Phase One Environmental Site Assessment 788 March Road Ottawa, Ontario

Revision: 0 (Final)

Prepared for:

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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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LIST OF ACRONYMS

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.



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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.

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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:

- 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

Geofirma Engineering Ltd

- 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 <u>Databases and Inventories</u>

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 <u>Site Operating Records</u>

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° 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 <u>Unidentified Substances</u>

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

July 16, 2018

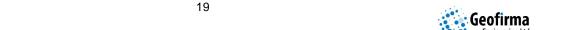
The site is currently addressed as 788 March Road, Ottawa. The site is currently vacant.

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	Description of	Property Use	Other Observation from Aerial
	ner/Occupant	Property Use	Property Use	Photographs, Fire Insurance Plans,
OWI	nei/Occupant	Froperty Ose		etc.
1960 – 1987 Leo	nard Roy,	Residential,	Residential,	A second structure was visible in the
	sanna Roy	Agricultural	Agricultural	1964 air photo, on the site along
(part I)	oaima rioj	, ignountaria	or other	March Road. Both structures on the
			01 011101	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 Hard	old Armstrong	Residential,	Residential,	Residential and agricultural farm
(part 2)	old 7 tilliotrollig	Agricultural	Agricultural	lands.
(part 2)		rigilioditarai	or other	iarias.
1982 – 1983 Allei	n A. Stewart,	Residential,	Residential,	Residential and agricultural farm
	garet Stewart	Agricultural	Agricultural	lands.
(part 2)	garot otowart	/ ignoditarar	or other	arido.
1983 – 1987 Kan	ata Red Oak	Residential,	Residential,	Residential and agricultural farm
	elopments	Agricultural	Agricultural	lands.
Ltd.	olopillollio	, ignountarian	or other	iando.
	n Stewart In	Residential,	Residential,	By 1991, only one residential
Trus		Agricultural	Agricultural	structure remained on the site along
		9	or other	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 1048	8383 Ontario	Vacant	Agricultural	The last remaining structure had been
Inc.			or other	demolished by the 1994 air photo.
				The land remained vacant between
				1994 and 2008.
1997 - 2001 1202	2642 Ontario	Vacant	Agricultural	Vacant land.
Inc.,	, Metal		or other	
	orts Ltd. In			
Trus				
2001 - 2010 Imp	erial Oil	Vacant,	Agricultural	A temporary container/material
Limi		container	or other,	storage area was located along March
		storage area	Industrial	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
1				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.

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Respectfully submitted,

Geofirma Engineering Ltd.

Angela Garrison, CET Environmental Technologist

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

Sean Herlu



9 REFERENCES

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

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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



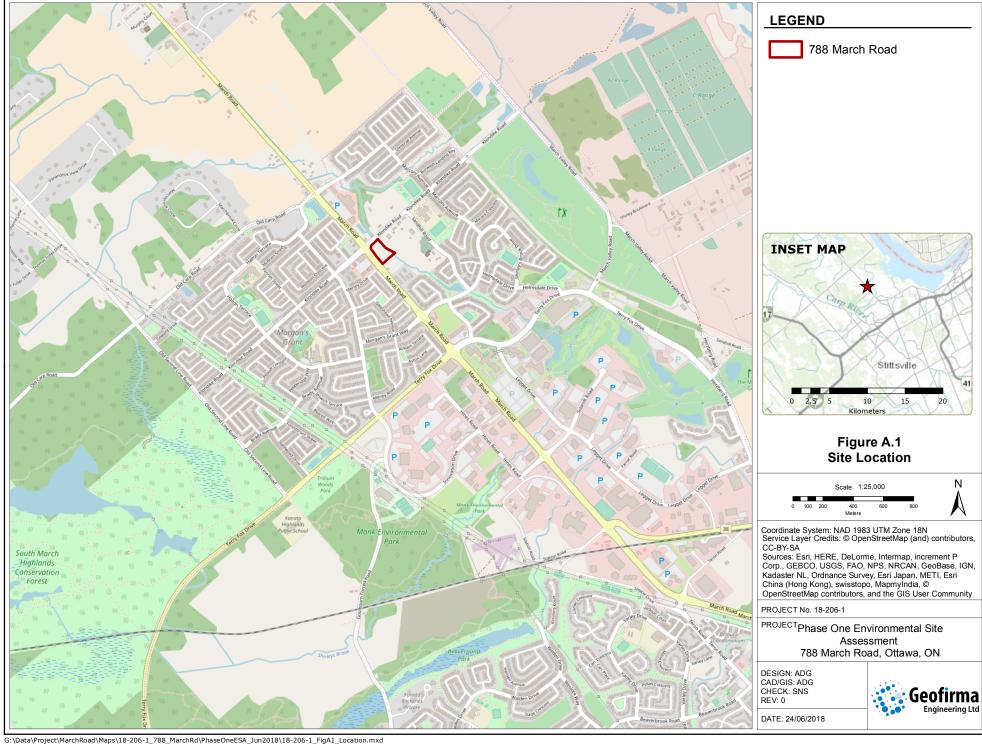
APPENDIX A

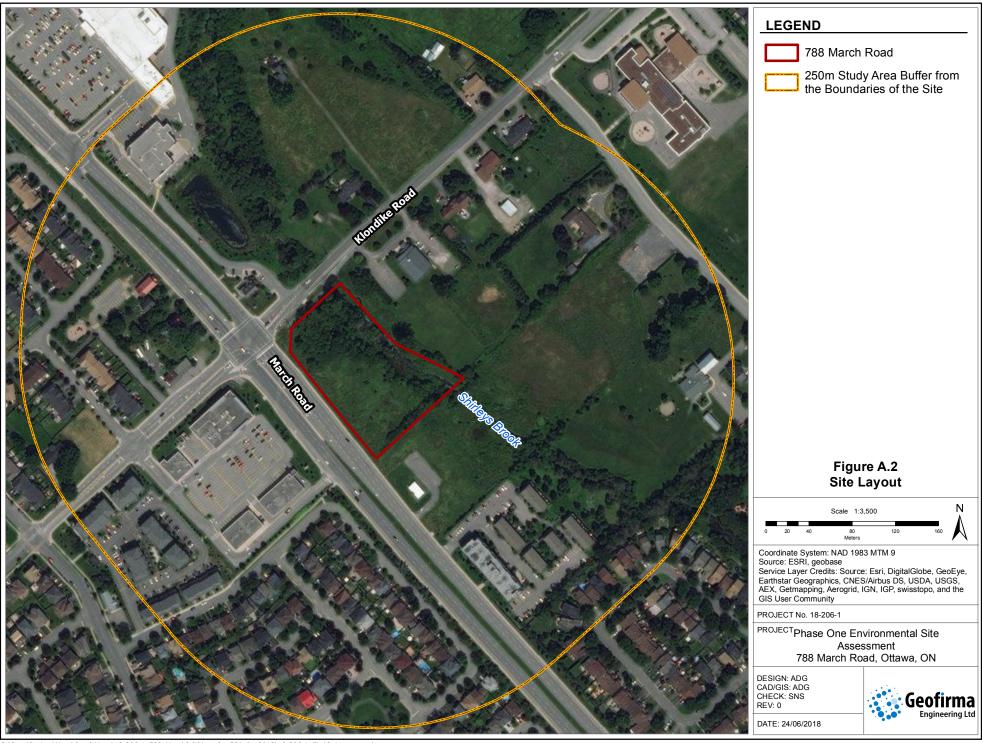
Figures

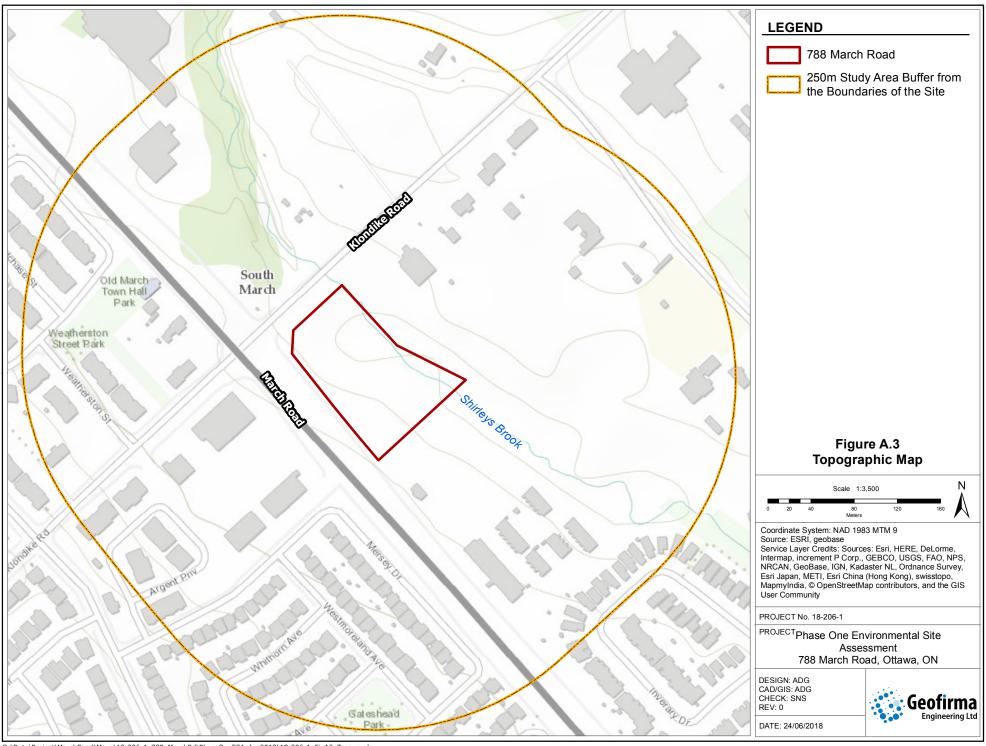
Figure A.1 – Site Location

Figure A.2 – Site Layout

Figure A.3 – Topographic Map







APPENDIX B

Title Search

attn: Thish Petrie

			ENVIRONMENTAL SEARCH 78	march Road, Kanata
INSTRUMENT #	Түре	DATE	Vendor	Purchaser
	Patent	ap, 23	lown	John
		1846		John Armstong
R07854	Deed	Oct 5	John	James
		1854	John armstrong	James simstrong
MH1775	Will	may 30	James Aunstrong	Slonge Simstrong
		1905	amotions	Sloye armations
M42417	Desd	June 20 1914	an antony	Slonge armstrong
M H 3485	Oled	June 4	Estate of Glange Ormstrong	Harold dronstrong Eric Fr. armstrong
		1940	Drinstrong	Ene F. armstrong
MH 3746	Deed	June 8 1948	Eric F. armstrong	Harold armstrong
MH4515	Deed	Thek 4 1960	Harold armstrong	Jeonard Ray
N 398637	Deed	July/7	Susanna Roy	Susanna Loy (Part) Allen Stewart In Trust
		1987		In Trust

			ENVIRONMENTAL SEARCH	
INSTRUMENT #	Түре	DATE	Vendor	Purchaser
N681746	Deed	Dec 24	allon Stewart	1048383
	· ·	1993	In Trust	Ontario Bre.
			•	(all)
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	closure	1997	(Several Sinsion)	ontario Inc.
4+1380109	Power	may/	metal Exports	1436996
	9	Z <i>00/</i>	fts., In Trust	ontario fre.
	Jala		-	
6+1384542	Deed	may/6	1436996	Imperial oil
		200/	Ontario Inc.	Timited
				(Curent ouner)
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of note-	e pog	e lup	until Brothement no.	MH 3746 for the
P	eccous.	ounes,	of the chain of title co	ntinued below
N5154358	Deed	June 25	Estate of Harold	allen a stewart
		1982	Denstrong	margaret Stewart
				(Parx)
N5219271	Deed	Mar 25	alleng. stewart	Kanata Red Oak
		1983	Allen g. stewart Morganet Stewart	Kanata Red Oak Developments Its.

			ENVIRONMENTAL	SEARCH	
INSTRUMENT #	Түре	DATE	VENDOR		Purchaser
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,			Derdagen		In Trust
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APPENDIX C

ERIS Documentation



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

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Executive Summary

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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	Υ	0	0	0
AGR	Aggregate Inventory	Υ	0	0	0
AMIS	Abandoned Mine Information System	Υ	0	0	0
ANDR	Anderson's Waste Disposal Sites	Υ	0	0	0
AUWR	Automobile Wrecking & Supplies	Υ	0	0	0
BORE	Borehole	Y	0	6	6
CA	Certificates of Approval	Υ	0	4	4
CFOT	Commercial Fuel Oil Tanks	Υ	0	0	0
CHEM	Chemical Register	Υ	0	0	0
CNG	Compressed Natural Gas Stations	Υ	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar	Υ	0	0	0
CONV	Sites Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Υ	0	0	0
DRL	Drill Hole Database	Υ	0	0	0
DRYCLEANERS	Dry Cleaning Facilities	Y	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Υ	0	0	0
ECA	Environmental Compliance Approval	Υ	0	2	2
EEM	Environmental Effects Monitoring	Υ	0	0	0
EHS	ERIS Historical Searches	Υ	1	4	5
EIIS	Environmental Issues Inventory System	Υ	0	0	0
EMHE	Emergency Management Historical Event	Υ	0	0	0
EXP	List of TSSA Expired Facilities	Υ	0	1	1
FCON	Federal Convictions	Υ	0	0	0
FCS	Contaminated Sites on Federal Land	Υ	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Υ	0	0	0
FST	Fuel Storage Tank	Υ	0	0	0
FSTH	Fuel Storage Tank - Historic	Υ	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Υ	0	14	14
GHG	Greenhouse Gas Emissions from Large Facilities	Υ	0	0	0
HINC	TSSA Historic Incidents	Υ	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	Υ	0	0	0
INC	TSSA Incidents	Υ	0	0	0
LIMO	Landfill Inventory Management Ontario	Υ	0	0	0
MINE	Canadian Mine Locations	Υ	0	0	0
MISA PENALTY	Environmental Penalty Annual Report	Υ	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)	Υ	0	0	0
NCPL	Non-Compliance Reports	Υ	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Υ	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	Υ	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGW	Oil and Gas Wells	Υ	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	Υ	0	0	0
PES	Pesticide Register	Y	0	2	2
PINC	TSSA Pipeline Incidents	Υ	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	Υ	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	Υ	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Υ	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	<u>18</u>
1	WWIS		KANATA ON	-/0.0	-0.64	<u>23</u>
2	RSC	Imperial Oil Limited	1092 Klondike Road and 788 March Road, Kanata, Ontario K2K 1X7 Kanata ON K2K 1X7	-/0.0	1.37	<u>25</u>
<u>3</u>	EHS		788 March Road Kanata ON	-/0.0	1.66	<u>26</u>

Executive Summary: Site Report Summary - Surrounding Properties

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

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

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	<u>90</u>
<u>33</u>	CA	Riotrin Properties (March Road) Inc.	830 March Rd 1095 Klondike Road Ottawa ON	NW/276.4	5.61	<u>93</u>
<u>34</u>	BORE		ON	E/282.5	5.69	<u>93</u>
<u>34</u>	WWIS		lot 10 con 4 ON	E/282.5	5.69	94
<u>35</u>	EHS		Klondike Rd. and Sandhill Rd. Kanata ON	NNE/286.6	3.10	<u>97</u>

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

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.

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

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.

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

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

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.

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

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.

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

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.

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

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

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.

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

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.

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

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.

Imperial Oil Limited Kanata ON K2K 1X7

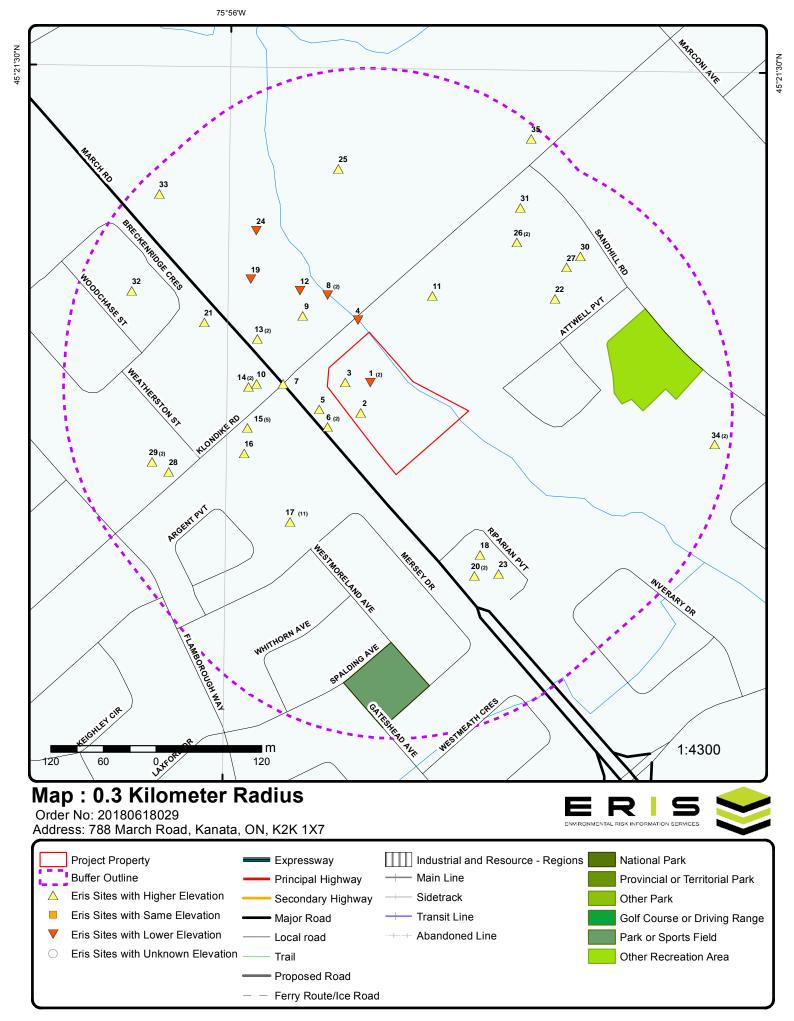
1092 Klondike Road and 788 March Road, Kanata, Ontario K2K 1X7

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

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



Aerial (2017)

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

Source: ESRI World Imagery



© ERIS Information Limited Partnership

Topographic Map

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

Source: ESRI World Topographic Map



Order No: 20180618029

© ERIS Information Limited Partnership

Detail Report

Мар Кеу	Numbe Record		Direction/ Distance (m)	Elev/Diff (m)	Site		DB
1	1 of 2		-/0.0	73.5 / -0.64	Ottawa ON		wwis
Well ID: Construction Primary Wate Sec. Water U Final Well St Water Type: Casing Mate Audit No: Tag: Construction Method: Elevation (m Elevation Re Depth to Bet Well Depth: Overburden/ Pump Rate: Static Water Flowing (Y/N Flow Rate: Clear/Cloudy	er Use: Ise: Ise: Ise: Ise: Ise: Ise: Ise: I	7128487 Monitoring Test Hole M04496 A074647			Data Entry Status: Data Src: Date Received: Selected Flag: Abandonment Rec: Contractor: Form Version: Owner: Street Name: County: Municipality: Site Info: Lot: Concession: Concession Name: Easting NAD83: Northing NAD83: Zone: UTM Reliability:	8/31/2009 Yes 1844 5 788 MARCH ROAD OTTAWA-CARLETON OTTAWA CITY	
Bore Hole Inf Bore Hole ID DP2BR: Spatial Statu Code OB: Code OB De Open Hole: Cluster Kind Date Comple Remarks: Elevrc Desc: Location Sou Improvement Source Revis Supplier Con	sc: sc: eted: erce Date: t Location t Location sion Comm	Method: ent:			Elevation: Elevrc: Zone: East83: Org CS: North83: UTMRC: UTMRC Desc: Location Method:	75.6 18 427003 UTM83 5022819 4 margin of error: 30 m - 100 m wwr	
Overburden a Materials Inte Formation ID Layer: Color: General Colo Mat1: Most Commo Mat2: Other Materia	erval : or: on Material	1 3 6 E C : (

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

Annular Space/Abandonment

Formation End Depth UOM:

Sealing Record

Plug ID: 1002817529

m

 Layer:
 1

 Plug From:
 0

 Plug To:
 2

 Plug Depth UOM:
 m

Method of Construction & Well

<u>Use</u>

Method Construction ID:1002817533Method Construction Code:F

Method Construction: H.S.A.

