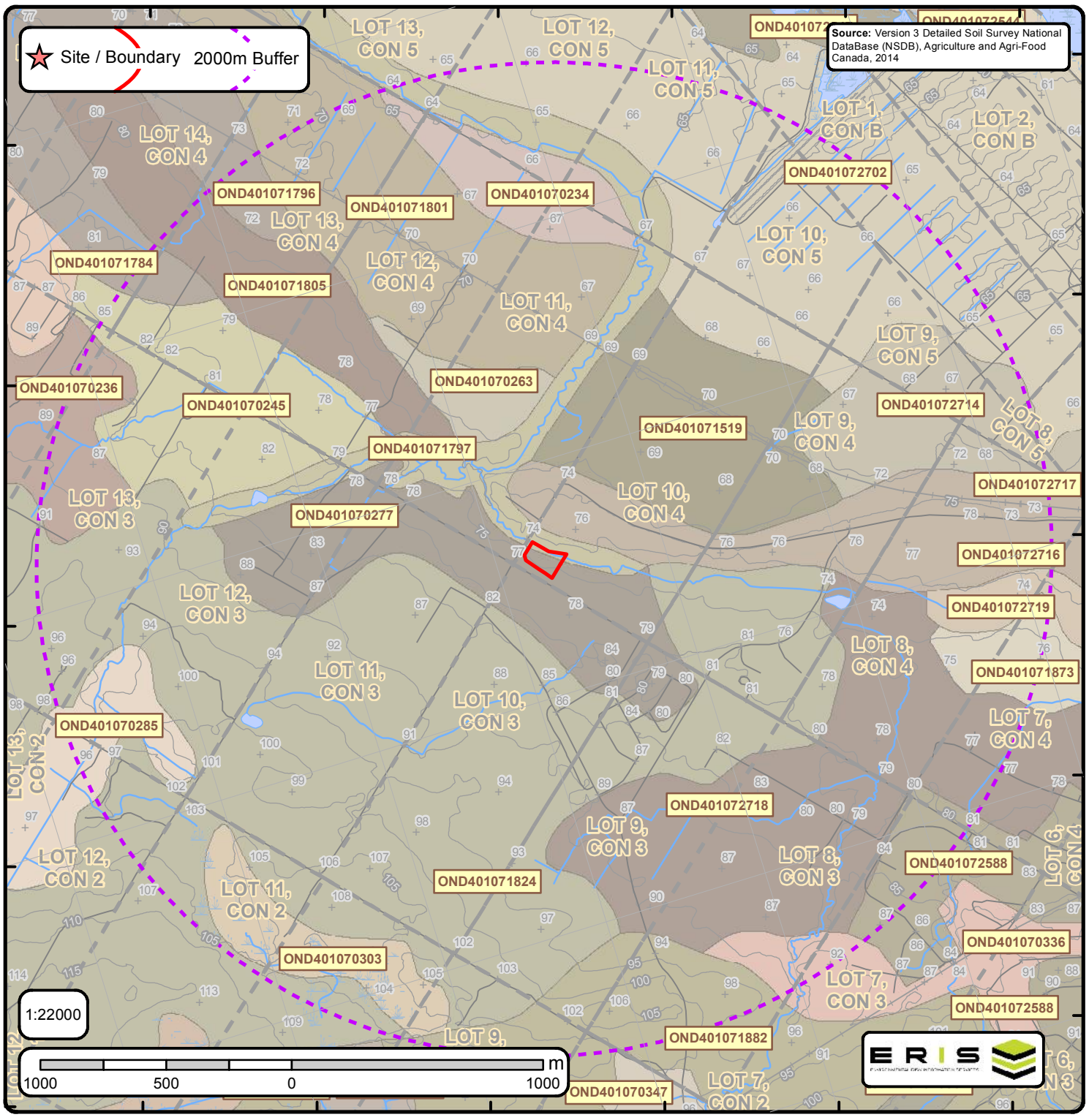
Provenance - This attribute provides the user with information regarding the provenance of a particular till unit (i.e. direction or lobe from which the till is derived).

Carbon Content - This attribute provides the user with information regarding the carbonate content of till.

Formation - This attribute provides the user with information regarding the formation to which a given primary material belongs (e.g., Tavistock Till, Port Stanley Till, Scarborough Formation). This attribute is seamless and allows the user to create a map based on formation.

Permeability - This attribute provides the user with basic information about permeability of the sediments in a ranking of high, medium and low.

Material Description - Material or sediment description, e.g., 'sand and silty fine sand', 'silty sand and gravel' and 'silty till with low stone content'.



Detailed Soil Survey (ON Soils)

Order No. 20180618029

- Spot Height
- Railroads
- Roads
- Contour Lines
- Streams
- Lots
- Pit or Quarry
- Airports
- Wetlands
- Waterbody