Other Method Construction:

Pipe Information

Pipe ID: 1002817524

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1002817530

Layer: 1

76.39

427078

UTM83

wwr

5022728

margin of error: 10 - 30 m

Order No: 20180618029

18

Elevation:

Elevrc:

East83:

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method:

Zone:

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

1002817531 Screen ID:

Layer: 10 Slot:

Screen Top Depth: Screen End Depth:

5 Screen Material: Screen Depth UOM: m Screen Diameter UOM: cm Screen Diameter: 5.8

Hole Diameter

Hole ID: 1002817528

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

Bore Hole Information

Bore Hole ID: 1002817506

DP2BR: Spatial Status: Code OB: Code OB Desc:

Cluster Kind: This is a record from cluster log sheet

18-JUN-09 Date Completed:

Remarks:

Open Hole:

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Annular Space/Abandonment

Sealing Record

1002817510 Plug ID:

Layer: Plug From: Plug To:

Plug Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID:

Method Construction Code: Method Construction:

1002817509

Other Method Construction: HSA

Pipe Information

Pipe ID: 1002817511

Casing No:
Comment:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1002817513

Layer:

Material:

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

Elevation:

Elevrc:

East83:

Org CS:

North83:

UTMRC: UTMRC Desc:

Location Method:

Zone:

72.84

427059

UTM83

5022822

margin of error: 10 - 30 m

Order No: 20180618029

18

wwr

Bore Hole Information

1002817515 Bore Hole ID:

DP2BR: Spatial Status:

Code OB: Code OB Desc: Open Hole: Cluster Kind:

This is a record from cluster log sheet

Date Completed: 19-JUN-09

Remarks: 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

<u>Use</u>

1002817518 **Method Construction ID:**

Method Construction Code: Method Construction:

Other Method Construction: HSA

Pipe Information

Pipe ID: 1002817520

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1002817522

Layer:

Material:

Open Hole or Material: **PLASTIC**

Depth From:

2.6 Depth To:

Casing Diameter: Casing Diameter UOM:

Casing Depth UOM:

Construction Record - Screen

Screen ID: 1002817521

Layer: Slot:

Screen Top Depth: 2.6 Screen End Depth: 5.7

Screen Material:

m

Screen Depth UOM:

Screen Diameter UOM: Screen Diameter:

Results of Well Yield Testing

Pump Test ID: 1002817523

m

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

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

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 A074647 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: 3/19/2010 Selected Flag: Yes

Abandonment Rec:

Contractor: 1844 Form Version: 5

Owner:

788 MARCH RD Street Name: County: OTTAWA-CARLETON

MARCH TOWNSHIP

Order No: 20180618029

Municipality: Site Info: Lot: Concession:

Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 75.6 1002951127 Elevation:

DP2BR: Elevrc: Spatial Status:

18 Zone:

Code OB: Code OB Desc: Open Hole: N Cluster Kind:

Date Completed: 15-FEB-10

Remarks: 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

<u>Use</u>

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

DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole:

Cluster Kind: This is a record from cluster log sheet

Date Completed: 15-FEB-10

Remarks: 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:

 East83:
 427003

 Org CS:
 UTM83

 North83:
 5022819

 UTMRC:
 4

UTMRC Desc: margin of error : 30 m - 100 m

72.84

427059

UTM83 5022822

margin of error: 30 m - 100 m

Order No: 20180618029

18

wwr

Location Method: www

Elevation:

Elevrc:

East83:

Org CS:

North83:

UTMRC: UTMRC Desc:

Location Method:

Zone:

Zone:

East83:

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method:

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: Code OB: Code OB Desc: Open Hole:

Cluster Kind: This is a record from cluster log sheet

15-FEB-10 Date Completed:

Remarks: 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

<u>Use</u>

Method Construction ID: 1003285099

Method Construction Code: Method Construction:

Other Method Construction:

Hole Diameter

Hole ID: 1003285098

Diameter: Depth From:

2

Depth To: 5.8 Hole Depth UOM: m

1 of 1

Hole Diameter UOM:

75.5 / 1.37 Imperial Oil Limited

1092 Klondike Road and 788 March Road,

18

427078

UTM83

5022728

margin of error: 30 m - 100 m

Kanata, Ontario K2K 1X7 Kanata ON K2K 1X7

erisinfo.com | Environmental Risk Information Services

-/0.0

RSC

Order No: 20180618029

25

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

Cert Date:

Audit (Y/N):

Telephone:

Fax:

Email:

Entire Leg Prop. (Y/N):

Accuracy Estimate:

Reg No: 63910

RA No:

Cert Prop Use No: No CPU Community RSC Type: Intended Prop Use: Curr Property Use: Agriculture/Other Nm of Qual. Person: Ed Charlton Stratified (Y/N):

District Office: **OTTAWA** 29-Jan-10

Date Submitted: Date Ack:

Date Returned: Restoration Type: Soil Type: Criteria:

CPU Issued Sect No

1686:

Asmt Roll No: 06-14-300-816-22700 Prop. ID No: 04517-0801(LT)

1092 Klondike Road and 788 March Road, Kanata, Ontario K2K 1X7 Property Municipal Address:

90 WYNFORD AVE, TORONTO, ON, M3C 1K5 Mailing Address: 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,

25-Jun-09

21 to 100 meters

ed.m.charlton@esso.ca

416-4417389

416-4417400

6/1/2009

ON

0.25

-75.931602

45.355116

EHS

Order No: 20180618029

No

Ottawa.

Digitized from a map Measurement Method:

Full Depth Site Conditions Standard, with Potable Ground Water, Medium/Fine Textured Soil, for Applicable Standards:

Industrial/Commercial/Community property use

RSC PDF:

1 of 1 -/0.0 75.8 / 1.66 788 March Road 3 **EHS** Kanata ON

164958 Order ID:

Order No: 20090601011 **Customer ID:** 77347 Company ID: 268

С Status: Report Code: 3CAN

Standard Report Report Type: Report Date: 6/4/2009

1 of 1

Report Requested by: O'Connor Associates Nearest Intersection:

Previous Site Name:

4

Additional Info Ordered: Fire Insur. Maps and/or Sire Plans

NNW/18.6

Klondike Rd & March Rd

Ottawa ON

Date Received:

Municipality:

Large Radius:

X:

Y:

Lot/Building Size:

Client Prov/State:

Search Radius (km):

Order ID: 428037 Date Received:

71.7/-2.46

Order No: 20151007070 67187 **Customer ID:** Company ID: 56 С Status: 3CAN Report Code:

Report Type: Standard Report Report Date: 09-OCT-15

Report Requested by: Stantec Consulting Ltd.

Nearest Intersection: Previous Site Name: Additional Info Ordered: 07-OCT-15

Lot/Building Size:

Municipality:

Client Prov/State: ON .25 Search Radius (km): Large Radius: .3

X: -75.931431 Y: 45.355755

5 1 of 1 W/23.0 80.6 / 6.45 lot 10 con 4 WWIS

Well ID: 1503411

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: ON

Data Entry Status: Data Src:

Date Received: 3/5/1956
Selected Flag: Yes
Abandonment Pec:

Abandonment Rec: Contractor:

Form Version: Owner: Street Name:

County: OTTAWA-CARLETON Municipality: MARCH TOWNSHIP

3705

1

Site Info:

 Lot:
 010

 Concession:
 04

 Concession Name:
 CON

Easting NAD83: Northing NAD83: Zone: UTM Reliability:

Bore Hole Information

 Bore Hole ID:
 10025454
 Elevation

 DP2BR:
 18
 Elevro:

Spatial Status:

Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 02-NOV-55

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment: Elevation: 76.52

Zone: 18

East83: 427000.6

Org CS:

North83: 5022792 **UTMRC**: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: p9

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:

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

<u>Use</u>

Method Construction ID: 961503411

Method Construction Code: 1

Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10574024

Casing No:

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

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

Borehole ID: 609813 Type: Borehole

Use: Status::

 Drill Method::
 UTM Zone::
 18

 Easting::
 427011
 Northing::
 5022772

 Location Accuracy::
 Orig. Ground Elev m::
 77.7

 Elev. Reliability Note::
 DEM Ground Elev m::
 76.1

Elev. Reliability Note:: DEM Ground Elev m::
Total Depth m:: 20.4 Primary Name::

Township:: 20.4 Primary Name::

Township:: Concession::
Lot:: Municipality:

Completion Date:: APR-1971 Static Water Level:: -13

Primary Water Use:: Sec. Water Use::

--Details--

 Stratum ID:
 218384154
 Top Depth(m):
 0.0

 Bottom Depth(m):
 0.9
 Stratum Desc:
 SOIL.

 Stratum ID:
 218384155
 Top Depth(m):
 0.9

Bottom Depth(m): 6.1 Stratum Desc: CLAY.

 Stratum ID:
 218384156
 Top Depth(m):
 6.1

 Bottom Depth(m):
 6.4
 Stratum Desc:
 GRAVEL.

Stratum ID: 218384157 **Top Depth(m):** 6.4

Bottom Depth(m): 20.4 Stratum Desc: SANDSTONE. WHITE. 00067. WATER

STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTONE.

Order No: 20180618029

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

Well ID: Data Entry Status:

Construction Date: Data Src:

Primary Water Use:DomesticDate Received:4/21/1971Sec. Water Use:0Selected Flag:Yes

Final Well Status:Water SupplyAbandonment Rec:Water Type:Contractor:3504

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: Concession Name Pump Rate: Easting NAD83:

Static Water Level:

Flowing (Y/N):

Flow Rate: Clear/Cloudy: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 10033117

DP2BR: 21

Spatial Status: Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 02-APR-71

Remarks: 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:

Color:

General Color:

Mat1: 02

Most Common Material: TOPSOIL

Mat2:

Other Materials:

Mat3:

Other Materials:

Elevation: 76.09

Elevrc:

Zone: 18 **East83:** 427010.6

Org CS:

North83: 5022772

UTMRC: 4
UTMRC Desc: 4
margin of error: 30 m - 100 m

Order No: 20180618029

Location Method: p4

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

<u>Use</u>

Method Construction ID: 961511120

Method Construction Code:

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

Pipe ID: 10581687

Casing No:

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

Map Key Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pumping Rate: Flowing Rate: Recommended Pump Rate: Levels UOM: Rate UOM: Water State After Test Code: Water State After Test:	12 10 ft GPM 2 CLOUDY 2			
Pumping Test Method: Pumping Duration HR: Pumping Duration MIN: Flowing:	1 0 N			
Draw Down & Recovery				
Pump Test Detail ID: Test Type: Test Duration: Test Level: Test Level UOM:	934097658 Recovery 15 0 ft			
Pump Test Detail ID: Test Type: Test Duration:	934380671 Recovery 30			
Test Level: Test Level UOM:	O ft			
Pump Test Detail ID: Test Type: Test Duration: Test Level: Test Level UOM:	934899728 Recovery 60 0 ft			
Pump Test Detail ID: Test Type: Test Duration: Test Level: Test Level UOM:	934642804 Recovery 45 0 ft			
Water Details				
Water ID: Layer: Kind Code: Kind: Water Found Depth: Water Found Depth UOM:	933466196 1 1 FRESH 62 ft			
Water ID: Layer: Kind Code: Kind: Water Found Depth: Water Found Depth UOM:	933466197 2 1 FRESH 67 ft			
<u>7</u> 1 of 1	W/50.5	80.2 / 6.04	R.M. OF OTTAWA-CARLETON MARCH RD./KLONDIKE RD. (SWM) KANATA CITY ON	CA

Order No: 20180618029

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

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

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 **BORE** ON

> > Status::

UTM Zone::

Northing::

Borehole ID: 609816 Type: **Borehole**

Use:

Drill Method::

Easting:: 427011

Location Accuracy:: Elev. Reliability Note:: Total Depth m:: 19.2

Township::

Lot::

AUG-1969 Completion Date::

Primary Water Use::

--Details--

Stratum ID:

Stratum ID: 218384161

Bottom Depth(m): 9.1

218384162

Bottom Depth(m): 15.2

Stratum ID: 218384163

Bottom Depth(m): 19.2

Orig. Ground Elev m::

DEM Ground Elev m::

Static Water Level::

Sec. Water Use::

Primary Name::

Concession::

Municipality:

Top Depth(m): 0.0 Stratum Desc:

CLAY. BROWN.

Top Depth(m): 9.1

Stratum Desc: SANDSTONE. BROWN.

18

79.2

71.1

-11

5022922

Top Depth(m):

LIMESTONE, WHITE, 00060STABLE AT 298.0 Stratum Desc:

FEET.BLACK. LIMESTONE. BLUE.

Order No: 20180618029

SANDSTONE. BLACK.

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

1510450 Well ID:

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:

1/21/1970 Date Received: Selected Flag: Yes Abandonment Rec: 4724 Contractor:

Form Version: Owner: Street Name:

OTTAWA-CARLETON County: Municipality: MARCH TOWNSHIP

Site Info:

011 Lot: 04 Concession: Concession Name: CON

Easting NAD83: Northing NAD83: Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 10032478

DP2BR: 30 Spatial Status:

Code OB: Bedrock Code OB Desc:

Open Hole: Cluster Kind:

Date Completed: 26-AUG-69

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: **Source Revision Comment:**

Supplier Comment:

Overburden and Bedrock

Materials Interval

931014923 Formation ID:

Layer: Color: 6 General Color: **BROWN** Mat1: 05 CLAY Most Common Material:

Mat2:

Other Materials: Mat3: Other Materials:

0 Formation Top Depth: Formation End Depth: 30 Formation End Depth UOM: ft

Formation ID: 931014925

Layer: 3 Color: General Color: WHITE Mat1: 15

Most Common Material: LIMESTONE

Mat2:

Other Materials:

Mat3:

Other Materials: Formation Top Depth: 50 63 Formation End Depth:

Formation End Depth UOM: ft

931014924 Formation ID:

2 Layer: Color: 6

General Color: **BROWN** Mat1:

SANDSTONE Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 30 50 Formation End Depth: Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Elevrc:

Zone: 18 East83: 427010.6

Org CS:

North83: 5022922

UTMRC:

margin of error: 30 m - 100 m UTMRC Desc:

Location Method:

Method Construction ID: 961510450

Method Construction Code: 1

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

Pipe ID: 10581048

Casing No: Comment:

Alt Name:

Construction Record - Casing

Casing ID: 930057543

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To:30Casing Diameter:6Casing Diameter UOM:inchCasing 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:

Flowing:

Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2

Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 2
Pumping Duration HR: 1
Pumping Duration MIN: 0

Draw Down & Recovery

Pump Test Detail ID:934097101Test Type:Draw Down

Ν

 Test Duration:
 15

 Test Level:
 30

 Test Level UOM:
 ft

Pump Test Detail ID:934640578Test Type:Draw Down

 Test Duration:
 45

 Test Level:
 30

 Test Level UOM:
 ft

Pump Test Detail ID:934897501Test Type:Draw Down

Test Duration: 60 **Test Level:** 30

Test Level UOM:

 Pump Test Detail ID:
 934378445

 Test Type:
 Draw Down

 Test Duration:
 30

 Test Level:
 30

 Test Level UOM:
 ft

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

9 1 of 1 NW/63.7 75.5 / 1.34 lot 11 con 4 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:11/17/2006Selected Flag:YesAbandonment Rec:YesContractor:1558Form 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 Elevation:

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

Casing No: Comment: Alt Name:

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

Well ID: 1518190 Data Entry Status:

Construction Date:Data Src:1Primary Water Use:MunicipalDate Received:4/5/1983

Sec. Water Use: 0 Selected Flag: Yes

Final Well Status:Water SupplyAbandonment Rec:Water Type:Contractor:1504Casing Material:Form Version:1Audit No:Owner:

Tag: Street Name: Construction Method: County:

Construction Method:County:OTTAWA-CARLETONElevation (m):Municipality:MARCH TOWNSHIPElevation Reliability:Site Info:

Depth to Bedrock:Lot:011Well Depth:Concession:03Overburden/Bedrock:Concession Name:CON

Overburden/Bedrock:Concession Name:CONPump Rate:Easting NAD83:Static Water Level:Northing NAD83:

Flowing (Y/N): Zone: Flow Rate: UTM Reliability:

Bore Hole Information

Clear/Cloudy:

 Bore Hole ID:
 10040060
 Elevation:
 77.22

 DP2BR:
 20
 Elevrc:

 Spatial Status:
 Zone:
 18

 Code OR:
 18
 18

 Code OB:
 r
 East83:
 426929.6

 Code OB Desc:
 Bedrock
 Org CS:

 Open Hole:
 North83:
 5022821

 Cluster Kind:
 UTMRC:
 4

Date Completed: 14-JUN-82 UTMRC Desc: margin of error: 30 m - 100 m

Order No: 20180618029

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: 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

<u>Use</u>

Method Construction ID: 961518190

Method Construction Code:

Method Construction: Rotary (Air)

Other Method Construction:

Pipe Information

Pipe ID: 10588630

Casing No: 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:

Depth To:24Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Results of Well Yield Testing

Pump Test ID: 991518190

80

Pump Set At:
Static Level: 11
Final Level After Pumping: 30
Recommended Pump Depth: 30

Pumping Rate: Flowing Rate:

Recommended Pump Rate: 80
Levels UOM: ft
Rate UOM: GPM

Water State After Test Code:

Water State After Test:

CLEAR

Pumping Test Method:

Pumping Duration HR:

Pumping Duration MIN:

O

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:

 Pump Test Detail ID:
 934639319

 Test Type:
 Recovery

 Test Duration:
 45

 Test Level:
 11

 Test Level UOM:
 ft

ft

Water Details

Water ID: 933474849

 Layer:
 1

 Kind Code:
 1

 Kind:
 FRESH

 Water Found Depth:
 35

 Water Found Depth UOM:
 ft

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

Well ID: 1519081

Construction Date:
Primary Water Use: Domestic

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:

Flow Rate: Clear/Cloudy: Data Entry Status:

Data Src:

Date Received: 8/7/1984 Selected Flag: Yes

Abandonment Rec:

Contractor: 1558
Form Version: 1

Owner: Street Name:

County: OTTAWA-CARLETON Municipality: MARCH TOWNSHIP

Site Info:

 Lot:
 010

 Concession:
 04

 Concession Name:
 CON

Easting NAD83: Northing NAD83: Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 10040951 **DP2BR:** 31

Spatial Status:

Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 10-JUL-84

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

Elevation: 76.36

Elevrc:

Zone: 18

East83: 427129.6

Org CS:

North83: 5022921

UTMRC: 4

UTMRC Desc: margin of error : 30 m - 100 m

Order No: 20180618029

Location Method: p4

Formation ID: 931040536

Layer: 2 2 Color: **GREY** General Color: 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

Mat3:85Other Materials:SOFTFormation Top Depth:31Formation End Depth:81Formation 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:

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:
 17

 Static Level:
 17

 Final Level After Pumping:
 30

 Recommended Pump Depth:
 50

 Pumping Rate:
 20

Flowing Rate: 5 Recommended Pump Rate: 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 Ν Flowing:

Draw Down & Recovery

Pump Test Detail ID:934651620Test 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

Pump Test Detail ID: 934381642
Test Type: Draw Down
Test Duration: 30

Test Level: 30
Test Level UOM: ft

Water Details

Test Level UOM:

Order No: 20180618029

ft

Water ID: 933475962

Layer: Kind Code: **FRESH** Kind: Water Found Depth: 77 Water Found Depth UOM: ft

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

Well ID: 7147352

Construction Date:

Primary Water Use: **Domestic**

Sec. Water Use:

Final Well Status: Water Supply

Water Type: Casing Material:

Z108317 Audit No: A093683 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: 6/25/2010 Selected Flag: Yes

Abandonment Rec:

1119 Contractor: Form Version:

Owner:

Street Name: 1095 KLONDIKE RD County: OTTAWA-CARLETON MARCH TOWNSHIP Municipality:

Site Info:

011 Lot: Concession: 04 CON Concession Name:

Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 1003074984

DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole:

Cluster Kind: 30-APR-10 Date Completed:

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: **Source Revision Comment:**

Supplier Comment:

72.31 Elevation: Elevrc:

Zone:

18 East83: 426979 Org CS: UTM83 North83: 5022927 UTMRC:

UTMRC Desc: margin of error: 30 m - 100 m

Order No: 20180618029

Location Method:

Overburden and Bedrock

Materials Interval

Formation ID: 1003194962

Layer: 3 Color: General Color: **GREY** Mat1:

LIMESTONE Most Common Material:

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: Color: General Color: **GREY** Mat1: 05 Most Common Material: CLAY Mat2: 11 **GRAVEL** Other Materials: 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

<u>Use</u>

Method Construction ID: 1003194986

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 1003194958

Casing No:

Comment: Alt Name:

Construction Record - Casing

Order No: 20180618029

Casing ID: 1003194968

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:20Depth To:28Casing Diameter:6Casing Diameter UOM:inchCasing 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:

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:

 Recommended Pump Rate:
 10

0

Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 0
Water State After Test:

Pumping Test Method:
Pumping Duration HR:

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:1003194974Test 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:1003194977Test Type:Draw DownTest Duration:15

Order No: 20180618029

Map Key Number of Records Direction/ Elev/Diff Site

Test Level: 15.167
Test Level UOM: 15.167

 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

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:: 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 13 2 of 2 WNW/87.5 79.9 / 5.69 lot 11 con 4

Well ID: 1503412

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: Data Entry Status: Data Src:

Date Received: 11/24/1955 Selected Flag: Yes

Selected Flag: Abandonment Rec:

Contractor: 2415 Form Version: 1 Owner:

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:

Clear/Cloudy:

Code OB:

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

Order No: 20180618029

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

930996772 Formation ID:

Layer: 3 Color: General Color: **GREY** Mat1: 18

SANDSTONE Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 18 48 Formation End Depth: Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961503412 **Method Construction Code:**

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

Pipe ID: 10574025 Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 930043660

Layer: 2 Material:

OPEN HOLE Open Hole or Material:

Depth From:

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

930043659 Casing ID:

Layer: Material: **STEEL**

Open Hole or Material:

Depth From: 21 Depth To: Casing Diameter: 6 Casing Diameter UOM: inch Casing Depth UOM:

Results of Well Yield Testing

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test ID Pump Set At: Static Level:		991503412 6			
Recommende Pumping Rat		22 5			
Levels UOM:	ed Pump Rate:	ft			
Water State A		GPM 1 CLEAR			
Pumping Test Method: Pumping Duration HR: Pumping Duration MIN: Flowing:		1 0 30 N			
Water Details	1				
Water ID: Layer:		933456316 1			
Kind Code: Kind: Water Found Water Found		5 Not stated 28 ft			
Water ID: Layer: Kind Code:		933456317 2 5			
Kind: Water Found Water Found		Not stated 40 ft			
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: Instance ID:		9818157			
Instance Type Description:	e:	FS Facility			
Status: TSSA Progra Maximum Ha	zard Rank:	EXPIRED			
Facility Type. Expired Date		12/2/2009 13:34			
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: Type: Expiry Date: Capacity (L): Licence #:		6727 retail 1990-12-31 0 0055662001			
<u>15</u>	1 of 5	W/102.2	81.9 / 7.69	2325225 Ontario Inc. 1102 KLONDIKE ROAD, R R #1 KANATA ON K2K 1X7	GEN

Order No: 20180618029

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

PO Box No.:

Choice of Contact:

Phone No. Admin:

Country:

Co Admin:

ON8411031 Generator No.:

Status:

2016 Approval Years: Contam. Facility: No MHSW Facility: No

SIC Code:

446110 SIC Description: 446110

--Details--

Waste Code:

PHARMACEUTICALS Waste Description:

Waste Code:

Waste Description: PATHOLOGICAL WASTES

15

2 of 5

W/102.2

312

81.9 / 7.69

2325225 Ontario Inc.

1102 KLONDIKE ROAD, R R #1

Canada

Canada

Canada

CO ADMIN

NASTRAN NAJAFI-FARD

4164931120 Ext.3218

CO_ADMIN

NASTRAN NAJAFI-FARD

GEN

GEN

PES

4164931120 Ext.3218

KANATA ON K2K 1X7

PO Box No.:

Choice of Contact:

Phone No. Admin:

Country:

Co Admin:

Generator No.: Status:

ON8411031 Registered As of Dec 2017 Approval Years:

Contam. Facility: MHSW Facility: SIC Code: SIC Description:

--Details--

Waste Code: 261 A

Waste Description: Pharmaceuticals

Waste Code: 312 P

Waste Description: Pathological wastes

15

3 of 5

W/102.2

81.9 / 7.69

G.G. Pharmacy Inc.

PO Box No.:

Choice of Contact:

Phone No. Admin:

Country:

Co Admin:

1102 KLONDIKE ROAD, R R #1

KANATA ON K2K 1X7

ON8411031 Generator No.:

Status:

2015

Approval Years: Contam. Facility: No MHSW Facility: No SIC Code: 446110

SIC Description:

446110

--Details--

Waste Code: 261

Waste Description: **PHARMACEUTICALS**

Waste Code:

PATHOLOGICAL WASTES Waste Description:

4 of 5 15

W/102.2

81.9 / 7.69

G.G PHARMACY INC.

1102 KLONDIKE RD KANATA ON K2K1X7

14783 Licence No:

Operator Box:

Order No: 20180618029

erisinfo.com | Environmental Risk Information Services

51

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) Detail Licence No: **Operator Class:**

Licence Type Code: Operator No: Active Limited Vendors Licence Type: Operator Type:

Licence Class: Operator Lot: Licence Control: Oper Concession: Operator Region: Trade Name: Post Office Box: Operator District: Lot: **Operator County:** Concession: Oper Phone Area Cd:

613 Region: Ext: 5926010 District: Oper Phone No:

County: Proponent Ext:

5 of 5 W/102.2 81.9 / 7.69 G.G PHARMACY INC. 15 **PES** 1102 KLONDIKE RD

> **KANATA** ON K2K 0G1

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:

WSW/120.9 83.3 / 9.11 16 1 of 1 lot 10 con 3 **WWIS** ON

UTM Reliability:

Order No: 20180618029

Well ID: 1503347 Data Entry Status: Construction Date: Data Src:

Primary Water Use: Commerical Date Received: 3/28/1966 Sec. Water Use: Selected Flag: Yes

Water Supply Final Well Status: Abandonment Rec: Water Type: Contractor: 4216 Casing Material: Form Version:

Audit No: Owner: Tag: Street Name:

County: OTTAWA-CARLETON **Construction Method:** Elevation (m): Municipality: MARCH TOWNSHIP Elevation Reliability: Site Info:

Depth to Bedrock: 010 Lot: Well Depth: Concession: 03 CON Overburden/Bedrock: Concession Name:

Pump Rate: Easting NAD83: Static Water Level: Northing NAD83: Flowing (Y/N): Zone:

Bore Hole ID: 10025390 Elevation: 78.03

DP2BR: 5 Flevro:

Spatial Status: Zone: 18 426915.6 Code OB: East83: r

Flow Rate: Clear/Cloudy:

Bore Hole Information

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method:

5022742

margin of error: 100 m - 300 m

Order No: 20180618029

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 25-FEB-66

Remarks: 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

<u>Use</u>

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

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m) Material: 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: **OPEN HOLE** Open Hole or Material: Depth From: Depth To: 82 Casing Diameter: 6 Casing Diameter UOM: inch Casing Depth UOM: Results of Well Yield Testing 991503347 Pump Test ID: Pump Set At: 35 Static Level: 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: Water State After Test: **CLEAR** Pumping Test Method: **Pumping Duration HR:** 1 **Pumping Duration MIN:** 0 Flowing: Ν Water Details Water ID: 933456241 Layer: Kind Code: 1 Kind: **FRESH**

Water Found Depth: 82
Water Found Depth UOM: ft

Generator No.: ON9298734
Status: Registered

1 of 11

Approval Years: As of Dec 2017
Contam. Facility:

MHSW Facility: SIC Code: SIC Description:

--Details--

17

Waste Code: 312 P

Waste Description: Pathological wastes

Activecare klondike medical centre 1108 klondike rd.

ottawa ON K2K0G1

PO Box No.:

Country: Canada

Choice of Contact: Co Admin: Phone No. Admin:

SW/127.5

83.2 / 9.00

GEN

Map Key Number Records			Direction/ Distance (m)	Elev/Diff (m)	Site		DB
<u>17</u>	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.: Status: Approval Years: Contam. Facility: MHSW Facility: SIC Code: SIC Description:		ON35269 2016 No No 621390		OTHER HEALTH	PO Box No.: Country: Choice of Contact: Co Admin: Phone No. Admin: PRACTITIONERS	Canada CO_OFFICIAL na na na Ext.	
Details Waste Code: Waste Description:			312 PATHOLOGICAL V	WASTES			
Waste Code: Waste Description:			261 PHARMACEUTICALS				
<u>17</u>	3 of 11		SW/127.5	83.2 / 9.00	INVIVA McKesson P 1108 Klondike Road Kanata ON K2K 0G1	Unit A	GEN
Generator No.: Status: Approval Years: Contam. Facility: MHSW Facility: SIC Code: SIC Description:		ON35269 Registere As of De	ed		PO Box No.: Country: Choice of Contact: Co Admin: Phone No. Admin:	Canada	
Details Waste Code Waste Desc			261 A Pharmaceuticals				
Waste Code Waste Desc			312 P Pathological waste	s			
<u>17</u>	4 of 11		SW/127.5	83.2 / 9.00	INVIVA McKesson P 1108 Klondike Road Kanata ON K2K 0G1	Unit A	GEN
Generator N Status: Approval Ye Contam. Facil MHSW Facil SIC Code: SIC Descrip	ears: cility: lity:	ON35269 2015 No No 621390		OTHER HEALTH	PO Box No.: Country: Choice of Contact: Co Admin: Phone No. Admin: PRACTITIONERS	Canada CO_OFFICIAL na na na Ext.	
Details Waste Code: Waste Description:			312 PATHOLOGICAL \	WASTES			
<u>17</u>	5 of 11		SW/127.5	83.2 / 9.00	Activecare klondike 1108 klondike rd. ottawa ON K2K0G1	medical centre	GEN

ottawa ON K2K0G1

Order No: 20180618029

Map Key Number of Direction/ Elev/Diff Site DΒ

Records Distance (m) (m)

83.2 / 9.00

83.2 / 9.00

ON9298734 Generator No.:

Status:

Approval Years: 2016 Contam. Facility: No MHSW Facility: No

621110 SIC Code:

OFFICES OF PHYSICIANS SIC Description:

--Details--

Waste Code: 312

6 of 11

PATHOLOGICAL WASTES Waste Description:

SW/127.5

Status:

Generator No.:

17

2015 Approval Years: No Contam. Facility: MHSW Facility: No 621110

SIC Code:

SIC Description: OFFICES OF PHYSICIANS

ON9298734

--Details--

Waste Code:

PATHOLOGICAL WASTES Waste Description:

17 7 of 11 SW/127.5 83.2 / 9.00

ON9298734 Generator No.:

Status:

2014 Approval Years: Contam. Facility: No MHSW Facility: No 621110

SIC Code:

OFFICES OF PHYSICIANS SIC Description:

--Details--

17

Waste Code:

Waste Description: PATHOLOGICAL WASTES

8 of 11

ON9298734 Generator No.:

Status:

Approval Years: 2010

Contam. Facility:

MHSW Facility:

621110 SIC Code:

SIC Description: Offices of Physicians PO Box No.:

Canada Country: Choice of Contact: CO_OFFICIAL

Co Admin: Phone No. Admin:

Activecare klondike medical centre

GEN

GEN

GEN

Order No: 20180618029

1108 klondike rd. ottawa ON K2K0G1

PO Box No.:

Canada Country: Choice of Contact: CO_OFFICIAL

Co Admin: Phone No. Admin:

Activecare klondike medical centre

1108 klondike rd. ottawa ON K2K0G1

PO Box No.:

Canada Country: CO_OFFICIAL Choice of Contact:

Co Admin: Phone No. Admin:

Activecare klondike medical centre

1108 klondike rd. ottawa ON K2K0G1

PO Box No.: Country:

Choice of Contact: Co Admin:

Phone No. Admin:

SW/127.5

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) --Details--Waste Code: 312 PATHOLOGICAL WASTES Waste Description: 17 9 of 11 SW/127.5 83.2 / 9.00 Activecare klondike medical centre **GEN** 1108 klondike rd. ottawa ON ON9298734 Generator No.: PO Box No.: Status: Country: Approval Years: 2013 Choice of Contact: Contam. Facility: Co Admin: MHSW Facility: Phone No. Admin: 621110 SIC Code: SIC Description: OFFICES OF PHYSICIANS --Details--Waste Code: 312 PATHOLOGICAL WASTES Waste Description: 17 10 of 11 SW/127.5 83.2 / 9.00 Activecare klondike medical centre **GEN** 1108 klondike rd. ottawa ON K2K0G1 ON9298734 PO Box No.: Generator No.: Country: Status: Approval Years: 2012 Choice of Contact: Contam. Facility: Co Admin: MHSW Facility: Phone No. Admin: 621110 SIC Code: SIC Description: Offices of Physicians --Details--Waste Code: 312 Waste Description: PATHOLOGICAL WASTES 11 of 11 SW/127.5 83.2 / 9.00 Activecare klondike medical centre 17 **GEN** 1108 klondike rd. ottawa ON K2K0G1 Generator No.: ON9298734 PO Box No.: Country: Status: Approval Years: 2011 Choice of Contact: Contam. Facility: Co Admin: MHSW Facility: Phone No. Admin: SIC Code: 621110 Offices of Physicians SIC Description: --Details--Waste Code: 312 Waste Description: PATHOLOGICAL WASTES

SSE/131.5

77.3 / 3.14

Blue Heron Co-operative Homes Inc.

750, 760 March Rd Kanata Ottawa ON K2K 2W4 **ECA**

Order No: 20180618029

18

1 of 1

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

8636-6D4KSW Approval No: SWP Area Name: Approval Date: 2005-06-14 **MOE District:**

Approved Status: City: Ottawa Longitude: Record Type: ECA

Link Source: IDS Latitude: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS Approval Type: Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS

750, 760 March Rd Kanata Address:

Full Address:

Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/6597-6CCPXM-14.pdf

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

7147353 Well ID: Data Entry Status:

Construction Date: Data Src: 6/25/2010 Primary Water Use: Domestic Date Received: Sec. Water Use: Selected Flag: Yes

Final Well Status: Water Supply Abandonment Rec: Water Type: 1119 Contractor: 7

Casing Material: Form Version: Z108340 Audit No: Owner:

Tag: A093682 Street Name: 1095 KLONDIKE RD **OTTAWA-CARLETON** Construction Method: County:

Municipality: MARCH TOWNSHIP Elevation (m): Elevation Reliability: Site Info:

Depth to Bedrock: 011 Lot: Well Depth: 04 Concession:

CON 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: 1003074986 Elevation: 74.55 DP2BR: Elevrc: Spatial Status: Zone: 18 Code OB: East83: 426923 Code OB Desc: UTM83 Org CS: Open Hole: 5022940

North83: Cluster Kind: **UTMRC:**

Date Completed: 30-APR-10 **UTMRC Desc:** margin of error: 30 m - 100 m Remarks: Location Method: Elevrc Desc:

Order No: 20180618029

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock **Materials Interval**

Formation ID: Layer: 2 Color: General Color: **GREY** Mat1: 15

LIMESTONE Most Common Material:

1003195010

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 To: Plug Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1003195034

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 1003195007

Casing No:

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:18Depth To:23Casing Diameter:5.6825Casing Diameter UOM:inchCasing 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

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

Draw Down & Recovery

Flowing:

 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

Order No: 20180618029

 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

ft

Test Level UOM:

 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:1003195020Test Type:Draw DownTest 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

Order No: 20180618029

Water Details

Water ID: 1003195014

Layer: Kind Code: 8

Untested Kind: Water Found Depth: 21 Water Found Depth UOM: ft

Hole Diameter

Hole ID: 1003195011

Diameter: Depth From: 0 Depth To: 18 Hole Depth UOM: ft Hole Diameter UOM: inch

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

20 1 of 2 SSE/145.4 78.5 / 4.34 Blue Heron Co-operative Homes Inc. 750, 760 March Road, Kanata

CA

CA

Order No: 20180618029

Ottawa ON

8636-6D4KSW Certificate #:

Application Year: 2005 Issue Date: 6/14/2005

Municipal and Private Sewage Works Approval Type:

Status: Approved

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

20

SSE/145.4 78.5 / 4.34

Blue Heron Co-operative Homes Inc. 750, 760 March Road, Kanata

Ottawa ON

Certificate #: 1156-6DFHK5

Application Year: 2005 Issue Date: 6/29/2005

2 of 2

Municipal and Private Sewage Works Approval Type:

Status:

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

Approved

1 of 1 WNW/150.8 78.8 / 4.61 lot 10 con 3 21 **WWIS**

Well ID: 1536169

Construction Date: Primary Water Use: Sec. Water Use: Final Well Status: Water Type: Casing Material:

Z39220 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:

KANATA ON Data Entry Status:

Data Src:

1/13/2006 Date Received: Selected Flag: Yes Abandonment Rec: Yes 1558 Contractor: Form Version:

Owner:

Street Name: 821 MARCH ROAD County: OTTAWA-CARLETON Municipality: MARCH TOWNSHIP

Site Info:

010 Lot: 03 Concession: Concession Name: CON

Easting NAD83: Northing NAD83: Zone: UTM Reliability:

Bore Hole Information

Bore Hole ID: 11550235

DP2BR: Spatial Status:

Code OB:

Code OB Desc: Open Hole:

No formation data

Cluster Kind:

Date Completed: 29-NOV-05

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

Zone: East83:

Elevation:

Elevrc:

426870 Org CS: UTM83 North83: 5022891 **UTMRC**:

UTMRC Desc: margin of error: 10 - 30 m

Order No: 20180618029

77.53

18

Location Method:

Annular Space/Abandonment

Sealing Record

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

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961536169 **Method Construction Code:**

Method Construction: Other Method Construction:

Pipe Information

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) 11559842 Pipe ID: Casing No: Comment: Alt Name: **22** 1 of 1 ENE/160.9 79.9 / 5.75 351 Sandhill Rd **EHS** Ottawa ON K2K1X7 Order ID: 487628 Date Received: 18-NOV-16 Order No: 20161118096 Lot/Building Size: 2.02 acres **Customer ID:** 88789 Municipality: Company ID: 25907 Client Prov/State: ON С .25 Status: Search Radius (km): 2CAN Large Radius: Report Code: .3 Standard Select Report -75.928572 Report Type: X: 25-NOV-16 Report Date: Y: 45.355996 Report Requested by: LRL Associates Ltd.

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

Fire Insur. Maps and/or Site Plans; Title Searches; Topographic Maps; City Directory

 Approval No:
 1156-6DFHK5
 SWP Area Name:

 Approval Date:
 2005-06-29
 MOE District:

Status: Approved City: Ottawa

 Record Type:
 ECA
 Longitude:

 Link Source:
 IDS
 Latitude:

 Approval Type:
 ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS

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

1 of 1 NW/171.4 72.8 / -1.36 lot 11 con 4 24 **WWIS** KANATA ON 7147354 Well ID: Data Entry Status: Construction Date: Data Src: Primary Water Use: Domestic Date Received: 6/25/2010

Order No: 20180618029

Sec. Water Use:Selected Flag:YesFinal Well Status:Water SupplyAbandonment Rec:Water Type:Contractor:1119Casing Material:Form Version:7Audit No:Z108342Owner:

Tag:A095989Street Name:1095 KLONDIKE RDConstruction Method:County:OTTAWA-CARLETON

 Construction Method:
 County:
 OTTAWA-CARLETON

 Elevation (m):
 Municipality:
 MARCH TOWNSHIP

 Elevation Reliability:
 Site Info:

 Depth to Bedrock:
 Lot:
 011

Well Depth:Concession:04Overburden/Bedrock:Concession Name:CONPump Rate:Easting NAD83:

Static Water Level:

Flowing (Y/N):

Flow Rate:

Clear/Cloudy:

Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Nearest Intersection: Previous Site Name: Additional Info Ordered:

Elevation:

Elevrc:

East83:

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method:

Zone:

72.53

426929 UTM83

5022995

margin of error: 30 m - 100 m

Order No: 20180618029

18

Bore Hole ID: 1003075040

DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole: Cluster Kind:

Date Completed: 30-APR-10

Remarks:

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

<u>Use</u>

Method Construction ID: 1003195106

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 1003195079

Casing No: 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:
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: 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:0Pumping Duration HR:1

Pumping Duration MIN: Flowing:

20

Draw Down & Recovery

 Pump Test Detail ID:
 1003195093

 Test Type:
 Draw Down

 Test Duration:
 3

 Test Level:
 19.667

Test Level: 19
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

Order No: 20180618029

Test Level UOM:

Pump Test Detail ID: 1003195094
Test Type: Draw Down
Test Puration: 4

ft

 Test Duration:
 4

 Test Level:
 19.667

 Test Level UOM:
 ft

Pump Test Detail ID:1003195090Test Type:Draw DownTest 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

Ottawa ON

Date Received: 20-NOV-15

Lot/Building Size:

1055 & 1075 Klondike Rd

 Order ID:
 434245

 Order No:
 20151120038

 Customer ID:
 77170

 Company ID:
 97

 Status:
 C

Report Code:4CANReport Type:Custom ReportReport Date:26-NOV-15

Report Requested by: exp Services Inc.