Soils Report

Soil Map Units Found within 2000 m of
788 March Road, Kanata, ON, K2K 1X7

Order ID:
20180618029

Soil ID: OND401070263
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONBIV~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-17 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 31 | **Total Sand(%)** : 53 | **Total Silt(%)** : 34 | **Total Clay(%)** : 13 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 6.8 | **Saturated Hydraulic Conductivity(cm/h)** : 2.052 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 17-33 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 18 | **Total Sand(%)** : 30 | **Total Silt(%)** : 39 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.273 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 33-62 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 40 | **Total Sand(%)** : 52 | **Total Silt(%)** : 28 | **Total Clay(%)** : 20 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.683 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 62-84 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 45 | **Total Sand(%)** : 62 | **Total Silt(%)** : 26 | **Total Clay(%)** : 12 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 1.597 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 84-100 | **Horizon** : Ckg | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 4 | **Total Silt(%)** : 54 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.194 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401070263
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONCST~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : medium - moderately fine loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-20 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 28 | **Total Sand(%)** : 30 | **Total Silt(%)** : 59 | **Total Clay(%)** : 11 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 5.5 | **Saturated Hydraulic Conductivity(cm/h)** : 1.156 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 20-35 | **Horizon** : Bmgj | **Layer No** : 2 | **Very Fine Sand(%)** : 36 | **Total Sand(%)** : 38 | **Total Silt(%)** : 48 | **Total Clay(%)** : 14 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.847 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 35-110 | **Horizon** : Cg | **Layer No** : 3 | **Very Fine Sand(%)** : 66 | **Total Sand(%)** : 67 | **Total Silt(%)** : 30 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 5.398 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071805
Component No : 2 | **Components(%)** : 50 | **Soil Name ID** : ONSHO~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : None | **Hydrological Soil Groups** : None | **Soil Texture of A Horizon** : None | **Field Crops Capability** : OND401071805-ONSHO~~~~~N | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : -5-0 | **Horizon** : LFH | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 40.0 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 2.588 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 0-4 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 41 | **Total Sand(%)** : 83 | **Total Silt(%)** : 9 | **Total Clay(%)** : 8 | **Organic Carbon(%)** : 10.3 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 2.981 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 4-26 | **Horizon** : Bf | **Layer No** : 3 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 3.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.598 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 26-64 | **Horizon** : BC | **Layer No** : 4 | **Very Fine Sand(%)** : 32 | **Total Sand(%)** : 95 | **Total Silt(%)** : 4 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.8 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.996 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 64-100 | **Horizon** : C | **Layer No** : 5 | **Very Fine Sand(%)** : 31 | **Total Sand(%)** : 99 | **Total Silt(%)** : 0 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 7.865 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071805
Component No : 1 | **Components(%)** : 50 | **Soil Name ID** : ONSHO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : Severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : Low inherent Moisture holding capacity | **Depth(cm)** : 0-4 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 41 | **Total Sand(%)** : 83 | **Total Silt(%)** : 9 | **Total Clay(%)** : 8 | **Organic Carbon(%)** : 10.3 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 2.981 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 4-26 | **Horizon** : Bf | **Layer No** : 2 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 3.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.598 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 26-64 | **Horizon** : BC | **Layer No** : 3 | **Very Fine Sand(%)** : 32 | **Total Sand(%)** : 95 | **Total Silt(%)** : 4 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.8 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.996 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 64-100 | **Horizon** : C | **Layer No** : 4 | **Very Fine Sand(%)** : 31 | **Total Sand(%)** : 99 | **Total Silt(%)** : 0 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 7.865 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071801
Component No : 1 | **Components(%)** : 50 | **Soil Name ID** : ONVUD~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 46 | **Total Sand(%)** : 75 | **Total Silt(%)** : 16 | **Total Clay(%)** : 9 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 3.869 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-31 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 43 | **Total Sand(%)** : 82 | **Total Silt(%)** : 15 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 6.065 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 31-63 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 7.127 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 63-78 | **Horizon** : Bg | **Layer No** : 4 | **Very Fine Sand(%)** : 44 | **Total Sand(%)** : 86 | **Total Silt(%)** : 7 | **Total Clay(%)** : 7 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 3.942 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 78-100 | **Horizon** : Cg | **Layer No** : 5 | **Very Fine Sand(%)** : 39 | **Total Sand(%)** : 93 | **Total Silt(%)** : 4 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 6.172 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071801
Component No : 2 | **Components(%)** : 50 | **Soil Name ID** : ONSPD~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : -6-0 | **Horizon** : LFH | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 18.0 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 2.588 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 0-4 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 35 | **Total Sand(%)** : 67 | **Total Silt(%)** : 23 | **Total Clay(%)** : 10 | **Organic Carbon(%)** : 7.1 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.975 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 4-18 | **Horizon** : Bf | **Layer No** : 3 | **Very Fine Sand(%)** : 30 | **Total Sand(%)** : 89 | **Total Silt(%)** : 7 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 6.081 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-25 | **Horizon** : Bfgj | **Layer No** : 4 | **Very Fine Sand(%)** : 47 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 7.891 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 25-42 | **Horizon** : Bfgj | **Layer No** : 5 | **Very Fine Sand(%)** : 43 | **Total Sand(%)** : 92 | **Total Silt(%)** : 7 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 1.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 9.131 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 42-59 | **Horizon** : Bgj | **Layer No** : 6 | **Very Fine Sand(%)** : 55 | **Total Sand(%)** : 92 | **Total Silt(%)** : 8 | **Total Clay(%)** : 0 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.0 | **Saturated Hydraulic Conductivity(cm/h)** : 9.133 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 59-76 | **Horizon** : Bg | **Layer No** : 7 | **Very Fine Sand(%)** : 1 | **Total Sand(%)** : 98 | **Total Silt(%)** : 2 | **Total Clay(%)** : 0 | **Organic Carbon(%)** : 0.3 | **pH in**

Soil ID: OND401070303
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZOR~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Very Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : None | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-99 | **Horizon** : Oh | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 20.0 | **pH in Calc Chloride** : 5.5 | **Saturated Hydraulic Conductivity(cm/h)** : 3.455 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 99-149 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 23 | **Total Silt(%)** : 17 | **Total Clay(%)** : 60 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.21 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071824
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONFRM~~~~~N | **Surface Stoniness Class** : Very stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : medium - moderately fine loam | **Field Crops Capability** : Natural grazing only; no improvements feasible. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-21 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 19 | **Total Sand(%)** : 44 | **Total Silt(%)** : 44 | **Total Clay(%)** : 12 | **Organic Carbon(%)** : 3.7 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 1.969 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 21-38 | **Horizon** : Bm | **Layer No** : 2 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 49 | **Total Silt(%)** : 45 | **Total Clay(%)** : 6 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 3.014 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-50 | **Horizon** : C | **Layer No** : 3 | **Very Fine Sand(%)** : 19 | **Total Sand(%)** : 57 | **Total Silt(%)** : 36 | **Total Clay(%)** : 7 | **Organic Carbon(%)** : 1.3 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 1.979 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 50-100 | **Horizon** : R | **Layer No** : 4 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : None | **pH in Calc Chloride** : None | **Saturated Hydraulic Conductivity(cm/h)** : None | **Electrical Conductivity(dS/m)** : None |

Soil ID: OND401071824
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Very stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : Natural grazing only; no improvements feasible. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |

Soil ID: OND401070236
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONBDO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-12 | **Horizon** : Apg | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 14 | **Total Silt(%)** : 52 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.223 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 12-38 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 46 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-70 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 47 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 70-105 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 8 | **Total Silt(%)** : 45 | **Total Clay(%)** : 47 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.197 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401070236
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |

Soil ID: OND401070234
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONSTA~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-20 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 40 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 2.8 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 20-50 | **Horizon** : Bmg | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 4 | **Total Silt(%)** : 41 | **Total Clay(%)** : 55 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.247 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 50-75 | **Horizon** : Bmg | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 5 | **Total Silt(%)** : 34 | **Total Clay(%)** : 61 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 75-100 | **Horizon** : Cgk | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 1 | **Total Silt(%)** : 53 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.5 | **Saturated Hydraulic Conductivity(cm/h)** : 0.192 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071882
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONAUH~~~~~N | **Surface Stoniness Class** : Exceedingly stony | **Slop Steepness(%)** : 12.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : No capability for agriculture. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-9 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 17 | **Total Sand(%)** : 78 | **Total Silt(%)** : 14 | **Total Clay(%)** : 8 | **Organic Carbon(%)** : 5.8 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 7.472 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 9-25 | **Horizon** : Bm | **Layer No** : 2 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 81 | **Total Silt(%)** : 16 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 6.775 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 25-100 | **Horizon** : R | **Layer No** : 3 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : None | **pH in Calc Chloride** : None | **Saturated Hydraulic Conductivity(cm/h)** : None | **Electrical Conductivity(dS/m)** : None |

Soil ID: OND401072716
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONSHO~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : Severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : Low inherent Moisture holding capacity | **Depth(cm)** : -5-0 | **Horizon** : LFH | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 40.0 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 2.588 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 0-4 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 41 | **Total Sand(%)** : 83 | **Total Silt(%)** : 9 | **Total Clay(%)** : 8 | **Organic Carbon(%)** : 10.3 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 2.981 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 4-26 | **Horizon** : Bf | **Layer No** : 3 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 3.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.598 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 26-64 | **Horizon** : BC | **Layer No** : 4 | **Very Fine Sand(%)** : 32 | **Total Sand(%)** : 95 | **Total Silt(%)** : 4 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.8 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.996 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 64-100 | **Horizon** : C | **Layer No** : 5 | **Very Fine Sand(%)** : 31 | **Total Sand(%)** : 99 | **Total Silt(%)** : 0 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 7.865 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401072714
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Exceedingly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : Natural grazing only; no improvements feasible. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |

Soil ID: OND401071796
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONNGW~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : silt loam | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-25 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 9 | **Total Sand(%)** : 43 | **Total Silt(%)** : 41 | **Total Clay(%)** : 16 | **Organic Carbon(%)** : 3.9 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 1.375 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 25-37 | **Horizon** : Bgj | **Layer No** : 2 | **Very Fine Sand(%)** : 9 | **Total Sand(%)** : 45 | **Total Silt(%)** : 40 | **Total Clay(%)** : 15 | **Organic Carbon(%)** : 3.3 | **pH in Calc Chloride** : 7.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.752 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 37-100 | **Horizon** : Cg | **Layer No** : 3 | **Very Fine Sand(%)** : 5 | **Total Sand(%)** : 20 | **Total Silt(%)** : 63 | **Total Clay(%)** : 17 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.29 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071796
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONVUD~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 46 | **Total Sand(%)** : 75 | **Total Silt(%)** : 16 | **Total Clay(%)** : 9 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 3.869 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-31 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 43 | **Total Sand(%)** : 82 | **Total Silt(%)** : 15 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 6.065 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 31-63 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 7.127 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 63-78 | **Horizon** : Bg | **Layer No** : 4 | **Very Fine Sand(%)** : 44 | **Total Sand(%)** : 86 | **Total Silt(%)** : 7 | **Total Clay(%)** : 7 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 3.942 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 78-100 | **Horizon** : Cg | **Layer No** : 5 | **Very Fine Sand(%)** : 39 | **Total Sand(%)** : 93 | **Total Silt(%)** : 4 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 6.172 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401070336
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONBDO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Depth(cm)** : 0-12 | **Horizon** : Apg | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 14 | **Total Silt(%)** : 52 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.223 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 12-38 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 46 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-70 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 47 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 70-105 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 8 | **Total Silt(%)** : 45 | **Total Clay(%)** : 47 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.197 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401070336
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONAUH~~~~~N | **Surface Stoniness Class** : Exceedingly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : No capability for agriculture. | **First CLI Limitation Subclass** : Presence of consolidated bedrock within one metre of the soil surface | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-9 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 17 | **Total Sand(%)** : 78 | **Total Silt(%)** : 14 | **Total Clay(%)** : 8 | **Organic Carbon(%)** : 5.8 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 7.472 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 9-25 | **Horizon** : Bm | **Layer No** : 2 | **Very Fine Sand(%)** : 13 | **Total Sand(%)** : 81 | **Total Silt(%)** : 16 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 6.775 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 25-100 | **Horizon** : R | **Layer No** : 3 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : None | **pH in Calc Chloride** : None | **Saturated Hydraulic Conductivity(cm/h)** : None | **Electrical Conductivity(dS/m)** : None |

Soil ID: OND401070277
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONBDO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-12 | **Horizon** : Apg | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 14 | **Total Silt(%)** : 52 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.223 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 12-38 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 46 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-70 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 47 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 70-105 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 8 | **Total Silt(%)** : 45 | **Total Clay(%)** : 47 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.197 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401072719
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZOR~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Very Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : None | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-99 | **Horizon** : Oh | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 20.0 | **pH in Calc Chloride** : 5.5 | **Saturated Hydraulic Conductivity(cm/h)** : 3.455 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 99-149 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 23 | **Total Silt(%)** : 17 | **Total Clay(%)** : 60 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.21 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401072718
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONDHU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-14 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 14 | **Total Silt(%)** : 57 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 2.2 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.353 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 14-46 | **Horizon** : Bmgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 18 | **Total Silt(%)** : 47 | **Total Clay(%)** : 35 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.272 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 46-110 | **Horizon** : Cgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 13 | **Total Silt(%)** : 43 | **Total Clay(%)** : 44 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.201 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 110-120 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 7 | **Total Silt(%)** : 47 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.195 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401072718
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONBDO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-12 | **Horizon** : Apg | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 14 | **Total Silt(%)** : 52 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.223 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 12-38 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 46 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-70 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 47 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 70-105 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 8 | **Total Silt(%)** : 45 | **Total Clay(%)** : 47 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.197 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401072588
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Not Applicable | **Slop Steepness(%)** : None | **Slop Length(m)** : -9 | **Drainage** : Not Applicable | **Hydrological Soil Groups** : None | **Soil Texture of A Horizon** : None | **Field Crops Capability** : None | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |

Soil ID: OND401071797
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZER~~~~~N | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 37.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : None | **Soil Texture of A Horizon** : None | **Field Crops Capability** : No capability for agriculture. | **First CLI Limitation Subclass** : Presence of adverse Topography | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-100 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 5 | **Total Sand(%)** : 15 | **Total Silt(%)** : 60 | **Total Clay(%)** : 25 | **Organic Carbon(%)** : 3.9 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.589 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401070285
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONBDO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-12 | **Horizon** : Apg | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 14 | **Total Silt(%)** : 52 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.223 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 12-38 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 46 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-70 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 47 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 70-105 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 8 | **Total Silt(%)** : 45 | **Total Clay(%)** : 47 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.197 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401070285
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONDHU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderate limitations on use for crops | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-14 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 14 | **Total Silt(%)** : 57 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 2.2 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.353 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 14-46 | **Horizon** : Bmgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 18 | **Total Silt(%)** : 47 | **Total Clay(%)** : 35 | **Organic Carbon(%)** : 0.6 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.272 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 46-110 | **Horizon** : Cgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 13 | **Total Silt(%)** : 43 | **Total Clay(%)** : 44 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.201 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 110-120 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 7 | **Total Silt(%)** : 47 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.195 | **Electrical Conductivity(dS/m)** : 0 |

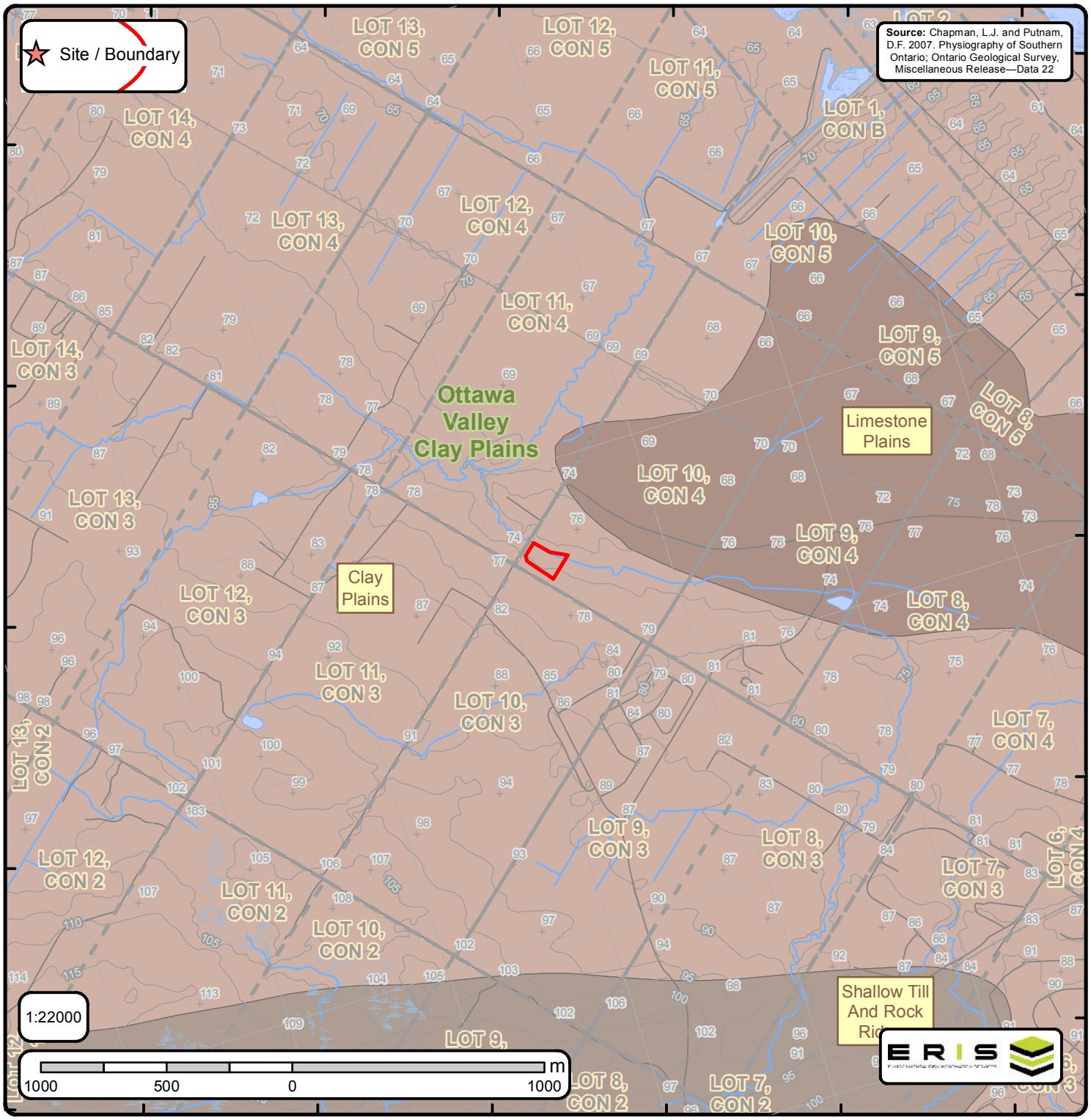
Soil ID: OND401071873
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONSHO~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils that have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : Severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : Low inherent Moisture holding capacity | **Depth(cm)** : -5-0 | **Horizon** : LFH | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 40.0 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 2.588 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 0-4 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 41 | **Total Sand(%)** : 83 | **Total Silt(%)** : 9 | **Total Clay(%)** : 8 | **Organic Carbon(%)** : 10.3 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 2.981 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 4-26 | **Horizon** : Bf | **Layer No** : 3 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 3.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.598 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 26-64 | **Horizon** : BC | **Layer No** : 4 | **Very Fine Sand(%)** : 32 | **Total Sand(%)** : 95 | **Total Silt(%)** : 4 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.8 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 7.996 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 64-100 | **Horizon** : C | **Layer No** : 5 | **Very Fine Sand(%)** : 31 | **Total Sand(%)** : 99 | **Total Silt(%)** : 0 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.1 | **Saturated Hydraulic Conductivity(cm/h)** : 7.865 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401072702
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONSTA~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-20 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 40 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 2.8 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 20-50 | **Horizon** : Bmg | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 4 | **Total Silt(%)** : 41 | **Total Clay(%)** : 55 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.247 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 50-75 | **Horizon** : Bmg | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 5 | **Total Silt(%)** : 34 | **Total Clay(%)** : 61 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.249 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 75-100 | **Horizon** : Cgk | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 1 | **Total Silt(%)** : 53 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.5 | **Saturated Hydraulic Conductivity(cm/h)** : 0.192 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071519
Component No : 1 | **Components(%)** : 70 | **Soil Name ID** : ONVUD~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-18 | **Horizon** : Ah | **Layer No** : 1 | **Very Fine Sand(%)** : 46 | **Total Sand(%)** : 75 | **Total Silt(%)** : 16 | **Total Clay(%)** : 9 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 4.9 | **Saturated Hydraulic Conductivity(cm/h)** : 3.869 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-31 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 43 | **Total Sand(%)** : 82 | **Total Silt(%)** : 15 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.6 | **Saturated Hydraulic Conductivity(cm/h)** : 6.065 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 31-63 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 53 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 0.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 7.127 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 63-78 | **Horizon** : Bg | **Layer No** : 4 | **Very Fine Sand(%)** : 44 | **Total Sand(%)** : 86 | **Total Silt(%)** : 7 | **Total Clay(%)** : 7 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 3.942 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 78-100 | **Horizon** : Cg | **Layer No** : 5 | **Very Fine Sand(%)** : 39 | **Total Sand(%)** : 93 | **Total Silt(%)** : 4 | **Total Clay(%)** : 3 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 6.1 | **Saturated Hydraulic Conductivity(cm/h)** : 6.172 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND401071519
Component No : 2 | **Components(%)** : 30 | **Soil Name ID** : ONSPD~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately fine to moderately coarse textures. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Low inherent soil Fertility | **Second CLI Limitation Subclass** : None | **Depth(cm)** : -6-0 | **Horizon** : LFH | **Layer No** : 1 | **Very Fine Sand(%)** : -9 | **Total Sand(%)** : -9 | **Total Silt(%)** : -9 | **Total Clay(%)** : -9 | **Organic Carbon(%)** : 18.0 | **pH in Calc Chloride** : 7.0 | **Saturated Hydraulic Conductivity(cm/h)** : 2.588 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 0-4 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 35 | **Total Sand(%)** : 67 | **Total Silt(%)** : 23 | **Total Clay(%)** : 10 | **Organic Carbon(%)** : 7.1 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.975 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 4-18 | **Horizon** : Bf | **Layer No** : 3 | **Very Fine Sand(%)** : 30 | **Total Sand(%)** : 89 | **Total Silt(%)** : 7 | **Total Clay(%)** : 4 | **Organic Carbon(%)** : 3.1 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 6.081 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 18-25 | **Horizon** : Bfgj | **Layer No** : 4 | **Very Fine Sand(%)** : 47 | **Total Sand(%)** : 90 | **Total Silt(%)** : 8 | **Total Clay(%)** : 2 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 7.891 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 25-42 | **Horizon** : Bfgj | **Layer No** : 5 | **Very Fine Sand(%)** : 43 | **Total Sand(%)** : 92 | **Total Silt(%)** : 7 | **Total Clay(%)** : 1 | **Organic Carbon(%)** : 1.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 9.131 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 42-59 | **Horizon** : Bgj | **Layer No** : 6 | **Very Fine Sand(%)** : 55 | **Total Sand(%)** : 92 | **Total Silt(%)** : 8 | **Total Clay(%)** : 0 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.0 | **Saturated Hydraulic Conductivity(cm/h)** : 9.133 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 59-76 | **Horizon** : Bg | **Layer No** : 7 | **Very Fine Sand(%)** : 1 | **Total Sand(%)** : 98 | **Total Silt(%)** : 2 | **Total Clay(%)** : 0 | **Organic Carbon(%)** : 0.3 | **pH in**