Municipality:
Client Prov/State:
Search Radius (km):
Large Radius:
3

X: -75.931738 **Y:** 45.357299 **EHS**

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

Records Nearest Intersection:

Previous Site Name:

Additional Info Ordered: City Directory

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

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

15.2 Total Depth m:: Primary Name:: Township:: Concession:: Lot:: Municipality:

AUG-1968 Completion Date:: Static Water Level:: -14

Primary Water Use:: Sec. Water Use::

--Details--Stratum ID: 218384164

Top Depth(m): 0.0 SAND. Bottom Depth(m): Stratum Desc: 2.7

Stratum ID: 218384165 Top Depth(m): 2.7

Bottom Depth(m): Stratum Desc: CLAY. BLUE. 8.5

218384166 Stratum ID: Top Depth(m): 8.5

SANDSTONE. 00047E. WHITE. Bottom Depth(m): 15.2 Stratum Desc:

00060STABLE AT 298.0 FEET.BLACK. LIMESTONE. BLUE. SANDSTO

Order No: 20180618029

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

Well ID: 1509908 Data Entry Status:

Construction Date: Data Src:

11/8/1968 Primary Water Use: Domestic Date Received: Sec. Water Use: Selected Flag: Yes

Final Well Status: Water Supply Abandonment Rec:

3553 Water Type: Contractor: Casing Material: Form Version: 1 Audit No: Owner:

Street Name: Tag: County:

Construction Method: OTTAWA-CARLETON MARCH TOWNSHIP Elevation (m): Municipality: Elevation Reliability: Site Info:

Depth to Bedrock: Lot: 010 Concession: 04

Well Depth: Overburden/Bedrock: Concession Name: CON Easting NAD83: Pump Rate:

Northing NAD83: Static Water Level: Flowing (Y/N): Zone:

Flow Rate: UTM Reliability: Clear/Cloudy:

10031940 75.78 Bore Hole ID: Elevation:

DP2BR: 28 Elevrc:

Spatial Status: Zone: 18 Code OB: East83: 427225.6

Bore Hole Information

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method:

5022982

margin of error: 30 m - 100 m

Order No: 20180618029

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 27-AUG-68

Remarks: 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

<u>Use</u>

Method Construction ID:961509908Method Construction Code:1Method 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:31Casing Diameter:6Casing Diameter UOM:inchCasing 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:

Water State After Test Code:

Water State After Test:

CLEAR

Pumping Test Method:

Pumping Duration HR:

Pumping Duration MIN:

O

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 WWIS

Well ID: 1536259 Data Entry Status:

Construction Date:

Primary Water Use: **Domestic**

Sec. Water Use:

Final Well Status: Water Supply

Water Type: Casing Material:

Audit No: Z39252 Tag: A035430

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 Src:

Date Received: 3/20/2006 Selected Flag: Yes

Abandonment Rec:

Contractor: 1558 Form Version: 3

Owner: Street Name: County:

351 SANDHILL RD OTTAWA-CARLETON Municipality: MARCH TOWNSHIP Site Info:

Lot: 010 04 Concession: CON Concession Name:

Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 11550325 DP2BR: 32

Spatial Status:

Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 01-FEB-06

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Elevation: 75.39

Elevrc:

Zone: 18 East83: 427282 Org CS: UTM83 North83: 5022953

UTMRC:

margin of error: 10 - 30 m **UTMRC Desc:**

Order No: 20180618029

Location Method: wwr

Overburden and Bedrock

Materials Interval

Formation ID: 933044822

Layer: 6 Color: 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:

933044824 Formation ID:

Layer: 3 Color: **GREY** General Color: Mat1: 18

SANDSTONE Most Common Material:

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

Pipe Information

 Pipe ID:
 11559932

 Casing No:
 1

Comment: Alt Name:

Construction Record - Casing

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

Casing ID: 930875665

Layer: 2 Material: 4

Open Hole or Material:OPEN HOLEDepth From:11.88Depth To:38.09

Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM:

cm m

Results of Well Yield Testing

11569389 Pump Test ID: 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: Rate UOM: LPM Water State After Test Code: **CLEAR** Water State After Test:

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:

 Pump Test Detail ID:
 11593817

 Test Type:
 Recovery

 Test Duration:
 20

 Test Level:
 2.83

 Test Level UOM:
 m

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:

 Pump Test Detail ID:
 11593811

 Test Type:
 Recovery

 Test Duration:
 5

 Test Level:
 2.71

 Test Level UOM:
 m

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:11593804Test Type:Draw DownTest Duration:2

 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

Мар Кеу	Number Records		Direction/ Distance (m)	Elev/Diff (m)	Site		DB
Water ID: Layer: Kind Code: Kind: Water Found Water Found		м:	934073908 1 22.24 m				
Water ID: Layer: Kind Code: Kind: Water Found Water Found	l Depth:		934073910 3 36.87 m				
Hole Diameter: Diameter: Depth From: Depth To: Hole Depth U Hole ID: Diameter: Depth From: Depth To: Hole Depth U Hole Diameter: Depth To: Hole Diameter	JOM: er UOM: JOM:		11681004 22.75 0 11.88 m cm 11681005 15.23 11.88 38.09 m cm				
Well ID: Construction Primary Wate Sec. Water U Final Well St Water Type: Casing Mate Audit No: Tag: Construction Elevation (m Elevation Re Depth to Bec Well Depth: Overburden/ Pump Rate: Static Water Flowing (Y/N Flow Rate: Clear/Cloudy	er Use: lse: lse: atus: rial: n Method:): liability: drock: Bedrock: Level:	1517710 Domestic 0 Water Su	;	84.1/9.92	lot 11 con 3 ON Data Entry Status: Data Src: Date Received: Selected Flag: Abandonment Rec: Contractor: Form Version: Owner: Street Name: County: Municipality: Site Info: Lot: Concession: Concession Name: Easting NAD83: Northing NAD83: Zone: UTM Reliability:	1 2/11/1982 Yes 3504 1 OTTAWA-CARLETON MARCH TOWNSHIP 011 03 CON	WWIS
Bore Hole In Bore Hole ID DP2BR: Spatial Statu Code OB: Code OB De: Open Hole: Cluster Kind	: sc:	1003958. 8 r Bedrock	2		Elevation: Elevrc: Zone: East83: Org CS: North83: UTMRC:	80.34 18 426829.6 5022721	

Location Method:

p4

Order No: 20180618029

Date Completed: 15-SEP-81 UTMRC Desc: margin of error : 30 m - 100 m

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

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

<u>Use</u>

Method Construction ID: 961517710

Method Construction Code: 4

Method Construction: Rotary (Air)

Other Method Construction:

Pipe Information

Pipe ID: 10588152

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 930069186

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

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

Results of Well Yield Testing

991517710 Pump Test ID:

Pump Set At:

Static Level: 32 Final Level After Pumping: 70 Recommended Pump Depth: 60 Pumping Rate: 10

Flowing:

Flowing Rate: Recommended Pump Rate: 8 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: 0 **Pumping Duration HR:** Pumping Duration MIN: 30

Draw Down & Recovery

Pump Test Detail ID: 934646378 Test Type: Recovery Test Duration: 45 Test Level: 32 Test Level UOM: ft

Ν

934895653 Pump Test Detail ID: Test Type: Recovery Test Duration: 60 Test Level: 32 Test Level UOM: ft

934376125 Pump Test Detail ID: Recovery Test Type: Test Duration: 30 Test Level: 32 Test Level UOM: ft

Water Details

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

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

Order No: 20180618029

609810 Borehole Borehole ID: Type:

Use: Status::

Drill Method:: UTM Zone:: 18 Easting:: 426811 Northing:: 5022732

Orig. Ground Elev m:: 80.8 Location Accuracy:: Elev. Reliability Note:: DEM Ground Elev m:: 80.9

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

Total Depth m:: 20.7

Primary Name:: Township:: Concession:: Lot:: Municipality:

NOV-1953 Completion Date:: Static Water Level:: -10 Primary Water Use:: Sec. Water Use::

--Details--218384147

0.0 Stratum ID: Top Depth(m): Bottom Depth(m): 0.3 Stratum Desc: SOIL.

218384148 0.3 Stratum ID: Top Depth(m):

SANDSTONE. FACE. Bottom Depth(m): 20.7 Stratum Desc:

BEDROCK, SANDSTONE. WATER STABLE AT 298.0 FEET.BLACK. LIMESTONE.

Order No: 20180618029

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

1503348 Well ID: Data Entry Status:

Construction Date: Data Src:

Primary Water Use: Domestic Date Received: 3/1/1954 Selected Flag: Sec. Water Use: Yes

Final Well Status: Water Supply Abandonment Rec: 4825 Water Type: Contractor: Form Version:

Casing Material: Audit No: Owner: Street Name: Tag:

Construction Method: County: OTTAWA-CARLETON MARCH TOWNSHIP Elevation (m): Municipality: Elevation Reliability: Site Info:

011 Depth to Bedrock: Lot: Well Depth: Concession: 03

Overburden/Bedrock: Concession Name: CON Pump Rate: Easting NAD83:

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

Bore Hole Information

Clear/Cloudy:

Bore Hole ID: 10025391 Elevation: 80.86

DP2BR: Elevrc: Spatial Status: Zone: 18

Code OB: East83: 426810.6 Code OB Desc: **Bedrock** Org CS:

Open Hole: North83: 5022732 Cluster Kind: UTMRC:

Date Completed: 03-NOV-53 **UTMRC Desc:** unknown UTM

Remarks: Location Method: p9 Elevrc Desc:

Source Revision Comment: Supplier Comment:

Overburden and Bedrock Materials Interval

Location Source Date: Improvement Location Source: Improvement Location Method:

Formation ID: 930996636 Layer:

Color:

General Color:

Mat1:02Most 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:

Other Materials: Formation Top Depth:

Formation Top Depth: 1
Formation End Depth: 68
Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961503348

Method Construction Code: Method Construction:

Cable Tool

Other Method Construction:

Pipe Information

Pipe ID: 10573961

Casing No:

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

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

Results of Well Yield Testing

Pump Test ID: 991503348

Pump Set At:

Static Level: 35 Final Level After Pumping: 60 Recommended Pump Depth:

5 Pumping Rate:

Flowing Rate:

Recommended Pump Rate:

Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR Pumping Test Method: Pumping Duration HR:** 0 Pumping Duration MIN: 30 Ν Flowing:

Water Details

Water ID: 933456242

Layer: 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 **WWIS** KANATA ON

Well ID: 1536260 Data Entry Status:

Construction Date:

Primary Water Use: **Domestic** Sec. Water Use: Final Well Status: Water Supply

Water Type:

Casing Material:

Audit No: Z39253

A035438 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 Src:

3/20/2006 Date Received: Selected Flag: Yes Abandonment Rec: 1558 Contractor: Form Version: 3

Owner:

Street Name: 351 SAND HILL RD OTTAWA-CARLETON County: Municipality: MARCH TOWNSHIP

Site Info:

010 Lot: Concession: 04 Concession Name: CON

Easting NAD83: Northing NAD83: Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 11550326 Elevation:

DP2BR: 31 Spatial Status:

Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 01-FEB-06 75.21

Elevrc: Zone:

18 East83: 427298 Org CS: UTM83 North83: 5022966

UTMRC:

UTMRC Desc: margin of error: 10 - 30 m

Location Method: Remarks: 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: Color: 6 **BROWN** General Color:

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

933041311 Formation ID:

Layer: 3 Color: General Color: **GREY** Mat1: 18

SANDSTONE Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 9.44 38.09 Formation End Depth: Formation End Depth UOM:

Formation ID: 933041310

2 Layer: Color: 2 General Color: **GREY** 05 Mat1: 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

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

Plug ID: 933288530 Layer:

Plug From: Plug To:

Plug Depth UOM: m

Method of Construction & Well

<u>Use</u>

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

930875938 Casing ID: Layer: 1 Material: 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 HOLEDepth 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:
 4.6

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

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

Pump Test Detail ID:11594101Test 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:11594099Test Type:Draw DownTest Duration:2

 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:11594097Test 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

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

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test D	etail ID:	11594098			
Test Type:		Recovery			
Test Duration) <i>:</i>	1			
Test Level: Test Level U	OM-	2.69 m			
rest Level O	71 V 1.	111			
Pump Test D	etail ID:	11594165			
Test Type:		Recovery			
Test Duration):	15			
Test Level:	244	2.11			
Test Level U	DIVI:	m			
Pump Test D	etail ID:	11594162			
Test Type:		Draw Down			
Test Duration) <i>:</i>	10			
Test Level:		3.33			
Test Level U	OM:	m			
Pump Test D	otoil ID:	11594173			
Test Type:	etali ID:	Recovery			
Test Duration) <i>-</i>	40			
Test Level:	•	2.14			
Test Level U	Э Μ:	m			
Water Details					
Water ID:		934073911			
Layer:		3			
Kind Code:					
Kind:					
Water Found		37.18			
Water Found	Depth UOM:	m			
Water ID:		934073912			
Layer:		2			
Kind Code:					
Kind:					
Water Found		28.04			
Water Found	Depth UOM:	m			
Water ID:		934073913			
Layer:		1			
Kind Code:					
Kind:					
Water Found		14.62			
Water Found	Depth UOM:	m			
Hole Diamete	<u>r</u>				
Hole ID:		11681006			
Diameter:		15.23			
Depth From:		11.88			
Depth To:		38.09			
Hole Depth U	OM:	m			
Hole Diamete	r UOM:	cm			
Hole ID:		11681007			
Diameter		22 75			

22.75 0 11.88 m cm

Diameter:
Depth From:
Depth To:
Hole Depth UOM:
Hole Diameter UOM:

31 1 of 1 NE/222.2 79.4 / 5.24 lot 11 con 4

Well ID: 1518467

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: 9/16/1983
Selected Flag: Yes
Abandonment Rec:

Contractor: 5411 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: 10040337 **DP2BR:** 15

DP2BR: Spatial Status:

Code OB:

Code OB Desc: Bedrock

Open Hole:

Cluster Kind:

Date Completed: 27-AUG-83

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Elevation: 74.84

Elevrc:

Zone: 18 **East83:** 427229.6

Org CS:

North83: 5023021

UTMRC: 4

UTMRC Desc: margin of error : 30 m - 100 m

Order No: 20180618029

Location Method: p4

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

<u>Use</u>

Method Construction ID:961518467Method 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

Мар Кеу	Number Records		Direction/ Distance (m)	Elev/Diff (m)	Site		DB
Pump Test ID Pump Set At: Static Level: Final Level At Recommende Pumping Rate: Recommende Levels UOM: Rate UOM: Water State A Pumping Tes: Pumping Dura Flowing:	ter Pumpined Pump Descript ed Pump Rescript for Test Conference of the Conference of	epth: ate:	991518467 7 9 65 40 8 ft GPM 1 CLEAR 1 1 0 N				
<u>Draw Down &</u>	Recovery						
Pump Test De Test Type: Test Duration Test Level: Test Level UC	:		934103782 Recovery 15 7 ft				
Water Details							
Water ID: Layer: Kind Code: Kind: Water Found Water Found		M:	933475188 2 1 FRESH 64 ft				
Water ID: Layer: Kind Code: Kind: Water Found Water Found		м:	933475187 1 1 FRESH 33 ft				
32	1 of 1		WNW/240.7	80.9 / 6.69	lot 11 con 3 ON		wwis
Well ID: Construction Primary Wate Sec. Water Us Final Well Stat Water Type: Casing Mater Audit No: Tag: Construction Elevation (m). Elevation Rela Depth to Bedi Well Depth: Overburden/E Pump Rate: Static Water L Flowing (Y/N) Flow Rate:	r Use: se: stus: ial: Method: : iability: rock: Bedrock:	Domestic Water St 198116			Data Entry Status: Data Src: Date Received: Selected Flag: Abandonment Rec: Contractor: Form Version: Owner: Street Name: County: Municipality: Site Info: Lot: Concession: Concession Name: Easting NAD83: Northing NAD83: Zone: UTM Reliability:	1 12/1/1998 Yes 4875 1 OTTAWA-CARLETON MARCH TOWNSHIP 011 03 CON	

North83:

UTMRC:

UTMRC Desc:

Location Method:

18

5022927

margin of error: 100 m - 300 m

Order No: 20180618029

Clear/Cloudy:

Bore Hole Information

Bore Hole ID: 10051932 Elevation: 78.1 DP2BR: 0 Elevrc:

Spatial Status:

Zone: Code OB: East83:

426787.6 Code OB Desc: Bedrock Org CS:

Open Hole: Cluster Kind:

Date Completed: 21-OCT-98

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

Overburden and Bedrock

Materials Interval

931075367 Formation ID: Layer: 8 Color: General Color: **BLACK**

Mat1: 21 Most Common Material: **GRANITE**

Mat2:

Other Materials:

Mat3:

Other Materials:

90 Formation Top Depth: Formation End Depth: 160 Formation End Depth UOM: ft

Formation ID: 931075366

Layer: 1 Color: WHITE General Color: Mat1:

SANDSTONE Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 0 90 Formation End Depth: Formation End Depth UOM: ft

Annular Space/Abandonment

Sealing Record

933115542 Plug ID:

Layer: 18 Plug From: Plug To: 0 Plug Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961530397

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10600502

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 930090549

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From:

Depth To:18Casing Diameter:6Casing Diameter UOM:inchCasing 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:12Final Level After Pumping:50Recommended Pump Depth:140Pumping 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:934393372Test Type:Draw Down

 Test Duration:
 30

 Test Level:
 43

 Test Level UOM:
 ft

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test D	etail ID:	934118384			
Test Type:		Draw Down			
Test Duration	n:	15			
Test Level:	014	36			
Test Level U	OIVI:	ft			
Pump Test D	etail ID:	934662522			
Test Type:		Draw Down			
Test Duration	n:	45			
Test Level:		47			
Test Level U	ОМ:	ft			
Pump Test D	otail ID:	934902109			
Test Type:	cian ib.	Draw Down			
Test Duration	n:	60			
Test Level:	•••	50			
Test Level U	ОМ:	ft			
Water Details	<u>S</u>				
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:	1.D (f)	Not stated			
Water Found		88			
water Found	Depth UOM:	ft			
Water ID:		933490513			
Layer:		3			
Kind Code:		5			
Kind:		Not stated			
Water Found		145			
water Found	Depth UOM:	ft			
<u>33</u>	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		2011			
Issue Date:	rear.	2/28/2011			
Approval Ty	ne.	Municipal and Priva	ate Sewane Works		
Status:	<i>.</i>	Approved	ate bewage works		
Application 1	Type:	πρριονοα			
Client Name:					
Client Addre					
Client City::					
Client Postal	Code::				
Project Desc					
Contaminant					
Emission Co	ntrol::				
<u>34</u>	1 of 2	E/282.5	79.9 / 5.69	ON	BORE
					

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

Concession::

609812 Borehole ID: Type: **Borehole**

Use:

Status:: UTM Zone:: Drill Method::

18 427451 5022752 Easting:: Northing:: Location Accuracy:: Orig. Ground Elev m:: 73.2 DEM Ground Elev m:: Elev. Reliability Note:: 75.9 Total Depth m:: 18 Primary Name::

Township::

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): Stratum Desc: CLAY. BLUE.

Stratum ID: 218384152 Top Depth(m):

GRAVEL, HARDPAN. Bottom Depth(m): 12.2 Stratum Desc:

Stratum ID: 218384153 Top Depth(m): 12.2

SANDSTONE. 00057E. WATER STABLE AT Bottom Depth(m): 18.0 Stratum Desc:

298.0 FEET.BLACK. LIMESTONE. BLUE.

Order No: 20180618029

SANDSTONE. BLACK

OTTAWA-CARLETON

MARCH TOWNSHIP

5/19/1972

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

Municipality:

Well ID: 1511768 Data Entry Status:

Construction Date:

Data Src: Primary Water Use: Date Received: Domestic

Sec. Water Use: 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:

Elevation Reliability: Site Info: 010 Depth to Bedrock: Lot:

Well Depth: Concession: 04 Overburden/Bedrock: CON Concession Name: Pump Rate: Easting NAD83:

Static Water Level: Northing NAD83: Flowing (Y/N): Zone:

UTM Reliability: Flow Rate: Clear/Cloudy:

Bore Hole Information

Improvement Location Source:

Elevation (m):

Bore Hole ID: 10033762 Elevation: 75.85

40 DP2BR: Elevrc:

Spatial Status: Zone: 18 Code OB: East83: 427450.6 Code OB Desc: Bedrock Org CS:

Open Hole: North83: 5022752

Cluster Kind: UTMRC:

Date Completed: 30-MAR-72 UTMRC Desc: margin of error: 30 m - 100 m

Remarks: Location Method:

Elevrc Desc:

Location Source Date:

Improvement Location Method:

Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

Formation ID: 931018679

Layer: 3
Color:

General Color:

Mat1: 1

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:GRAVELMat2:14Other Materials:HARDPAN

Mat3:

Other Materials:

Formation Top Depth: 20 Formation End Depth: 40 Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961511768

Method Construction Code: 1

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

Pipe ID: 10582332

Casing No:

Comment: Alt Name:

Construction Record - Casing

 Casing ID:
 930059982

 Layer:
 1

 Material:
 1

 Open Hole or Material:
 STEEL

 Depth From:
 Depth To:
 43

 Coping Diameter:
 5

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:

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

Map Key Number of Records Direction/ Elev/Diff Site DB

Test Type: Recovery

 Test Type:
 Rec

 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

35 1 of 1 NNE/286.6 77.3 / 3.10

 Order ID:
 96639

 Order No:
 20070307016

 Customer ID:
 44007

 Company ID:
 86

 Status:
 C

Report Code: 3CAN

Report Type: CAN - Complete Report

Report Date: 3/15/2007

Report Requested by: SLR Consulting (Canada) Ltd. **Nearest Intersection:** Klondike and Sandhill NE corner

Previous Site Name: Additional Info Ordered: Klondike Rd. and Sandhill Rd. Kanata ON

Date Received: 3/7/2007

Lot/Building Size: 5 acres approximately

Municipality: Client Prov/State:

Search Radius (km): 0.25 Large Radius: 2

X: -75.928947 **Y:** 45.357632

EHS

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	
00111				
CONV	IMPERIAL OIL LIMITED		NORTH YORK ON	
		McGee Pit Ottawa Ontario Lot 11 and 12, Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA	NORTH YORK ON	
CONV	IMPERIAL OIL LIMITED	Concession 4 Geographic Township of West		
CONV	IMPERIAL OIL LIMITED West Carleton Sand & Gravel	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA	ON	K2L 2N3
CONV EBR EXP	IMPERIAL OIL LIMITED West Carleton Sand & Gravel CITY OF KANATA	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA KLONDIKE RD	ON KANATA ON	K2L 2N3 K2L 2N3
CONV EBR EXP	IMPERIAL OIL LIMITED West Carleton Sand & Gravel CITY OF KANATA CITY OF KANATA	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA KLONDIKE RD KLONDIKE RD	ON KANATA ON KANATA ON	
CONV EBR EXP EXP	IMPERIAL OIL LIMITED West Carleton Sand & Gravel CITY OF KANATA CITY OF KANATA CITY OF KANATA	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA KLONDIKE RD KLONDIKE RD KLONDIKE RD	ON KANATA ON KANATA ON	K2L 2N3
CONV EBR EXP EXP EXP EXP	IMPERIAL OIL LIMITED West Carleton Sand & Gravel CITY OF KANATA CITY OF KANATA CITY OF KANATA CITY OF KANATA	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA KLONDIKE RD KLONDIKE RD KLONDIKE RD KLONDIKE RD	ON KANATA ON KANATA ON KANATA ON	K2L 2N3
CONV EBR EXP EXP EXP EXP	IMPERIAL OIL LIMITED West Carleton Sand & Gravel CITY OF KANATA	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA KLONDIKE RD KLONDIKE RD KLONDIKE RD KLONDIKE RD KLONDIKE RD	ON KANATA ON KANATA ON KANATA ON KANATA ON KANATA ON	K2L 2N3
CONV EBR EXP EXP EXP EXP EXP	IMPERIAL OIL LIMITED West Carleton Sand & Gravel CITY OF KANATA CITY OF KANATA	Concession 4 Geographic Township of West Carelton City of Ottawa CITY OF OTTAWA KLONDIKE RD KLONDIKE RD KLONDIKE RD KLONDIKE RD KLONDIKE RD KLONDIKE RD	ON KANATA ON KANATA ON KANATA ON KANATA ON KANATA ON KANATA ON	K2L 2N3 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	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		Part of Lot 11, Concession 3 Lot 11-14, Conc 4	City of Ottawa ON Ottawa ON	
	of Rideau West Carleton Sand & Gravel		·	
NCPL	of Rideau West Carleton Sand & Gravel Inc.	Lot 11-14, Conc 4 R. M. OTTAWA- CARLETON/ CONC. 3. LOT	Ottawa ON	
NCPL NPCB	of Rideau West Carleton Sand & Gravel Inc. ONTARIO HYDRO	Lot 11-14, Conc 4 R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S.	Ottawa ON Kanata ON	
NCPL NPCB PRT	of Rideau West Carleton Sand & Gravel Inc. ONTARIO HYDRO CITY OF KANATA	R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S. KLONDIKE RD	Ottawa ON Kanata ON KANATA ON	
NCPL NPCB PRT PRT	of Rideau West Carleton Sand & Gravel Inc. ONTARIO HYDRO CITY OF KANATA CITY OF KANATA Kanata Research Park	Lot 11-14, Conc 4 R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S. KLONDIKE RD KLONDIKE RD Lots 8, 9 and 10, Concession 4, Ottawa,	Ottawa ON Kanata ON KANATA ON KANATA ON	
NCPL NPCB PRT PRT PTTW	of Rideau West Carleton Sand & Gravel Inc. ONTARIO HYDRO CITY OF KANATA CITY OF KANATA Kanata Research Park Corporation	R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S. KLONDIKE RD Lots 8, 9 and 10, Concession 4, Ottawa, geographic area of Kanata CITY OF OTTAWA	Ottawa ON Kanata ON KANATA ON KANATA ON ON	
NCPL NPCB PRT PRT PTTW	of Rideau West Carleton Sand & Gravel Inc. ONTARIO HYDRO CITY OF KANATA CITY OF KANATA Kanata Research Park Corporation West Carleton Sand & Gravel	R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S. KLONDIKE RD Lots 8, 9 and 10, Concession 4, Ottawa, geographic area of Kanata CITY OF OTTAWA Lots 11 and 12, Concession 4 CITY OF OTTAWA Lot: 10-12, Concession: 3, Original Geographic Township of Nepean, City of Ottawa Lot 8-9 and Concession 3, Original Geographic Township of	Ottawa ON Kanata ON KANATA ON KANATA ON ON ON 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: Database: **AAGR**

Lot 8/11 Con 4/5 Kanata ON

Type:

Region/County: Ottawa-Carleton

Township: Kanata Concession:: 4/5 8/11 Lot::

Size (ha):: Landuse:: Comments::

Site: Database: AAGR Lot 10 Con 3 Nepean ON

Type:

Region/County: Ottawa-Carleton Nepean

Township: Concession:: 10 Lot:: Size (ha):: 11

Landuse:: Comments::

Site: Database: **AAGR** Lot 11 Con 3 Kanata ON

Type: Quarry Ottawa-Carleton Region/County:

Township: Kanata Concession:: 3 11 Lot:: 0.5 Size (ha)::

Landuse:: Comments::

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

Certificate #: 1369-7TZJGG 2009 Application Year: Issue Date: 8/5/2009

Municipal and Private Sewage Works Approval Type:

Status: Approved

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

<u>Site:</u> KNL Developments Inc. Database:

Former Township of March Ottawa ON

Certificate #: 3666-7FFRAG

 Application Year:
 2008

 Issue Date:
 8/28/2008

Approval Type: Municipal and Private Sewage Works

Status: Approved

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

Application Type:

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 ApprovalClient 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. Database:
Sandhill Rd Kanata Ottawa ON CA

Order No: 20180618029

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:

Certificate #: 3-0372-96Application 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:

Certificate #:3-0927-95-Application Year:95Issue Date:7/19/1995Approval Type:Municipal sewageStatus: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:

 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

Order No: 20180618029

 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:

Order No: 20180618029

 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 Postription:

Project Description:: Contaminants:: Emission Control::

 Site:
 Database:

 Pt. Lots 7, 8, 9, 10, 11, Conc. 4 Nepean ON
 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 Database:
Part of Lots 9 and 10, Concession 4, Plan 4M-755 Ottawa ON CA

Certificate #: 2874-4UNSJN

Application Year: 01
Issue Date: 3/10/01

Approval Type: Municipal & Private sewage

Status: Approved

Application Type:New Certificate of ApprovalClient 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::

Briarridge Subdivision Site:

Part of Lots 9 and 10, Concession 4, Plan 4M-755 Ottawa ON

Certificate #: 5513-4VBK22

Application Year: 01 Issue Date: 4/2/01

Approval Type: Municipal & Private water

Approved Status:

Application Type: New Certificate of Approval Tenth Line Development Inc. Client Name:: 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

8454-4UNSYA Certificate #:

Application Year: 01 Issue Date: 3/10/01

Municipal & Private water Approval Type:

Status: Approved Application Type: Amended CofA

Tenth Line Development Inc. Client Name:: 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::**

West Carleton Sand & Gravel Inc. Site:

Part of Lots 11 and 12, Concession 4 Ottawa ON

Database: CA

Certificate #: 5875-6BDFW7

Application Year: 2006 Issue Date: 4/28/2006

Industrial Sewage Works Approval Type:

Status: Approved

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

Morgan's Grant Site:

Part of Lot 11, Concession 3 Ottawa ON

Database:

8692-54QSUG Certificate #:

Application Year: 01 Issue Date: 12/21/01

Municipal & Private sewage Approval Type: 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 Database:

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

Contaminants:: **Emission Control::**

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

7072-4LFPRF

Certificate #: Application Year: 00 Issue Date: 6/21/00

Municipal & Private sewage Approval Type:

Status: Approved

New Certificate of Approval Application Type: Client Name:: Minto Developments Inc. 427 Laurier Ave. West Client Address::

Client City:: Ottawa Client Postal Code:: K1R 7Y2

Sotrm and sanitary sewers to be constructed in Morgan's Grant Subdivision Phase 5C in the City of Kanata. Project Description::

Contaminants:: Emission Control::

Database: CA

Database:

Database:

Order No: 20180618029

CA

Site: Part of Lot 10, Concession 3 Kanata ON

0081-4LFQ7S Certificate #:

Application Year: 6/21/00 Issue Date:

Approval Type: Municipal & Private water

Status: Approved

New Certificate of Approval Application Type: 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:

Lot 10, Concession 3 Kanata ON 3314-4Q7RF4 Certificate #:

Morgan's Grant Subdivision Phase 5B

Application Year: 00 10/25/00 Issue Date:

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::

Lot 10, Concession 3 Kanata ON CA

4041-4PSKY2 Certificate #:

Application Year: 00 Issue Date: 10/5/00

Shirleys Brooke Drive

Approval Type: Municipal & Private sewage

Site:

Status: Approved

Application Type:New Certificate of ApprovalClient Name::Shell Canada LimitedClient 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 ApprovalClient 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:

Database: CA

Order No: 20180618029

 Certificate #:
 8141-4Q2Q3S

 Application Year:
 00

 Issue Date:
 10/13/00

Approval Type: Municipal & Private water

Status: Approved

Application Type:New Certificate of ApprovalClient 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

Certificate #: 8761-53CPYZ

Application Year:01Issue Date:10/11/01

Approval Type: Municipal & Private sewage

Status: Approved

Application Type: New Certificate of Approval Client Name:: New Certificate of Approval 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

Certificate #: 0828-4UMQX6

Application Year:01Issue Date:3/10/01

Approval Type: Municipal & Private sewage

Status: Approved

Application Type: New Certificate of Approval Client Name:: New Certificate of Approval 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

Certificate #: 3520-4Q2R3G

Application Year:00Issue 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

Order No: 20180618029

Database:

Database:

CA

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)

OWRA- -66(3) Act/Regulation/Section: 6/4/93

Date Charged:

Charge Disposition:

Fine: \$6,000

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

Database: CONV

File No.:

Publication Title: Publication City:

Url:

Crown Brief No.:

Ministry District:

EASTERN REGION Region:

Description: FAILED TO INSPECT OIL/WATER SEPARATOR WEEKLY & MAINTAIN LOG BOOK AT SITE

--Details--

Publication Date:

Count:

OWRA Act:

Regulation:

Section: 66(3)

OWRA- -66(3) Act/Regulation/Section:

Date Charged: 6/4/93

Charge Disposition:

Fine: \$1,000

Publication Date:

Count: Act: **OWRA**

Regulation:

Section: 66(3)

Act/Regulation/Section: OWRA- -66(3)

6/4/93 Date Charged:

Charge Disposition:

Fine: \$4,000

Site: West Carleton Sand & Gravel

Database: McGee Pit Ottawa Ontario Lot 11 and 12, Concession 4 Geographic Township of West Carelton City of Ottawa CITY **EBR**

OF OTTAWA ON

EBR Registry No.: IA05E0467 Ministry Ref. No.: 9797-6ASMMB Notice Type: Instrument Decision Notice Date: April 28, 2006 Proposal Date: April 11, 2005

2005 Year:

Proponent Address: 3725 Carp Road, P.O Box 264, Carp Ontario, K0A 1L0 Instrument Type: (OWRA s. 53(1)) - Approval for sewage works

West Carleton Sand & Gravel

Location Other:

Company Name:

Location:

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

CITY OF KANATA Site: Database: EXF KLONDIKE RD KANATA ON

Instance No: 10797969 Instance ID:41197Instance Type:FS PipingDescription:FS PipingStatus:EXPIRED

TSSA Program Area: Maximum Hazard Rank:

Facility Type: Expired Date:

Site: CITY OF KANATA

KLONDIKE RD KANATA ON K2L 2N3

Database: EXP

Database: EXP

Database:

EXP

Instance No: Instance ID:

Instance ID:

Instance Type: FS Liquid Fuel Tank

10797960

10798026

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

Instance No:

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

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

Order No: 20180618029

 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:

CITY OF KANATA Site: Database: **EXP**

KLONDIKE RD KANATA ON

10797999 Instance No: 40770 Instance ID: Instance Type: FS Piping FS Piping Description: **EXPIRED** Status:

TSSA Program Area: Maximum Hazard Rank:

Facility Type: **Expired Date:**

Site: CITY OF KANATA

KLONDIKE RD KANATA ON K2L 2N3

10798008 Instance No: Instance ID:

Instance Type: FS Liquid Fuel Tank

Description: Fuels Safety Private Fuel Outlet - Self Serve

EXPIRED Status:

TSSA Program Area: Maximum Hazard Rank:

FS Liquid Fuel Tank Facility Type:

12/29/1990 Expired Date:

CITY OF KANATA Site: Database: **EXP** KLONDIKE RD KANATA ON K2L 2N3

Instance No: 10797990

Instance ID:

Instance Type: FS Liquid Fuel Tank

Description: Fuels Safety Private Fuel Outlet - Self Serve

EXPIRED Status:

TSSA Program Area: Maximum Hazard Rank:

Facility Type: FS Liquid Fuel Tank

Expired Date: 8/29/1990

Site: CITY OF KANATA Database: KLONDIKE RD KANATA ON

10798017 Instance No:

41890 Instance ID: FS Piping Instance Type: FS Piping Description: Status: **EXPIRED**

TSSA Program Area: Maximum Hazard Rank:

Facility Type: Expired Date:

Site: CITY OF KANATA Database: KLONDIKE RD KANATA ON

Instance No: 10797984 Instance ID: 41317 FS Piping Instance Type: Description: FS Piping EXPIRED Status:

TSSA Program Area: Maximum Hazard Rank:

Facility Type:

Database: **EXP**

CITY OF KANATA Site:

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: Instance ID:

10797978

Instance Type:

FS Liquid Fuel Tank

Description:

Status:

EXPIRED

TSSA Program Area: Maximum Hazard Rank:

Facility Type:

Expired Date:

8/29/1990

CITY OF KANATA Site:

KLONDIKE RD KANATA ON K2L 2N3

Database: **EXP**

Instance No: Instance ID:

10798026

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

Instance No: Instance ID: Instance Type:

Description: Fuels Safety Private Fuel Outlet - Self Serve **EXPIRED**

9319126

384893

FS Facility

Status:

TSSA Program Area: Maximum Hazard Rank:

Facility Type: **Expired Date:**

Site: CITY OF KANATA

KLONDIKE RD KANATA ON K2L 2N3

Database: EXP

Order No: 20180618029

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 Database: KLONDIKE RD KANATA ON 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 Database: KLONDIKE RD KANATA ON K2L 2N3 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 Database: LOT 10, CONC. 3, CAMP 12 F.OP SITE IVY TWP., C/O 1335 CARLING AVE. OTTAWA ON K1Z 8N8 GEN

Generator No.: ON0009805 PO Box No.: Status: Country:

Approval Years: 94,95,96 Choice of Contact:
Contam. Facility: Co Admin:
MHSW Facility: Phone No. Admin:

SIC Code: 2599

SIC Description: OTHER WOOD IND.

--Details--

Waste Code: 252

Waste Description: WASTE OILS & LUBRICANTS

Site: E.B. EDDY FOREST PRODUCTS LTD. Database: LOT 10, CONC. 3, CAMP 12 F.OP SITE IVY TWP., C/0 1335 CARLING AVE. OTTAWA ON K1Z 8N8 GEN

Order No: 20180618029

Generator No.: ON0009805 PO Box No.:

Status: Country:
Approval Years: 90 Choice of Contact:
Contam. Facility: Co Admin:
MHSW Facility: Phone No. Admin:

SIC Code: 2599

SIC Description: OTHER WOOD IND.

--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**

Database:

Generator No.:

SIC Code:

ON0000713

4523

86,87,88,89,90

PO Box No.:

Status:

Country:

Approval Years:

Choice of Contact:

Contam. Facility:

SIC Description:

Co Admin: Phone No. Admin:

MHSW Facility:

Site:

C of A No:

AIRCRAFT SEVICING

--Details--

Waste Code:

Waste Description:

OIL SKIMMINGS & SLUDGES

Pierces Corners Landfill

The Corporation of the Township of Rideau

Part of Lot 11, Concession 3 City of Ottawa ON

C of A Issue Date:

A461201 11/17/1971

C of A Issued to: **Operation Status:**

Closed

Landfill Type: Total Site Area: Footprint:

Tot Apprvd Capac: Tot Aprv Cp Unit:

Fill Rate: Fill Rate Unit: Est Remain Cap: ERC Volume Unit:

ERC Methodology: ERC Dt Last Det: Total Waste Rec: TWR Unit:

TWR Methodology:

Site Name:

Air Emmis Monitor: Leachate Off-Site: Leachate On Site: Landfill Gas Manag (P): Landfill Gas Manag (F): Landfill Gas Manag (E):

Reg Col Lndfll Gas: Lndfll Gas Clicted: **Lndfll Gas Mntr:** Service Area:

Approved Waste Type:

LIMO Ottawa Site County: MOE Region: Eastern

Ottawa

MOE District: Easting: Northing: Latitude: Longitude: UTM Zone:

Data Source: small landfills

Cntm Attn Zn: **Grndwtr Mntr:** Surf Wtr Mntr: Lst Rprting Yr: Fin Assrnce: Nat Attnuatn: Liners: Cvr Material:

West Carleton Sand & Gravel Inc. Site: Lot 11-14, Conc 4 Ottawa ON

2006 Year:

Discharge Type: Industrial Sewage Sector: Miscellaneous District Area:

Type of Concern: C of A/Permit Non-Compliance SUSPENDED SOLIDS Contaminant:

Status Report:

--Details--

Database: NCPL

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 Operational Process Modification Facility Action:

ONTARIO HYDRO Site:

R. M. OTTAWA- CARLETON/ CONC. 3. LOT SOUTH MARCH T. S. Kanata ON

Database: **NPCB**

Database:

Database:

PRT

O0941 Company Code: Utility Industry:

Site Status: Stored for Disposal

11/9/1989 Transaction Date:

Inspection Date:

--Details--Label: Serial No.:

PCB Type/Code: Askarel/Inerteen

Location: Item/State: No. of Items: Manufacturer:

Stored for disposal Status:

Contents:

Site: CITY OF KANATA

KLONDIKE RD KANATA ON PRT

Location ID: 6728 retail Type:

Expiry Date: Capacity (L): 22730

Licence #: 0001052484

CITY OF KANATA Site:

KLONDIKE RD KANATA ON

Location ID: 6728 Type: private

Expiry Date:

36368.00 Capacity (L): 0001031141 Licence #:

Site: Kanata Research Park Corporation

Lots 8, 9 and 10, Concession 4, Ottawa, geographic area of Kanata CITY OF OTTAWA ON

Database: **PTTW**

Order No: 20180618029

EBR Registry No.: IA05E1015 ER-3083-67XPBX Ministry Ref. No.: Instrument Decision Notice Type: Notice Date: November 02, 2005 June 29, 2005 Proposal Date:

2005 Proponent Address: 555 Legget Drive, Kanata Ontario, K2K 2X3 Instrument Type: (OWRA s. 34) - Permit to Take Water

Location Other:

Location:

Year:

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

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

EBR Registry No.:

Ministry Ref. No.:

Notice Type:

Notice Date:

Proposal Date:

012-5618

6071-A3PQPJ

Instrument Decision

February 01, 2016

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

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.:

Ministry Ref. No.:

Notice Type:

Notice Date:

Proposal Date:

010-4784

6623-7JUKMA

Instrument Decision

April 29, 2009

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

Site: Mattamy (Half Moon Bay) Limited

Lot 11, 12, Concession 3, Ottawa, City CITY OF OTTAWA ON

 EBR Registry No.:
 010-5959

 Ministry Ref. No.:
 8783-7PCUC4

Database: PTTW

Order No: 20180618029

hase.