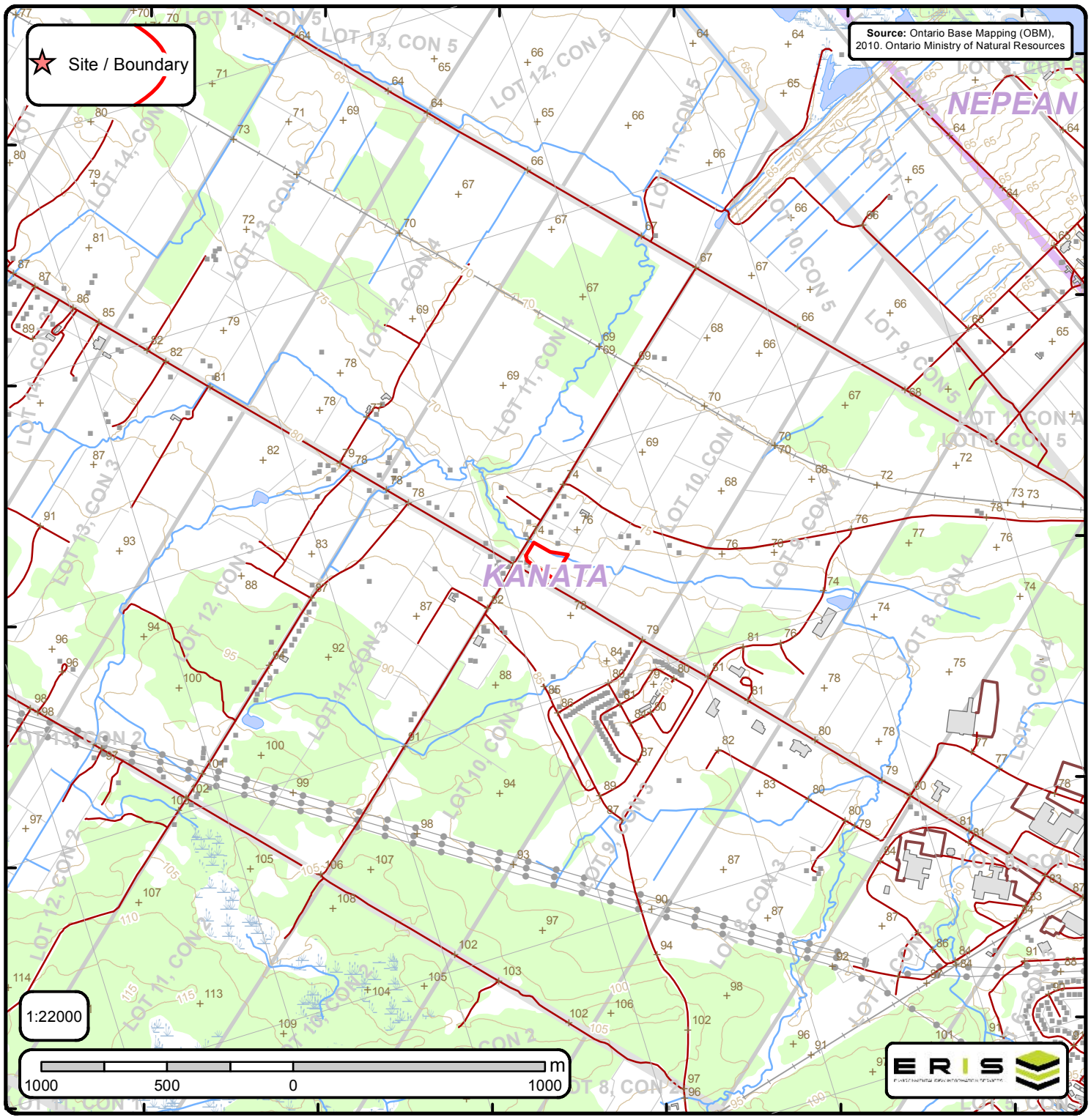
Soil ID: OND401070245
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONBDO~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : None | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-12 | **Horizon** : Apg | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 14 | **Total Silt(%)** : 52 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.1 | **pH in Calc Chloride** : 5.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.223 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 12-38 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 46 | **Total Clay(%)** : 43 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-70 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 11 | **Total Silt(%)** : 47 | **Total Clay(%)** : 42 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 6.9 | **Saturated Hydraulic Conductivity(cm/h)** : 0.211 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 70-105 | **Horizon** : Cg | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 8 | **Total Silt(%)** : 45 | **Total Clay(%)** : 47 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.197 | **Electrical Conductivity(dS/m)** : 0 |



Physiography of Southern Ontario

Order No. 20180618029

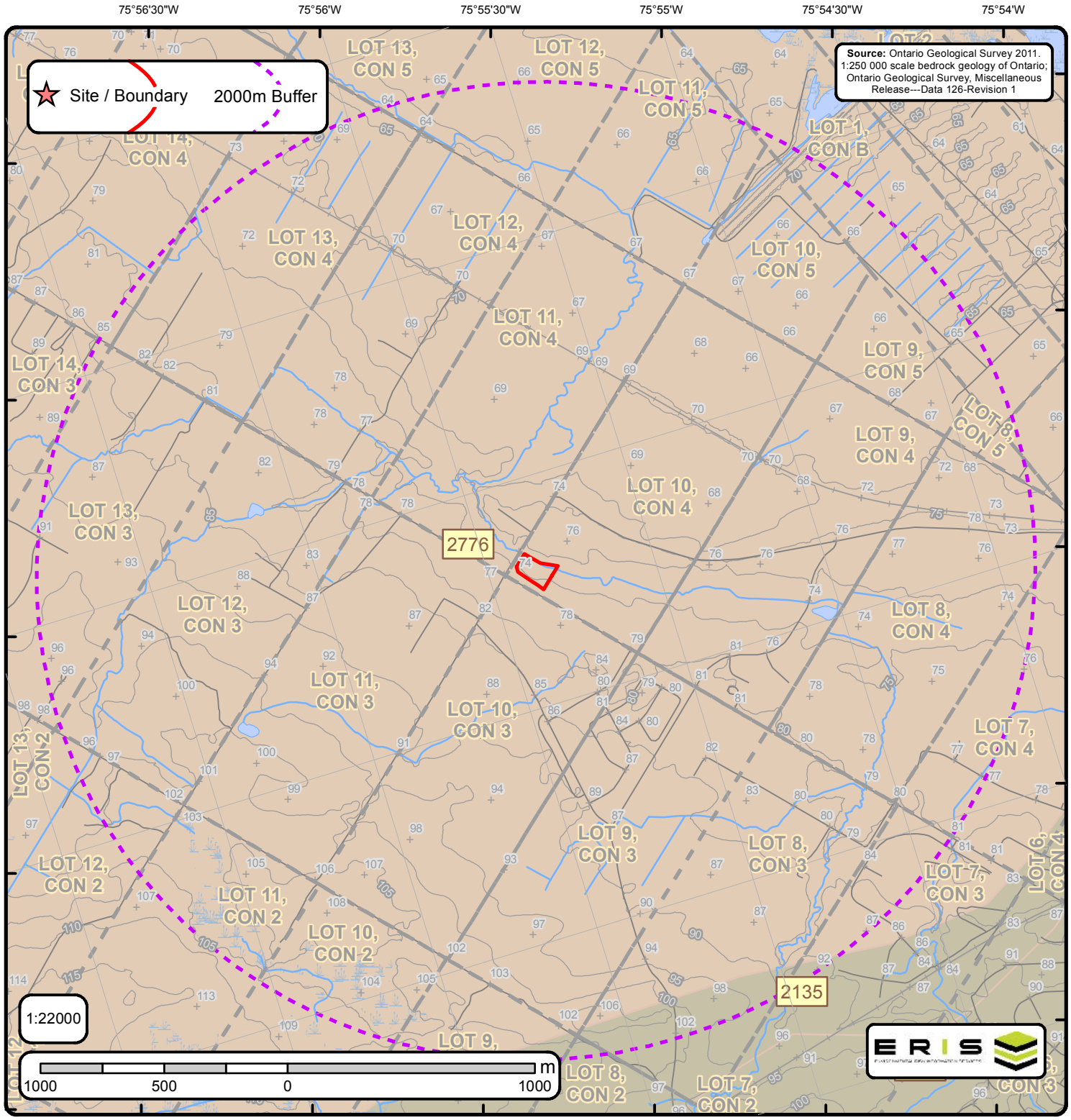
- Spot Height
- Roads
- Railroads
- Contour Lines
- Streams
- Lots
- Pit or Quarry
- Airports
- Wetlands
- Waterbody
- Boulder Pavement
- Dissected Terrain
- Mud Flow Scars
- Sand Dunes
- escarpment
- shorecliff
- shorecliff (weakly developed)
- Physiography Regions
- Bare Rock Ridges And Shallow Till
- Beaches
- Bevelled Till Plains
- Clay Plains
- Drumlins
- Escarpments
- Eskers
- Kame Moraines
- Limestone Plains
- Peat And Muck
- Sand Plains
- Shale Plains
- Shallow Till And Rock Ridges
- Spillways
- Till Moraines
- Till Plains (Drumlinized)
- Till Plains (Undrumlinized)