Notice Type:Instrument DecisionNotice Date:June 26, 2009Proposal 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

Database:

SPL

Order No: 20180618029

20103

 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:

Contaminant Name:

Contaminant Name:

Contaminant Limit 1:

Contam Limit Freq 1:

Contaminant UN No 1:

Contaminant Qty:

Site Name:

Site Address:

Site District Office:

Site County/District:

Site Postal Code:

Site Region:

Environment Impact: POSSIBLE Site Municipality: 20107

Nature of Impact:Water course or lakeSite Lot:Receiving Medium:LAND / WATERSite 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:2/25/2002Site 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

 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:

Contaminant Name:

Contaminant Limit 1:

Contam Limit Freq 1:

Contaminant UN No 1:

Site Postal Code:

Site Name:

Site Address:

Site District Office:

Site County/District:

Site Postal Code:

Contaminant UN No 1: Site Postal Code:
Contaminant Qty: Site Region:
Environment Impact: CONFIRMED Site Municipality:

Nature of Impact:Soil contaminationSite Lot:Receiving Medium:LANDSite Conc:Receiving Env:Northing:

 Health/Env Conseq:
 Easting:
 EPS

 MOE Response:
 Site Geo Ref Accu:

MOE Response:Site Geo Ref Accu:Dt MOE Arvl on Scn:Site Geo Ref Meth:MOE Reported Dt:7/3/1996Site Map Datum:

Dt Document Closed: SAC Action Class:

Incident Reason: **OTHER**

ONTARIO HYDRO: 250 ML OF PCB OIL (200 PPM) TO SOILCONTAINED AND CLEANED UP. Incident Summary:

Site: ESSO PETROLEUM CANADA

BULK STATION OTTAWA CITY ON

Database: SPL

Database:

Database:

Order No: 20180618029

SPL

Ref No: 155190 Discharger Report: Material Group: Site No: Incident Dt: 5/1/1998 Client Type:

Year: Sector Type: Incident Cause: OTHER CAUSE (N.O.S.) Source Type:

Incident Event: Nearest Watercourse: Site Name:

Contaminant Code: 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:

NOT ANTICIPATED Site Municipality: **Environment Impact:** 20101 Site Lot:

Nature of Impact: 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: 5/1/1998 MOE Reported Dt: 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

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:

Nearest Watercourse: Incident Event:

1961 Merivale Rd<UNOFFICIAL> Contaminant Code: 13 Site Name:

DIESEL FUEL Contaminant Name: Site Address: Contaminant Limit 1: Site District Office: Contam Limit Freg 1: Site County/District: Site Postal Code: Contaminant UN No 1: Contaminant Qtv: 8 L Site Region:

Environment Impact: Confirmed Site Municipality: Ottawa Nature of Impact:

soil contamiination Site Lot: Receiving Medium: 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

ESSO PETROLEUM CANADA

SERVICE STATION NEPEAN CITY ON

Ref No: 65520 Discharger Report: Site No: Material Group:

Site:

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:

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: **FRROR**

ESSO/TRW PETROLEUM: 30 L GASOLINE TO GROUND WHEN TANK OVERFILLED Incident Summary:

Site: ESSO PETROLEUM CANADA Database:

20104

Order No: 20180618029

TANK TRUCK (CARGO) OTTAWA CITY ON

Ref No: 47843 Discharger Report: Material Group: Site No: 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: Site Region: Contaminant Qty:

Environment Impact: NOT ANTICIPATED Site Municipality: 20101

Nature of Impact: Site Lot: Site Conc: Receiving Medium: LAND Receiving Env: Northing:

Health/Env Conseq: Easting: MOE Response: Site Geo Ref Accu:

Dt MOE Arvl on Scn: Site Geo Ref Meth: 3/20/1991 MOE Reported Dt: 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 Database: TANK TRUCK (CARGO) NEPEAN CITY ON 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 Freg 1: Site County/District: Site Postal Code: Contaminant UN No 1: Contaminant Qty: Site Region:

Environment Impact: NOT ANTICIPATED Site Municipality: 20104

Nature of Impact:Site Lot:Receiving Medium:LANDSite 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:5/29/1990Site Map Datum:

Dt Document Closed: SAC Action Class:

Incident Reason: ERROR

Incident Summary: IMPERIAL OIL - 10 L GASO- LINE TO CONCRETE. CLEAN UP COMPLETED.

Database:

Database:

SPL

Order No: 20180618029

20101

Site: ESSO PETROLEUM CANADA

TRANSPORT TRUCK (CARGO) OTTAWA CITY ON

 Ref No:
 59519
 Discharger Report:

 Site No:
 Material Group:

 Incident Dt:
 11/7/1991
 Client Type:

Year:Sector Type:Incident Cause:PIPE/HOSE LEAKSource Type:

Incident Event: Nearest Watercourse:

Contaminant Code:

Contaminant Name:

Contaminant Limit 1:

Contam Limit Freq 1:

Contaminant UN No 1:

Site Postal Code:

Contaminant Of:

Site Postal Code:

Site Postal Code:

Contaminant Qty: Site Region:
Environment Impact: NOT ANTICIPATED Site Municipality:

 Nature of Impact:
 Site Lot:

 Receiving Medium:
 LAND

 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:11/7/1991Site 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

 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:

Contaminant Name:

Contaminant Limit 1:

Contam Limit Freq 1:

Contaminant UN No 1:

Contaminant Qty:

Site Name:

Site Address:

Site District Office:

Site County/District:

Site Postal Code:

Site Region:

Environment Impact: NOT ANTICIPATED Site Municipality: 20101

 Nature of Impact:
 Site Lot:

 Receiving Medium:
 LAND

 Receiving Env:
 Northing:

 Hoolth/Env Conseq:
 Fasting:

Receiving Env:
Health/Env Conseq:
MOE Response:
Northing:
Easting:
Site Geo Ref Accu:

Dt MOE Arvl on Scn:Site Geo Ref Meth:MOE Reported Dt:2/21/1991Site Map Datum:

Dt Document Closed: SAC Action Class:

Incident Reason: **ERROR**

ESSO DISTRIB. STATION - 50 L FURNACE OIL SPILLED TO LOADING DOCK. OV/FILL. Incident Summary:

Site: Database: lot 11 ON

Data Entry Status:

1

9

Order No: 20180618029

Well ID: 1524142

Construction Date: Data Src:

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: 56282 Owner: Tag: Street Name:

Construction Method: OTTAWA-CARLETON County: 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: 10045914 Elevation: DP2BR: Elevrc: 1

Spatial Status: Zone: 18 Code OB: East83:

Code OB Desc: Bedrock Org CS: Open Hole: North83: Cluster Kind:

UTMRC: Date Completed: 30-AUG-89 UTMRC Desc: unknown UTM

Remarks: Location Method:

Elevrc Desc: Location Source Date: Improvement Location Source:

Overburden and Bedrock

Materials Interval

Improvement Location Method: Source Revision Comment: Supplier Comment:

931056979 Formation ID:

Layer: Color: 2 **GREY** General Color: Mat1: 05 Most Common Material: CLAY Mat2:

Other Materials: **GRAVEL**

Mat3: Other Materials:

Formation End Depth UOM:

Formation Top Depth: 0 Formation End Depth:

Formation ID: 931056980

Layer: 2 2 Color:

ft

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:

Method of Construction & Well

Method Construction ID: 961524142

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10594484

Casing No:

Comment: Alt Name:

Construction Record - Casing

930080381 Casing ID:

Layer: 1 Material: Open Hole or Material: STEEL

Depth From:

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

Casing Depth UOM: ft

Casing ID: 930080382 Layer: 2

Material: **OPEN HOLE**

Open Hole or Material:

Depth From: 100 Depth To: Casing Diameter: 6 Casing Diameter UOM: inch

ft Casing Depth UOM:

Results of Well Yield Testing

Pump Test ID: 991524142

Pump Set At:

Static Level: 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: Water State After Test: **CLOUDY**

Pumping Test Method: **Pumping Duration HR: Pumping Duration MIN:** 0

Ν Flowing:

Draw Down & Recovery

Pump Test Detail ID: 934652922

Test Type:

45 Test Duration: Test Level: 40 Test Level UOM: ft

934107723 Pump Test Detail ID:

Test Type:

Test Duration: 15 40 Test Level: Test Level UOM: ft

934391952 Pump Test Detail ID:

Test Type:

30 Test Duration: Test Level: 40 Test Level UOM: ft

Pump Test Detail ID: 934910122

Test Type:

Test Duration: 60 40 Test Level: Test Level UOM: ft

Water Details

Water ID: 933482687

Layer: Kind Code:

FRESH Kind: Water Found Depth: 63 Water Found Depth UOM: ft

Water ID: 933482688

Layer: 2 Kind Code: 1

FRESH Water Found Depth: 95 Water Found Depth UOM: ft

Site: Database: **WWIS** lot 11 ON

Order No: 20180618029

Well ID: 1526861 Data Entry Status:

Construction Date: Data Src:

Domestic 10/20/1992 Primary Water Use: Date Received: Sec. Water Use: Selected Flag: Yes

Final Well Status: Water Supply

Abandonment Rec: Water Type: Contractor:

3323 Casing Material: Form Version: 1 Audit No: NA Owner:

Street Name: Tag:

Construction Method: County: **OTTAWA-CARLETON** MARCH TOWNSHIP Elevation (m): Municipality:

Elevation Reliability: Site Info: Depth to Bedrock: 011 Lot:

Well Depth: Concession: Overburden/Bedrock: Concession Name: Pump Rate: Easting NAD83: Static Water Level: Northing NAD83:

Flowing (Y/N): Zone:

UTM Reliability: Flow Rate:

Clear/Cloudy:

Bore Hole Information

Bore Hole ID: 10048549 **DP2BR:** 7

Spatial Status:

Code OB:

Code OB Desc: Bedrock
Open Hole:

Cluster Kind:

Date Completed: 26-NOV-86

Remarks: 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 For Depth: 7
Formation End Depth UOM: ft

Annular Space/Abandonment

Elevation: Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Location Method: n

Sealing Record

Plug ID: 933112005

 Layer:
 1

 Plug From:
 0

 Plug To:
 18

 Plug Depth UOM:
 ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961526861

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10597119

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 930085001

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From:

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

Results of Well Yield Testing

Pump Test ID: 991526861

Pump Set At:

Static Level:6Final Level After Pumping:130Recommended Pump Depth:70Pumping 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

6 Test Level: 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

1534269

Layer: Kind Code:

FRESH Kind: Water Found Depth: 130 Water Found Depth UOM: ft

Site:

Well ID:

lot 11 ON

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:

Bore Hole Information

Bore Hole ID: 11097321 DP2BR:

Spatial Status:

Code OB: No formation data Code OB Desc:

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:

Data Entry Status:

Data Src: Date Received:

11/17/2003

Selected Flag: Yes

Abandonment Rec:

Contractor: 6907 Form Version: 2

Owner: Street Name:

OTTAWA-CARLETON County: Municipality: **NEPEAN TOWNSHIP**

Database:

Order No: 20180618029

Site Info: Lot:

011

Concession: Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Elevation:

Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC:

UTMRC Desc: unknown UTM

Location Method:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961534269

Method Construction Code:

Method Construction: Other Method

Other Method Construction:

Pipe Information

Pipe ID: 11101036

Casing No:

Comment: Alt Name:

Site:

| lot 11 | ON | Database: WWIS

Well ID: 1520591 Data Entry Status:

Construction Date: Data Src:

Primary Water Use: Domestic Date Received: 7/21/1986

Sec. Water Use: Selected Flag: Yes

Final Well Status: Water Supply

Water Supply

Abandonment Rec:

Contractor: 5222

Casing Material: Form Version: 1

Casing Material: Form Version: 1
Audit No: NA Owner:

 Tag:
 Street Name:

 Construction Method:
 County:
 OTTAWA-CARLETON

 Elevation (m):
 Municipality:
 MARCH TOWNSHIP

Elevation Reliability:

Depth to Bedrock:

Site Info:

Lot:

011

Well Depth: Concession:

Overburden/Bedrock: Concession Name:

Pump Rate: Easting NAD83:

Static Water Level: Northing NAD83:

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:
 10042433
 Elevation:

 DP2BR:
 7
 Elevro:

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: UTMRC Desc: UNKNOWN OTM

Order No: 20180618029

Elevrc Desc:
Location Source Date:
Improvement Location Source:

Overburden and Bedrock

Improvement Location Method: Source Revision Comment: Supplier Comment:

<u>Materials Interval</u>

 Formation ID:
 931045243

 Layer:
 2

 Color:
 1

General Color: WHITE **Mat1:** 18

Most Common Material: SANDSTONE

Mat2: 18

Other Materials: SANDSTONE

Mat3:73Other Materials:HARDFormation Top Depth:7Formation End Depth:35Formation 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 **PACKED** Other Materials: Formation Top Depth: 0 Formation End Depth: 7

Formation ID: 931045244

ft

 Layer:
 3

 Color:
 1

 General Color:
 WHITE

 Mat1:
 18

Formation End Depth UOM:

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

<u>Use</u>

Method Construction ID: 961520591

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10591003

Casing No:

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:22Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Results of Well Yield Testing

Pump Test ID: 991520591

Pump Set At:

Static Level:5Final Level After Pumping:30Recommended Pump Depth:30Pumping 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:934112478Test Type:Draw Down

 Test Duration:
 15

 Test Level:
 30

 Test Level UOM:
 ft

Pump Test Detail ID:934648364Test Type:Draw DownTest Duration:45Test Level:30

Test Level: 30
Test Level UOM: ft

Pump Test Detail ID:934906146Test Type:Draw Down

 Test Duration:
 60

 Test Level:
 30

 Test Level UOM:
 ft

Pump Test Detail ID:934387341Test Type:Draw DownTest Duration:30

 Test Duration:
 30

 Test Level:
 30

 Test Level UOM:
 ft

Water Details

Water ID: 933477877 **Layer:** 2

Kind Code: **FRESH** Kind: Water Found Depth: 49 ft Water Found Depth UOM:

933477876 Water ID:

Layer: Kind Code: **FRESH** Kind: Water Found Depth: 33 Water Found Depth UOM: ft

Site: Database: lot 11 ON

1531176 Well ID:

Construction Date: Primary Water Use: Domestic

Sec. Water Use: Final Well Status: Water Supply

Water Type: Casing Material:

Audit No: 206814

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:

Bore Hole Information

Bore Hole ID: 10052710

DP2BR: 25 Spatial Status:

Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 26-MAY-00

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

931077739 Formation ID: Layer: 2 Color: 2 General Color: **GREY**

Mat1: 22

Most Common Material: **GREENSTONE**

Mat2: 73 Other Materials: **HARD**

Mat3:

Data Entry Status:

Data Src:

Date Received: 6/12/2000 Selected Flag: Yes Abandonment Rec: Contractor: 6006 Form Version: 1

Owner: Street Name:

OTTAWA-CARLETON County: Municipality: MARCH TOWNSHIP

Site Info:

Lot: 011

Concession:

CON Concession Name:

Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Elevation:

Elevrc: 18

Zone: East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: na 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

<u>Use</u>

Method Construction ID: 961531176

Method Construction Code:

Method Construction: Rotary (Air)

Other Method Construction:

Pipe Information

Pipe ID: 10601280

Casing No:

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:

7 Static Level: Final Level After Pumping: 50 Recommended Pump Depth: 55 35 Pumping Rate: Flowing Rate: Recommended Pump Rate: 15 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: Pumping Duration HR: 1 Pumping Duration MIN: 0 Flowing: Ν

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

933491540 Water ID:

Layer: 2 Kind Code: **FRESH** Kind: Water Found Depth: 45 Water Found Depth UOM: ft

Site: Database: **WWIS** lot 11 ON

Well ID: 1520592 Data Entry Status:

Construction Date: Data Src: Primary Water Use: **Domestic** Date Received: 7/21/1986

Sec. Water Use: Selected Flag: Yes Final Well Status: Abandonment Rec:

Recharge Well 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 Site Info:

Elevation Reliability: 011 Depth to Bedrock: Lot:

Well Depth: Concession: Overburden/Bedrock: Concession Name:

Pump Rate: Easting NAD83: Static Water Level: Northing NAD83:

Flowing (Y/N): Zone: Flow Rate: UTM Reliability: Clear/Cloudy:

Bore Hole Information

Bore Hole ID: 10042434 Elevation: 4 DP2BR: Elevrc:

Spatial Status: Zone: 18

East83: Code OB: Code OB Desc: Bedrock Org CS: Open Hole: North83:

Cluster Kind: UTMRC: 02-JUL-86 UTMRC Desc: Date Completed: unknown UTM

9

Order No: 20180618029

Remarks: Location Method: na Elevrc Desc:

Location Source Date: Improvement Location Source:

Source Revision Comment: Supplier Comment:

Improvement Location Method:

Overburden and Bedrock

Materials Interval

Formation ID: 931045245

Layer: Color: 6

BROWN General Color: Mat1: 05 Most Common Material: **CLAY** Mat2: SANDY Other Materials:

Other Materials: **PACKED** Formation Top Depth: 0 Formation End Depth: 4

79

Mat3:

Formation End Depth UOM:

Formation ID: 931045246

 Layer:
 2

 Color:
 1

 General Color:
 WHITE

 Mat1:
 18

Most Common Material: SANDSTONE

Mat2: 78

Other Materials: MEDIUM-GRAINED

ft

Mat3:73Other Materials:HARDFormation Top Depth:4Formation End Depth:30Formation 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

<u>Use</u>

Method Construction ID:961520592Method Construction Code:5Method 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:22Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Results of Well Yield Testing

Pump Test ID: 991520592

Pump Set At:
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
30

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: 2
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID:934648365Test Type:Draw Down

 Test Type.
 518

 Test Duration:
 45

 Test Level:
 20

 Test Level UOM:
 ft

Pump Test Detail ID:934387342Test Type:Draw Down

 Test Duration:
 30

 Test Level:
 20

 Test Level UOM:
 ft

Pump Test Detail ID:934112479Test Type:Draw Down

 Test Duration:
 15

 Test Level:
 20

 Test Level UOM:
 ft

Pump Test Detail ID:934906147Test 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

<u>Site:</u>

| lot 11 | ON | Database: | WWIS | |

Well ID: 1521489 Data Entry Status:

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: Selected Flag: Yes
Abandonment Rec:

Contractor: 5222 Form Version: 1

Owner: Street Name:

County: OTTAWA-CARLETON Municipality: MARCH TOWNSHIP

7/2/1987

Site Info:

Data Src:

Date Received:

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137

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:

Overburden and Bedrock

Formation End Depth UOM:

Materials Interval

Formation ID: 931048222

Layer: 3 Color: **GREY** General Color: Mat1: 21 Most Common Material: **GRANITE** Mat2: 46 Other Materials: **QUARTZ** Mat3: 73 HARD Other Materials: Formation Top Depth: 70 115 Formation End Depth:

Formation ID: 931048223

ft

 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

Elevation: Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: na

Other Materials:HARDFormation Top Depth:38Formation End Depth:70Formation 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

<u>Use</u>

Method Construction ID: 961521489

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10591881

Casing No:

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:125Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Results of Well Yield Testing

Pump Test ID: 991521489

20

Pump Set At:
Static Level: 3
Final Level After Pumping: 55
Recommended Pump Depth: 55

Pumping Rate: Flowing Rate:

7 Recommended Pump Rate: Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: CLEAR Pumping Test Method: **Pumping Duration HR:** 2 **Pumping Duration MIN:** 0 Flowing: Ν

Draw Down & Recovery

Pump Test Detail ID:934390654Test Type:Draw Down

 Test Duration:
 30

 Test Level:
 55

 Test Level UOM:
 ft

Pump Test Detail ID:934651798Test Type:Draw Down

 Test Duration:
 45

 Test Level:
 55

 Test Level UOM:
 ft

Pump Test Detail ID:934106554Test 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 | WWIS | Database: | Database

II ID: 1525686 Data Entry Status:

Construction Date: 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:
 r

 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:

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

<u>Use</u>

Method Construction ID: 961525686

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10595991

Elevation:

Elevrc: 2one: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: na

Casing No: Comment:

Construction Record - Casing

Casing ID: 930083010

1

263

Layer: 2

Material: 4

Open Hole or Material: OPEN HOLE

Depth From: Depth To: Casing Diameter:

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:

Alt Name:

Depth To:22Casing Diameter:6Casing Diameter UOM:inchCasing 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:

60 Test Duration: 255 Test Level: Test Level UOM: ft

Water Details

Water ID: 933484743 Layer: 2 Kind Code:

FRESH Kind: Water Found Depth: 258 Water Found Depth UOM:

Water ID: 933484742

Layer: Kind Code: 1 Kind: **FRESH** Water Found Depth: 160 Water Found Depth UOM: ft

Database: Site: **WWIS** lot 10 ON

1518764 Well ID: Data Entry Status:

Construction Date:

Data Src: 1/10/1984 Primary Water Use: Date Received: Domestic Sec. Water Use: Selected Flag: Yes

Final Well Status: Water Supply Abandonment Rec: Water Type: Contractor: 3644 Casing Material: Form Version: 1 Audit No: Owner:

Tag: Street Name:

OTTAWA-CARLETON **Construction Method:** County: Elevation (m): Municipality: **NEPEAN TOWNSHIP**

Elevation Reliability: Site Info: Lot: 010 Depth to Bedrock:

Well Depth: Concession: CON Overburden/Bedrock: Concession Name:

Pump Rate: Easting NAD83: Static Water Level: Northing NAD83:

Flowing (Y/N): Zone:

UTM Reliability: Flow Rate: Clear/Cloudy:

Bore Hole Information

Bore Hole ID: 10040634 Elevation: DP2BR: 88 Elevrc:

18 Spatial Status: Zone: Code OB: East83:

Code OB Desc: Bedrock Org CS: North83: Open Hole:

Cluster Kind: UTMRC: 9 UTMRC Desc:

Date Completed: 25-NOV-83 unknown UTM

Order No: 20180618029

Remarks: Location Method: Elevrc Desc:

Overburden and Bedrock **Materials Interval**

Location Source Date: Improvement Location Source: Improvement Location Method: **Source Revision Comment:** Supplier Comment:

Formation ID: 931039483

 Layer:
 2

 Color:
 2

 General Color:
 GREY

 Mat1:
 14

Most Common Material: HARDPAN Mat2: 11
Other Materials: GRAVEL

Other Materials: 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

<u>Use</u>

Method Construction ID: 961518764

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10589204

Casing No:

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:105Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Results of Well Yield Testing

Pump Test ID: 991518764

Pump Set At:

Static Level: 0 20 Final Level After Pumping: Recommended Pump Depth: 20 Pumping Rate: 20 Flowing Rate: Recommended Pump Rate: 10 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: CLOUDY Pumping Test Method: **Pumping Duration HR:** Pumping Duration MIN: 0 Flowing: Ν

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:
 60

 Test Duration:
 20

 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: Database:

3644

Order No: 20180618029

1

lot 10 ON

Well ID: 1521613 Data Entry Status: Data Src:

Construction Date:

Primary Water Use: Domestic Date Received: 8/17/1987

Sec. Water Use: Selected Flag: Yes Abandonment Rec:

Water Supply Final Well Status:

Water Type: Contractor: Casing Material: Form Version:

07137 Audit No: Owner: Tag: Street Name:

OTTAWA-CARLETON Construction Method: County: 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: East83:

Code OB Desc: Org CS: **Bedrock** Open Hole: North83:

9 Cluster Kind: UTMRC:

Date Completed: 29-MAY-87 UTMRC Desc: unknown UTM

Remarks: Location Method: Elevrc Desc: Location Source Date:

Overburden and Bedrock

Improvement Location Source: Improvement Location Method: **Source Revision Comment:** Supplier Comment:

Materials Interval

931048632 Formation ID: Layer: 2 2 Color: **GREY** General Color: 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: Color: 2 General Color: **GREY** 05 Mat1: CLAY Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 0
Formation End Depth: 48
Formation End Depth UOM: ft

Formation ID: 931048634

Layer: 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

<u>Use</u>

Method Construction ID: 961521613

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Alt Name:

Pipe ID: 10592005

Casing No: 1
Comment:

Construction Record - Casing

Casing ID: 930075880

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To:225Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Casing ID: 930075879

Layer: 1
Material: 1

Open Hole or Material: **STEEL** Depth From: 100 Depth To: 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: 210 210 Recommended Pump Depth: Pumping Rate:

Flowing Rate:

Recommended Pump Rate: 5 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLOUDY** Pumping Test Method: 1

Pumping Duration HR: 1 **Pumping Duration MIN:** 0 Ν Flowing:

Draw Down & Recovery

934107088 Pump Test Detail ID:

Test Type:

Test Duration: 15 210 Test Level: Test Level UOM: ft

934390770 Pump Test Detail ID:

Test Type:

Test Duration: 30 Test Level: 210 Test Level UOM: ft

934909981 Pump Test Detail ID:

Test Type:

Test Duration: 60 Test Level: 210 Test Level UOM: ft

Pump Test Detail ID: 934652331

Test Type:

Test Duration: 45 210 Test Level: Test Level UOM:

Water Details

Water ID: 933479252

Layer: Kind Code: 5

Not stated Kind: Water Found Depth: 190 Water Found Depth UOM: ft

Site: Database: **WWIS** lot 10 ON

Order No: 20180618029

1521663 Well ID: Data Entry Status:

Construction Date: Data Src: 1 Primary Water Use: Domestic

Sec. Water Use:
Final Well Status: Water Supply

Water Type: Casing Material:

Audit No: 08597

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:** 8/14/1987

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: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 10043485

DP2BR: 59

Spatial Status: Code OB:

Code OB Desc: Bedrock

Open Hole: Cluster Kind:

Date Completed: 28-JUL-87

Remarks: 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

 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

Elevation: Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: na

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

<u>Use</u>

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: 220 220 Recommended Pump Depth: Pumping Rate: 3

Flowing Rate:

Recommended Pump Rate: 5 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: CLOUDY Water State After Test:

Pumping Test Method: **Pumping Duration HR:** 0 **Pumping Duration MIN:** Flowing: Ν

Draw Down & Recovery

934107556 Pump Test Detail ID:

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

934652800 Pump Test Detail ID:

Test Type:

45 Test Duration: 220 Test Level: Test Level UOM: ft

934910031 Pump Test Detail ID:

Test Type:

Test Duration: 60 Test Level: 220 Test Level UOM: ft

Water Details

933479327 Water ID: Layer: Kind Code: Kind: **FRESH** Water Found Depth: 215

Site: lot 10 ON

Water Found Depth UOM:

Database:

Data Src:

1524141 Well ID:

Construction Date:

Primary Water Use: Domestic

Sec. Water Use:

Final Well Status: Water Supply

Water Type:

Casing Material:

49834 Audit No:

ft

Contractor: Form Version:

Data Entry Status:

Abandonment Rec:

Date Received:

Selected Flag:

1/26/1990

Yes

3644

Owner: Street Name:

erisinfo.com | Environmental Risk Information Services

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:

OTTAWA-CARLETON County: Municipality: MARCH TOWNSHIP

Site Info:

010 Lot:

Concession: Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

10045913 Bore Hole ID: 6

DP2BR: Spatial Status:

Code OB:

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:

Overburden and Bedrock Materials Interval

Formation ID: 931056978 Layer: 2 2 Color:

General Color: **GREY** Mat1: 18

SANDSTONE Most Common Material: Mat2: 90

Other Materials: **VERY** 73 Mat3: Other Materials: HARD Formation Top Depth: 6 Formation End Depth: 80 Formation End Depth UOM:

Formation ID: 931056977

Layer: 2 Color: General Color: **GREY** Mat1: 05 Most Common Material: CLAY Mat2: 12 **STONES** Other Materials:

Mat3:

Other Materials: Formation Top Depth: 0 Formation End Depth: 6 ft

Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961524141

Method Construction Code:

Elevation:

Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10594483

Casing No:
Comment:

Alt Name:

Construction Record - Casing

Casing ID: 930080380

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To:80Casing Diameter:6Casing Diameter UOM:inchCasing Depth UOM:ft

Casing ID: 930080379

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

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

Results of Well Yield Testing

Pump Test ID: 991524141

Pump Set At:

8 Static Level: Final Level After Pumping: 40 Recommended Pump Depth: 40 Pumping Rate: 30 Flowing Rate: Recommended Pump Rate: 10 Levels UOM: ft GPM Rate UOM: Water State After Test Code: 2 Water State After Test: **CLOUDY** Pumping Test Method: 1 Pumping Duration HR: 1 **Pumping Duration MIN:** 0

Draw Down & Recovery

Pump Test Detail ID: 934107722

Ν

Test Type:

Flowing:

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 40 Test Level: Test Level UOM: ft

934910121 Pump Test Detail ID:

Test Type:

Test Duration: 60 Test Level: 40 Test Level UOM: ft

Water Details

Water ID: 933482686 2

Layer: Kind Code: 1 Kind: **FRESH** Water Found Depth: 75 Water Found Depth UOM:

933482685 Water ID:

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

Site: Database: lot 10 ON **WWIS**

Order No: 20180618029

Well ID: 1524851 Data Entry Status:

Construction Date: Data Src:

9/17/1990 Primary Water Use: Domestic Date Received: Yes

Sec. Water Use: Selected Flag:

Final Well Status: Water Supply Abandonment Rec: 3644 Water Type: Contractor:

Casing Material: Form Version: 1 Audit No: 68406 Owner:

Street Name: Tag:

Construction Method: County: OTTAWA-CARLETON MARCH TOWNSHIP Municipality: Elevation (m):

Elevation Reliability: Site Info: Depth to Bedrock: Lot: 010

Well Depth: Concession: Overburden/Bedrock: Concession Name: Easting NAD83: Pump Rate:

Static Water Level: Northing NAD83: Flowing (Y/N): Zone:

Flow Rate: UTM Reliability: Clear/Cloudy:

Bore Hole Information

Improvement Location Source:

Bore Hole ID: 10046594 Elevation: DP2BR: 0 Elevrc:

Spatial Status: 18 Zone:

Code OB: East83: Code OB Desc: Mixed in a Layer Org CS: Open Hole: North83:

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Cluster Kind: **UTMRC**: UTMRC Desc: 12-JUL-90 unknown UTM Date Completed:

Remarks: Location Method: na

Elevrc Desc:

Location Source Date:

Improvement Location Method: Source Revision Comment: Supplier Comment:

Overburden and Bedrock

Materials Interval

Formation ID: 931059281 Layer: Color: 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

931059280 Formation ID:

Layer: Color: 2 General Color: **GREY** Mat1: 05 Most Common Material: CLAY Mat2: 26 **ROCK** Other Materials:

Mat3:

Other Materials:

0 Formation Top Depth: Formation End Depth: 5 Formation End Depth UOM: ft

931059282 Formation ID:

Layer: Color: General Color: WHITE Mat1: 18

SANDSTONE Most Common Material:

73 Mat2: Other Materials: **HARD**

Mat3:

Other Materials:

18 Formation Top Depth: 63 Formation End Depth: Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961524851

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10595164 Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 930081576

Layer:

Material:

Open Hole or Material:

Depth From:

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

Casing ID: 930081577

Layer: 2

Material:

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:10Final Level After Pumping:45Recommended Pump Depth:45Pumping Rate:25Flowing Rate:

Recommended Pump Rate:

Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2

Water State After Test: CLOUDY

15

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

933483612 Water ID:

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

Site: Database: **WWIS** lot 10 ON

Yes

18

9

Order No: 20180618029

Well ID: 1524853 Data Entry Status: Construction Date: Data Src:

Primary Water Use: **Domestic** Date Received: 9/17/1990

Sec. Water Use: Selected Flag: 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: OTTAWA-CARLETON County: Elevation (m): Municipality: MARCH TOWNSHIP

Elevation Reliability: Site Info: 010 Depth to Bedrock: Lot:

Well Depth: Concession: Overburden/Bedrock: Concession Name:

Pump Rate: Easting NAD83: Static Water Level: Northing NAD83:

Flowing (Y/N): Zone: Flow Rate: UTM Reliability: Clear/Cloudy:

Bore Hole Information

Bore Hole ID: 10046596 Elevation: 5 DP2BR: Elevrc:

Spatial Status: Zone:

East83: Code OB: Code OB Desc: Bedrock Org CS: Open Hole: North83:

Cluster Kind: UTMRC: 12-JUL-90 UTMRC Desc: Date Completed: unknown UTM

Remarks: Location Method: na

Elevrc Desc:

Overburden and Bedrock **Materials Interval**

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

Formation ID: 931059285

Layer: Color: 2 **GREY** General Color: Mat1: 05 Most Common Material: **CLAY** Mat2: 12

Other Materials: **STONES**

Other Materials: Formation Top Depth: 0

5

Formation End Depth:

Mat3:

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

<u>Use</u>

Method Construction ID: 961524853

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10595166

Casing No:

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

Final Level After Pumping:

991524853 Pump Test ID:

Pump Set At: Static Level:

10 50 Recommended Pump Depth: 50

15

Pumping Rate: Flowing Rate:

Recommended Pump Rate: 15

Levels UOM: ft Rate UOM: **GPM** Water State After Test Code:

Water State After Test: **CLOUDY** Pumping Test Method: **Pumping Duration HR:** 1 **Pumping Duration MIN:** 0 Ν Flowing:

Draw Down & Recovery

Pump Test Detail ID: 934110032

Test Type:

Test Duration: 15 Test Level: 50 Test Level UOM: ft

934385441 Pump Test Detail ID:

Test Type:

30 Test Duration: Test Level: 50 Test Level UOM: ft

934655219 Pump Test Detail ID:

Test Type:

45 Test Duration: Test Level: 50 Test Level UOM: ft

Pump Test Detail ID: 934903596

Test Type:

Test Duration: 60 50 Test Level: Test Level UOM: ft

Water Details

Water ID: 933483615 Layer: 1

Kind Code: **FRESH** Kind: Water Found Depth: 70 Water Found Depth UOM: ft

Site: Database: **WWIS** lot 10 ON

Order No: 20180618029

Well ID: Data Entry Status: 1524890

Construction Date: Data Src:

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:

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:

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:

Formation End Depth: 10
Formation End Depth UOM: ft

Formation ID: 931059407

0

 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

Elevation: Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Location Method: na

Most Common Material:HARDPANMat2:05Other Materials:CLAY

Other Materials: 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

<u>Use</u>

Method Construction ID: 961524890

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10595203

Casing No:

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:

Water State After Test Code: 2
Water State After Test: CLOUDY

Pumping Test Method: 1

Pumping Duration HR: 0 **Pumping Duration MIN:** Flowing: Ν

Draw Down & Recovery

934385896 Pump Test Detail ID:

Test Type:

Test Duration: 30 Test Level: 60 Test Level UOM: ft

Pump Test Detail ID: 934110488

Test Type:

Test Duration: 15 60 Test Level: 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: Kind Code: Kind: **FRESH** 108 Water Found Depth: Water Found Depth UOM: ft

Database: Site: lot 10 ON

Well ID: 1528729

Construction Date: Domestic

Primary Water Use: 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:

9/21/1995 Date Received: Selected Flag: Yes

Abandonment Rec:

Contractor: 3323 Form Version:

Owner: Street Name:

OTTAWA-CARLETON County: Municipality: MARCH TOWNSHIP

Order No: 20180618029

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: Code OB Desc:

Open Hole:

Bedrock

Elevrc:

East83:

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method:

Zone:

18

na

unknown UTM

Order No: 20180618029

Cluster Kind:

14-AUG-95 Date Completed:

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

931070612 Formation ID:

Layer: 2 Color: **GREY** General Color: Mat1: 15

LIMESTONE Most Common Material:

Mat2: 18

SANDSTONE Other Materials:

Mat3:

Other Materials:

6 Formation Top Depth: Formation End Depth: 80 Formation End Depth UOM:

931070611 Formation ID:

Layer: Color: 2 General Color: **GREY** 05 Mat1: Most Common Material: CLAY Mat2: 01 FILL Other Materials:

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: Plug From: 7 20 Plug To: Plug Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961528729

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

163

Pipe ID: 10598835

Casing No: Comment: Alt Name:

Construction Record - Casing

Casing ID: 930087844

Layer: 1 Material: 1

Open Hole or Material: STEEL

Depth From:
Depth To:
Casing Diameter:
Casing Diameter UOM:
Casing Depth UOM:

ft

Results of Well Yield Testing

Pump Test ID: 991528729

Pump Set At:

Static Level:6Final Level After Pumping:80Recommended Pump Depth:60Pumping Rate:50Flowing Rate:

Recommended Pump Rate: 30
Levels UOM: ft
Rate UOM: GPM

Water State After Test Code: Water State After Test: Pumping Test Method:

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 Data Entry Status:

 Construction Date:
 Data Src:

 Primary Water Use:
 Date Received:
 9/29/2005

 Sec. Water Use:
 Selected Flag:
 Yes

 Final Well Status:
 Abandonment Rec:

 Water Type:
 Contractor:
 6907

 Casing Material:
 Form Version:
 3

Casing Material:Form Version:Audit No:Z17653Owner:

Tag: Street Name: Construction Method: County:

Construction Method:County:OTTAWA-CARLETONElevation (m):Municipality:OTTAWA CITYElevation Reliability:Site Info:

Depth to Bedrock:Lot:010Well Depth:Concession:

Overburden/Bedrock: Concession. Concession. Name: Pump Rate: Easting NAD83: Static Water Level: Northing NAD83:

Flowing (Y/N): Northing NAD83.