Ontario Base Mapping (OBM) Data

Order No. 20180618029

Spot Height (metre)	Transportation Structure	Contour Line	Wooded Area
Building Point	Utility Line	Pit or Quarry	Conservation Authority
Towers	Water Structure	Waterbody	Conservation Area
Utility Site Point	Drainage Line Feature	Wetlands	Municipal Park
Misc. Line	River or Stream	Concession	Provincial Park
Railroads	Airports	Lots	National Park
Roads	Tanks	Municipalitiy	Nature Reserve
Trail	Building to Scale	Land Ownership	



Bedrock Geology of Ontario

Order No. 20180618029

Spot Height
Roads
Contour Lines
Streams
Railroads
Lots
Pit or Quarry
Airports
Waterbody
Wetlands

Bedrock Geology Lines

- CONTACT, GEOPHYSICAL, TREND, INTERPRETED
- CONTACT, SHARP, TREND, INTERPRETED
- CONTACT, SHARP, TREND, OBSERVED
- FAULT, DEXTRAL HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, PROJECTED FAULT, INTERPRETED, UNKNOWN GENERATION
- FAULT, SINISTRAL HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, SINISTRAL HORIZONTAL COMPONENT, TREND, OBSERVED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, INCLINED-REVERSE, INTERPRETED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, INCLINED-REVERSE, OBSERVED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, TREND, OBSERVED, UNKNOWN GENERATION
- NEATLINE
- ONTARIO BORDER
- Marble, chert, iron formation, minor metavolcanic rocks

Dikes

- Abitibi mafic dike
- Biscotasing mafic dike
- Empey Lake mafic dike
- Felsic to intermediate intrusive rocks
- Fort Frances mafic dike
- Frontenac mafic dike
- Grenville mafic dike
- Logan and Nipigon mafic sills
- Mackenzie mafic dike
- Mafic dikes of uncertain age
- Mafic sills and dikes
- Marathon mafic dike
- Marathon, Kapuskasing or Biscotasing mafic dike
- Matachewan mafic dike
- Mine Centre mafic dike
- Molson mafic dike
- North Channel mafic dike
- Pickle Crow mafic dike (Molson swarm) normal
- Pickle Crow mafic dike (Molson swarm) reverse
- Rideau mafic dike
- Sudbury mafic dike
- Ultramafic, gabbroic and granophyric intrusions
- Unsubdivided mafic dike
- Unsubdivided mafic dike (Keweenawan age)
- unknown

C Lines

- FOLD, ANTICLINE, INTERPRETED, UNKNOWN GENERATION
- FOLD, ANTICLINE, OBSERVED, UNKNOWN GENERATION
- FOLD, ANTICLINE, SYNFORMAL, INTERPRETED, SECOND GENERATION
- FOLD, ANTIFORM, INTERPRETED, UNKNOWN GENERATION
- FOLD, SYNCLINE, INTERPRETED, UNKNOWN GENERATION
- FOLD, SYNCLINE, OBSERVED, UNKNOWN GENERATION
- FOLD, SYNFORM, INTERPRETED, UNKNOWN GENERATION

Kimberlite

Bedrock Geology Report

Bedrock Geology units found within 2000 m of

788 March Road, Kanata, ON, K2K 1X7

Order ID: 20180618029

ID: 2776 | **Unit Name:** |

Type (All): 53 | **Type (Primary):** 53 | **Type (Secondary):** | **Type (Tertiary):** | **Rock Type (Primary):** Dolostone, sandstone | **Strata (Primary):** Beekmantown Group | **Super Eon (Primary):** | **Eon (Primary):** PHANEROZOIC (Present to 542.0 Ma) | **Era (Primary):** PALEOZOIC (251.0 Ma to 542.0 Ma) | **Period (Primary):** ORDOVICIAN (443.7 Ma to 488.3 Ma) | **Epoch (Primary):** LOWER ORDOVICIAN | **Province (Primary):**

ID: 2135 | **Unit Name:** Clastic metasedimentary rocks |

Type (All): 45 | **Type (Primary):** 45 | **Type (Secondary):** | **Type (Tertiary):** | **Rock Type (Primary):** Conglomerate, wacke, quartz arenite, arkose, limestone, siltstone, chert, minor iron formation, minor metavolcanic rocks | **Strata (Primary):** Grenville Supergroup and Flinton Group (ask Mike if this covers any other units) | **Super Eon (Primary):** PRECAMBRIAN (0.542 Ga to <3.85 Ga) | **Eon (Primary):** PROTEROZOIC (0.542 Ga to 2.50 Ga) | **Era (Primary):** NEO-TO MESOPROTEROZOIC (0.542 Ga to 1.6 Ga) | **Period (Primary):** | **Epoch (Primary):** | **Province (Primary):** GRENVILLE

Bedrock Geology Report Metadata

Ontario Geological Survey 2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release-Data 126 Revision1

ONTARIO MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY

ID - Unit ID **Unit Name** - Generalized geological unit classification

Type (All) - The geological unit number(s) or code(s) for all rock types present in an individual polygon.

Type (Primary) - The primary geological unit number or code for the primary rock type in an individual polygon

Type (Secondary) - The secondary geological unit number or code for the secondary rock type, if present, in an individual polygon

Type (Tertiary) - The tertiary geological unit number or code for the tertiary rock type, if present, in an individual polygon

Rock Type (Primary) - Rock type or sub-unit description

Status (Primary) - The Stratigraphic unit. Divided into:

```
Supergroup (two or more groups and lone formations)
Group (two or more formations)
Formation (primary unit of lithostratigraphy)
Member (named lithologic subdivision of a formation)
Bed (named distinctive layer in a member or formation)
```

Super Eon (Primary) - A name given to the largest defined unit of geological time, divided into Eons. Unique values which this field may contain (Domains) are:

```
PRECAMBRIAN (0.542 Ga to <3.85 Ga)
```

Eon (Primary) - A name given to a defined unit of geological time, divided into Eras. Unique values which this field may contain (Domains) are:

```
ARCHEAN (2.5 Ga to <3.85 Ga)
PROTEROZOIC (0.542 Ga to 2.50 Ga)
PHANEROZOIC (Present to 542.0 Ma)
```

Era (Primary) - A name given to a defined unit of geological time, divided into Periods. Each era on the scale is separated from the next by a major event or change. Unique values which this field may contain (Domains) are:

```
MESOARCHEAN (2.8 Ga to 3.2 Ga)
NEO-TO MESOARCHEAN (2.5 Ga to 3.2 Ga)
NEOARCHEAN (2.5 Ga to 2.8 Ga)
PALEOPROTEROZOIC (1.6 Ga to 2.5 Ga)
MESO-TO PALEOPROTEROZOIC (1.0 Ga to 2.5 Ga)
MESOPROTEROZOIC (1.0 Ga to 1.6 Ga)
EARLY PALEOZOIC TO NEOPROTEROZOIC (443.7 Ma to 1.0 Ga)
NEO-TO MESOPROTEROZOIC (0.542 Ga to 1.6 Ga)
PALEOZOIC (251.0 Ma to 542.0 Ma)
MESOZOIC (65.5 Ma to 251.0 Ma)
```

Period (Primary) - A name given to a defined unit of geological time, divided into Epochs. Unique values which this field may contain (Domains) are:

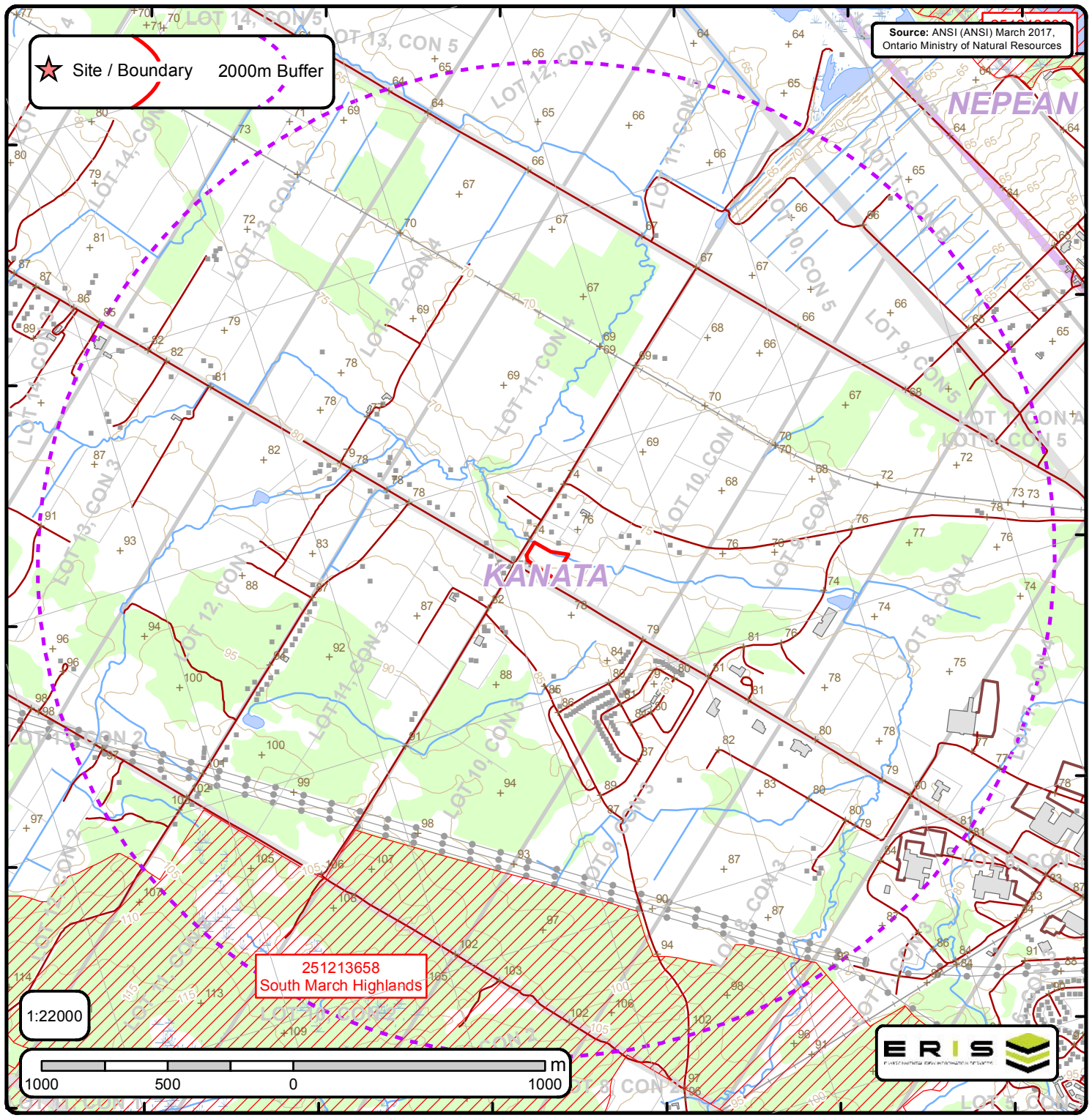
```
CAMBRIAN (488.3 Ma to 542.0 Ma)
ORDOVICIAN (443.7 Ma to 488.3 Ma)
SILURIAN (416.0 Ma to 443.7 Ma)
DEVONIAN (359.2 Ma to 416.0 Ma)
MISSISSIPPIAN TO DEVONIAN (318.1 Ma to 416.0 Ma)
JURASSIC (145.5 Ma to 199.6 Ma)
CRETACEOUS AND JURASSIC (65.5 Ma to 199.6 Ma)
```

Epoch (Primary) - A name given to a defined unit of geological time. Unique values which this field may contain (Domains) are:

```
LOWER ORDOVICIAN
MIDDLE ORDOVICIAN
UPPER ORDOVICIAN
MIDDLE AND LOWER SILURIAN
UPPER SILURIAN TO LOWER DEVONIAN
UPPER SILURIAN
LOWER DEVONIAN
MIDDLE DEVONIAN
UPPER DEVONIAN
LOWER CRETACEOUS AND MIDDLE JURASSIC
```

Province (Primary) - The Geological Province the geological unit is in. Unique values which this field may contain (Domains) are:

```
SUPERIOR
SOUTHERN
SUPERIOR
GRENVILLE
```



Area of Natural & Scientific Interest (ANSI) Order No. 20180618029

Spot Height	Transportation Structure	Contour Line	Wooded Area
Building Point	Utility Line	Pit or Quarry	Conservation Authority
Towers	Water Structure	Waterbody	Conservation Area
Utility Site Point	Drainage Line Feature	Wetlands	Municipal Park
Misc. Line	River or Stream	Concession	Provincial Park
Railroads	Airports	Lots	National Park
Roads	Tanks	Municipalitiy	Nature Reserve
Trail	Building to Scale	Land Ownership	ANSI Area

ANSI Report

ANSI Units Found within 2000 m of

788 March Road, Kanata, ON, K2K 1X7

Order ID: 20180618029

ANSI Name: South March Highlands

ID: 251213658 | **Type:** Candidate ANSI, Life Science | **Significance:** Provincial | **Management Plan:** No | **Area (sqm):** 8955569.866 |

Comments:

APPENDIX D

Aerial Photographs

LEGEND

788 March Road

1946 Air Photo

Scale 1:5,000

0 25 50 100 150 200
Meters

N

Coordinate System: NAD 1983 UTM Zone 18N
Source: Air Photo A10370_232 (1946-08-14)

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 01/07/2018

Geofirma Engineering Ltd

G:\Data\Project\MarchRoad\Maps\18-206-1_788_MarchRd\PhaseOneESA_Jun2018\18-206-1_1946AP.mxd

LEGEND

788 March Road

1952 Air Photo

Scale 1:5,000

0 25 50 100 150 200
Meters

N

Coordinate System: NAD 1983 UTM Zone 18N
Source: Air Photo A13380-22 (1952-07-31)

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 01/07/2018

Geofirma Engineering Ltd

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LEGEND

788 March Road

1975 Air Photo

Scale 1:5,000

0 25 50 100 150 200
Meters

N

Coordinate System: NAD 1983 UTM Zone 18N
Source: Air Photo A23959-59 (1975-04-30)

PROJECT No. 18-206-1

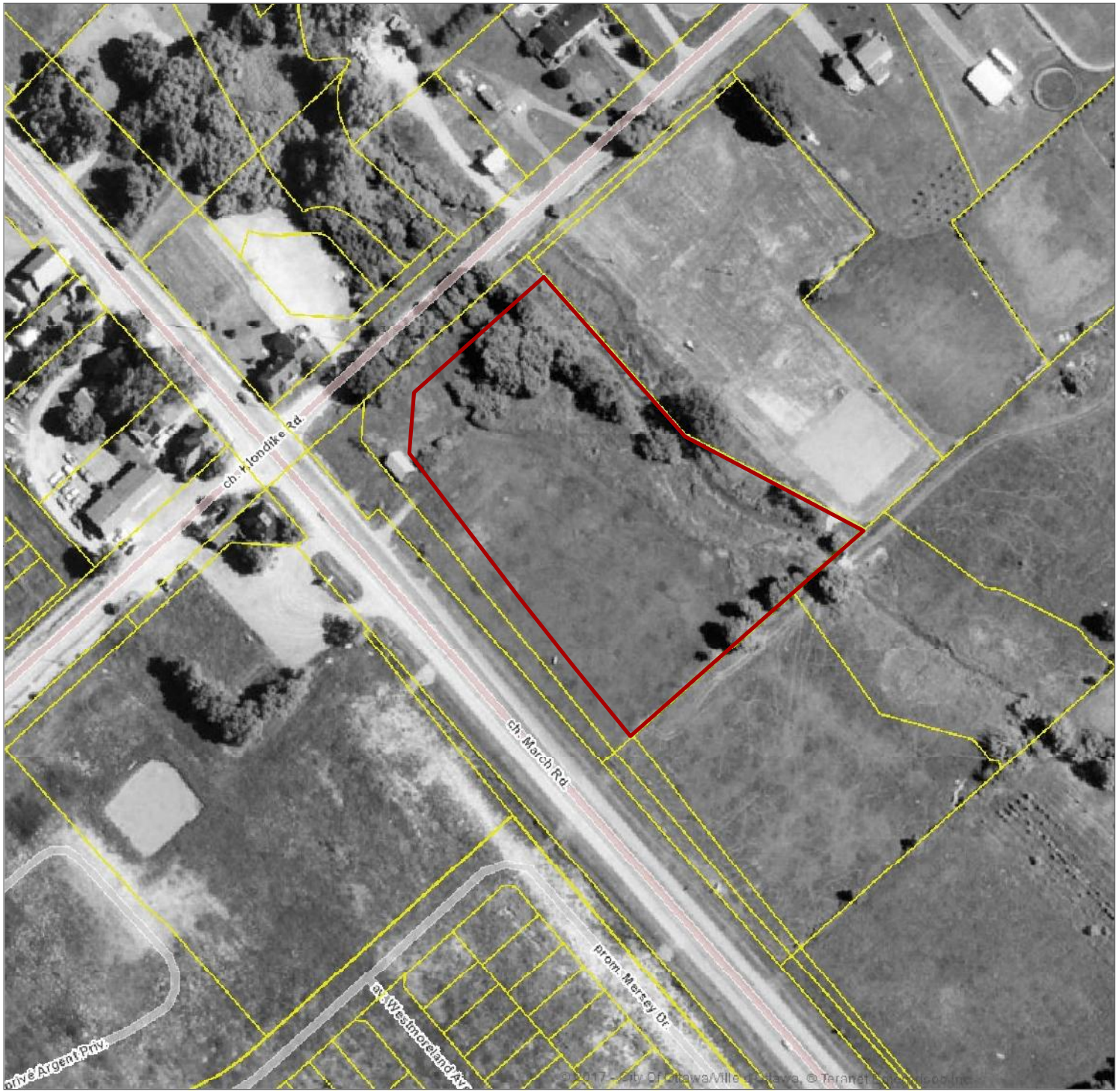
PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 01/07/2018

Geofirma Engineering Ltd

G:\Data\Project\MarchRoad\Maps\18-206-1_788_MarchRd\PhaseOneESA_Jun2018\18-206-1_1975AP.mxd



LEGEND

788 March Road

1991 Air Photo

Scale 1:2,000

0 10 20 40 60 80
Meters

N

Coordinate System: NAD 1983 UTM Zone 18N
Source: City of Ottawa geoOttawa 1991 Air Photo

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 01/07/2018

Geofirma Engineering Ltd

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LEGEND

788 March Road

2017 Air Photo

Scale 1:2,000

0 10 20 40 60 80
Meters

N

Coordinate System: NAD 1983 UTM Zone 18N
Source: City of Ottawa geoOttawa 2017 Air Photo

PROJECT No. 18-206-1

PROJECT Phase One Environmental Site Assessment
788 March Road, Ottawa, ON

DESIGN: ADG
CAD/GIS: ADG
CHECK: SNS
REV: 0

DATE: 01/07/2018

Geofirma Engineering Ltd

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APPENDIX E

Photographs of Site Features

Northern boundary, along Klondike Road (looking east)

Northeast corner – Shirley's Brook at Klondike Road (looking east)

Eastern boundary, Shirley's Brook (looking south)

Northern boundary, along Klondike Road (looking west)

Overgrown and vacant land along Shirley's Brook

Densely wooded areas

Phase One ESA – 788 March Road, Ottawa, ON
Photos taken on July 3, 2018

Eastern boundary, Shirley's Brook (looking north)

Overgrown and vacant land (looking north west)

Evidence of recent drilling – overgrown and vacant land (looking south along west boundary)

Evidence of recent drilling – overgrown and vacant land (looking easy along west boundary)

APPENDIX F

Legal Plan of Survey

TOPOGRAPHIC DETAIL OF

PART OF LOT 10
CONCESSION 4

GEOGRAPHIC TOWNSHIP OF MARCH

CITY OF OTTAWA

SCALE 1 : 250

5 0 5 10 15 metres

J.D. BARNES LIMITED

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

NOTES

BEARINGS ARE GRID AND ARE REFERRED TO SOUTHERLY LIMIT OF PART 1, SHOWN ON PLAN 4R-29354, HAVING A BEARING OF N 47°17'45" E .

LEGEND

☐	DENOTES	SURVEY MONUMENT FOUND
□	DENOTES	SURVEY MONUMENT SET
SIB	DENOTES	STANDARD IRON BAR
SSIB	DENOTES	SHORT STANDARD IRON BAR
IB	DENOTES	IRON BAR
PB	DENOTES	PLASTIC BAR
WIT	DENOTES	WITNESS
MEAS	DENOTES	MEASURED
P	DENOTES	PLAN 4R-25367
P1	DENOTES	PLAN 4R-24176
857	DENOTES	FAIRHALL & MOFFATT LIMITED
1692	DENOTES	FARLEY, SMITH AND DENIS SURVEYING LTD.
SG	DENOTES	STANTEC GEOMATICS
℄/L	DENOTES	CENTRELINE

ELEVATION NOTES

ELEVATIONS ARE GEODETIC AND ARE ESTABLISHED USING GLOBAL POSITIONING SYSTEM (GPS) EQUIPMENT TO ESTABLISH ELLIPSOIDAL HEIGHTS. ELIPSOIDAL HEIGHTS WERE TRANSFORMED TO CGVD-1928 DATUM (GEODETIC) USING THE FEDERAL HT2.0 HEIGHT TRANSFORMATION MODEL.

IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE SITE BENCHMARK HAS NOT BEEN ALTERED OR DISTRIBUED AND THAT ITS' RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.

AREA NOTE

DEVELOPMENT AREA SOUTH WEST OF 30m SETBACK **6684.1** sqm.

TOPOGRAPHIC DETAIL PROVIDED ON JANUARY 12, 2018

J.D.BARNES LIMITED
SURVEYING MAPPING GIS
LAND INFORMATION SPECIALISTS
2430 DON REID DRIVE, SUITE 204, OTTAWA, ON K1H 1E1
T: (613) 731-7244 F: (613) 731-8955 www.jdbarnes.com

DRAWN BY:	CHECKED BY:	REFERENCE NO.:
LH	SS/CF	17-10-136-00
FILE: G:\17-10-136\00\17-10-136 Topo.dgn		DATED: mm/dd/yy

PLOTTED: 1/17/2018