Flow Rate: UTM Reliability: Clear/Cloudy:

Bore Hole Information

Bore Hole ID: 11316364

DP2BR: Spatial Status: Code OB:

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:

Overburden and Bedrock

Materials Interval

Formation ID: 932997253

Layer: 1

Color: General Color:

Mat1:

Most Common Material: Mat2:

Other Materials:

Elevation:
Elevrc:
Zone:
East83:
Org CS:
North83:
UTMRC:

UTMRC Desc:

Location Method: na

Mat3:

Other Materials:

Formation Top Depth: 0
Formation End Depth: 19
Formation End Depth UOM: ft

Formation ID: 932997254

Layer: 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

<u>Use</u>

Method Construction ID: 961535825

Method Construction Code:

Method Construction: Other Method

Other Method Construction:

Pipe Information

Pipe ID: 11331219

Casing No: 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:

Recommended Pur 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:

<u>Site:</u>

con 4 ON

Database:

WWIS

Data Entry Status:

Abandonment Rec:

Well ID: 1530124

Construction Date: Data Src:

Primary Water Use:DomesticDate Received:8/14/1998Sec. Water Use:Selected Flag:Yes

Final Well Status: Water Supply

Water Type: Contractor: 1558
Casing Material: Form Version: 1

 Audit No:
 194690
 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:

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:

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:

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

Elevation: Elevrc:

Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: na

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

<u>Use</u>

Method Construction ID: 961530124

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10600229

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 930090016

Layer: 1
Material: 1

Open Hole or Material:

Depth From:
Depth To:
Casing Diameter:
Casing Diameter UOM:
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:

Not stated Kind: Water Found Depth: 40 ft Water Found Depth UOM:

933490176 Water ID:

Layer: 2 Kind Code: 5

Kind: Not stated Water Found Depth: 93 Water Found Depth UOM: ft

Site: Database: lot 10 ON

1521190 Well ID:

Construction Date: Primary Water Use: Domestic

Sec. Water Use: Final Well Status: Water Supply

Water Type: Casing Material:

Audit No: 02155

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: 2/10/1987 Selected Flag: Yes Abandonment Rec: Contractor: 3644 Form Version: 1

Owner: Street Name:

OTTAWA-CARLETON County: Municipality: **NEPEAN TOWNSHIP**

Site Info:

Lot: 010

Concession: Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 10043026

DP2BR: Spatial Status:

Code OB:

Code OB Desc: Overburden

Open Hole:

Cluster Kind:

Date Completed: 28-NOV-86

Remarks: Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

931047134 Formation ID:

Layer: 2 Color: 2 General Color: **GREY** Mat1: 14 Most Common Material: **HARDPAN**

Mat2: Other Materials: **GRAVEL**

Mat3:

Elevation:

Elevrc: Zone: 18

East83: Org CS: North83:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 20180618029

Location Method: na 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:

Formation End Depth:

54
Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961521190

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10591596

Casing No:

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

934908365 Pump Test Detail ID:

Test Type:

Test Duration: 60 Test Level: 30 Test Level UOM: ft

Pump Test Detail ID: 934389008

934105889

Test Type:

Test Duration: 30 Test Level: 30 Test Level UOM: ft

Pump Test Detail ID:

Test Type:

Test Duration: 15 Test Level: 30 Test Level UOM: ft

934651136 Pump Test Detail ID:

Test Type:

Test Duration: 45 30 Test Level: Test Level UOM: ft

Water Details

933478678 Water ID: Layer: 1 Kind Code: Kind: **FRESH** Water Found Depth: 80 Water Found Depth UOM: ft

Site: lot 10 ON

Database: **WWIS**

Order No: 20180618029

Well ID: 1522769

Construction Date: Domestic

Primary Water Use:

Sec. Water Use:

Final Well Status: Water Supply

Water Type:

Casing Material: Audit No: 27111

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:

10/26/1988 Date Received:

Selected Flag: Yes

Abandonment Rec:

Contractor: 3644 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

10044578 Bore Hole ID: Elevation: DP2BR: 5 Flevro:

Spatial Status: Zone: 18

East83: Code OB: Code OB Desc: Bedrock Org CS: Open Hole: Cluster Kind:

Date Completed:

Remarks:

16-SEP-88

North83:

UTMRC:

UTMRC Desc:

Location Method:

unknown UTM

na

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

Formation ID: 931052522

Layer: 2 Color: General Color: **GREY** Mat1: 05 Most Common Material: CLAY Mat2: 12 **STONES** Other Materials:

Mat3:

Other Materials: Formation Top Depth: 0 Formation End Depth: 5 Formation End Depth UOM: ft

931052523 Formation ID:

2 Layer: Color: WHITE General Color: Mat1: 18

SANDSTONE Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 5 60 Formation End Depth: Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961522769

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

Pipe ID: 10593148

Casing No:

Comment: Alt Name:

Construction Record - Casing

930077965 Casing ID:

Layer: Material: Open Hole or Material: STEEL

Depth From:

173

22 Depth To:

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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:

6 Static Level: Final Level After Pumping: 30 Recommended Pump Depth: 30 30 Pumping Rate: Flowing Rate: Recommended Pump Rate: 10 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: CLOUDY Water State After Test: Pumping Test Method: Pumping Duration HR: 1 Pumping Duration MIN: 0 Flowing: Ν

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

Well ID: 1532192

Construction Date:
Primary Water Use: Domestic

Sec. Water Use:
Final Well Status: Water Supply

Water Type:

Casing Material:

Audit No: 234540

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: 8/28/2001 Selected Flag: Yes

Abandonment Rec:

Contractor: 4609 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: 10516642

DP2BR: 3
Spatial Status:

Code OB: r Code OB Desc: Bedrock

Open Hole:

Cluster Kind:

Date Completed: 19-JUL-01

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

Order No: 20180618029

Location Method: na

Overburden and Bedrock

Materials Interval

Formation ID: 932832124

Layer: 1
Color: 6
General Color: Bi

 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

<u>Use</u>

Method Construction ID: 961532192

Method Construction Code:

Method Construction: Rotary (Air)

Other Method Construction:

Pipe Information

Pipe ID: 11065212

Casing No:

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:6Casing Diameter UOM:inchCasing Depth UOM:ft

Casing ID: 930094297

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From: Depth To:

Casing Diameter:6Casing Diameter UOM:inchCasing 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:ftRate UOM:GPMWater State After Test Code:2Water State After Test:CLOUDYPumping Test Method:1Pumping Duration HR: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

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

Order No: 20180618029

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

<u>Chemical Register:</u> 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

Order No: 20180618029

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

Order No: 20180618029

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

CS

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 FS:

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

Order No: 20180618029

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:

=ederal

NDFT

Order No: 20180618029

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

IEES

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

Order No: 20180618029

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*

<u>Pesticide Register:</u> 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

Order No: 20180618029

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

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

SCT

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

Order No: 20180618029

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

Order No: 20180618029

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

<u>Database Descriptions:</u> This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

<u>Detail Report</u>: 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.

<u>Distance:</u> The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

<u>Direction</u>: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

<u>Elevation:</u> 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.

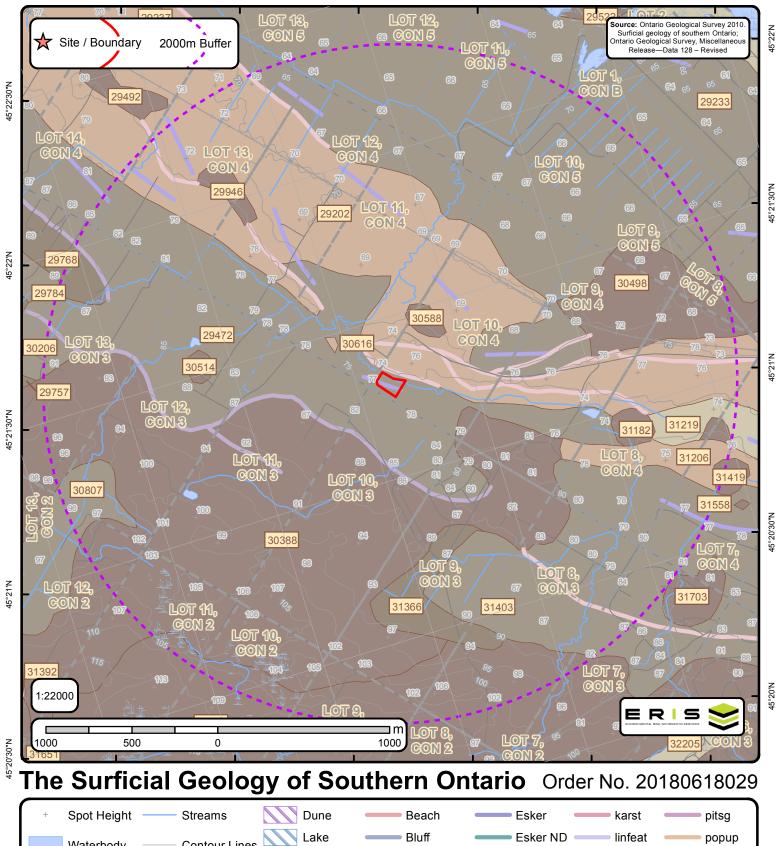
'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

<u>Map Key:</u> 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.'

<u>Unplottables:</u> 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.

Order No: 20180618029



75°55'W

75°54'30"W

75°54'W

75°55'30"W

75°56'30"W





Page 1 **Order ID:** 20180618029



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 bluegrey; 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



Page 2 **Order ID:** 20180618029



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: | Sub Episode: | Phase: | Stratus Modifier: Surface | Provenance: | Carbon Content: | Formation: | Permeability: Variable | Material Description: Limestone, dolomite, sandstone, and locally shale: relatively flat lying: mainly occurring 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.



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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.



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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



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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.

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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).

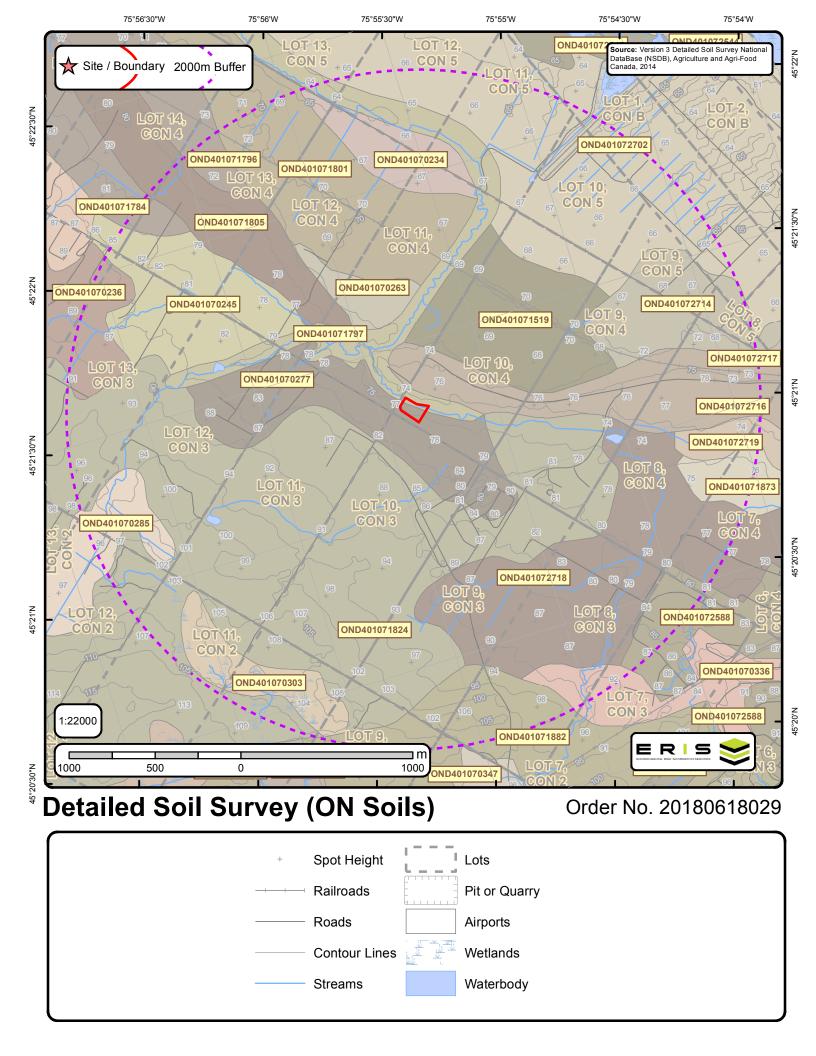
Provenance - This attribute provides the user with information regarding the provenance of a particular till unit (i.e. direction or lobe from which the till is derived).

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'.



Page 1 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 : Ckq | 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 Sand(%) : -9 | Total Clay(%) : -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

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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 $\textbf{Conductivity(dS/m)}: 0] \mid \textbf{Depth(cm)}: 25-42 \mid \textbf{Horizon}: Bfgj \mid \textbf{Layer No}: 5 \mid \textbf{Very Fine Sand(\%)}: 43 \mid \textbf{Total Sand(\%)}: 92 \mid \textbf{Morizon}: Bfgj \mid \textbf{Layer No}: 5 \mid \textbf{Very Fine Sand(\%)}: 43 \mid \textbf{Morizon}: 92 \mid \textbf{Morizon$ 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

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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 | Total Clay(%) : -9 | Total Clay(%) : 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 | Parent Material Chemical Property 1|2|3 : Not Applicable; Not Applicable | Parent Material Chemical Property 1|2|3 : Not Applicable; Not Applicable; Not Applicable | Not Applicable; Not Applicable | Not App

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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; Not Applicable; Not Applicable; Not Applicable | Parent Material Chemical Property 1|2|3 : Not Applicable; Not Applicable; Not Applicable; Not Applicable | No

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

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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 | Electrical Conductivity(dS/m) : None | Electrical Conductivity(dS/m) : 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

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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:Cq | 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 |

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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 | Electrical Conductivity(dS/m) : None | Electrical Conductivity(dS/m) : 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 |

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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; Not Applicable | Parent Material Chemical Property 1|2|3 : Not Applicable; Not Applicable | Not Applicable |

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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

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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 | 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 |

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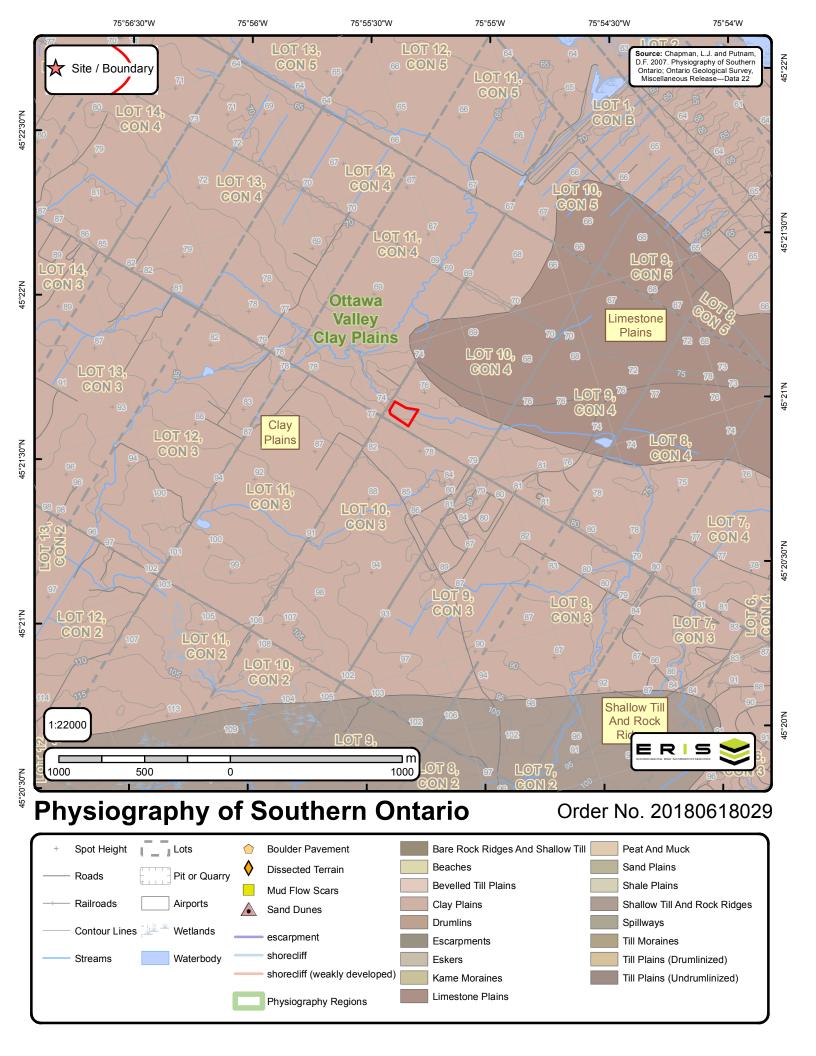


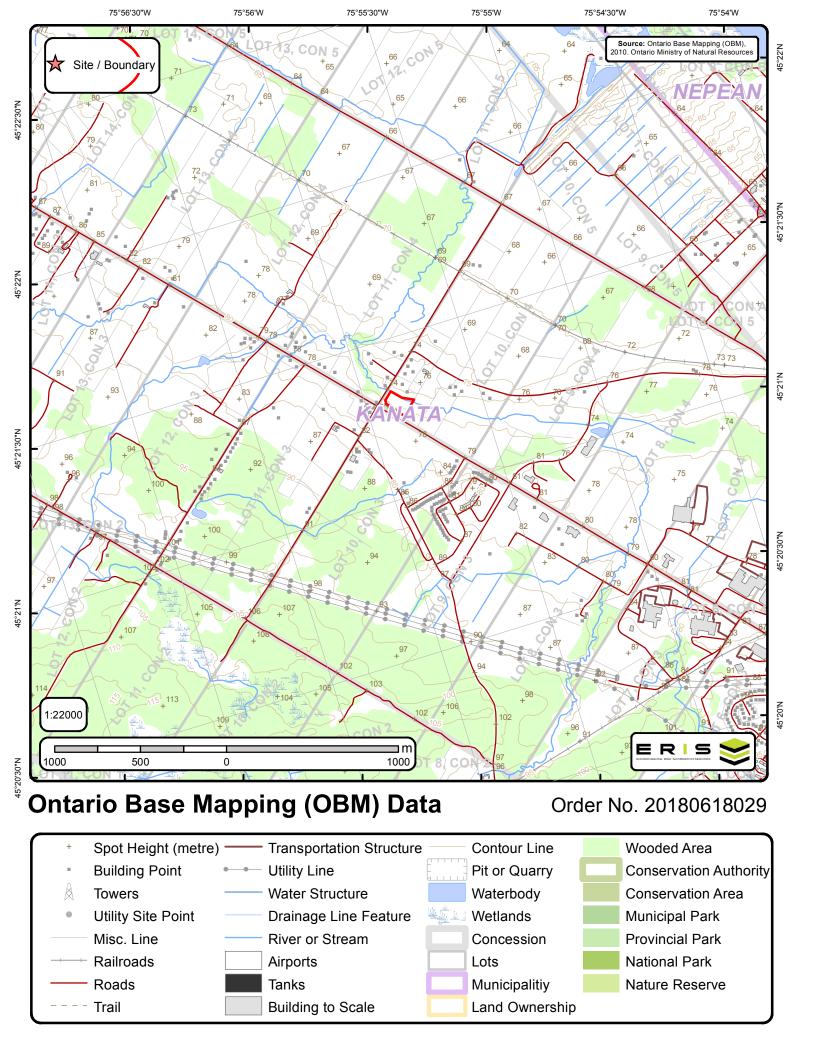
Soil ID: OND401071519

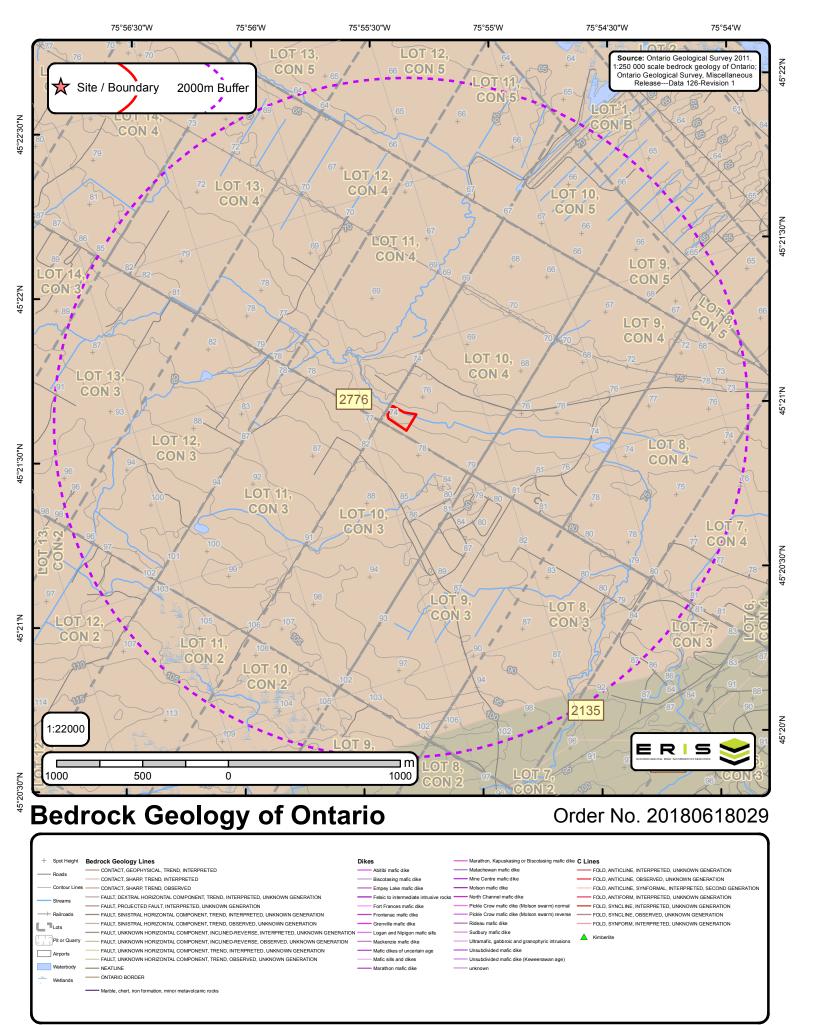
Component No : 2 | Components(%) : 30 | Soil Name ID : ONSPD~~~~N | Surface Stoniness Class : Nonstony | Slop Steepness(%): 1.2 | Slop Length(m): -9 | Drainage: Imperfectly | Hydrological Soil Groups: Soils with moderate infiltration rates when completely wetted. Soils are sandy loam soils with moderately 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: Bfg| 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:Bfg| 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 |







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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) MESOPROTEROZOIC (1.0 Ga to 1.6 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)

PALEOZOIC (251.0 Ma to 542.0 Ma)

EARLY PALEOZOIC (0.542 Ga to 1.6 Ga)

PALEOZOIC (251.0 Ma to 542.0 Ma) MESO-TO PALEOPROTEROZOIC (1.0 Ga to 2.5 Ga) 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)

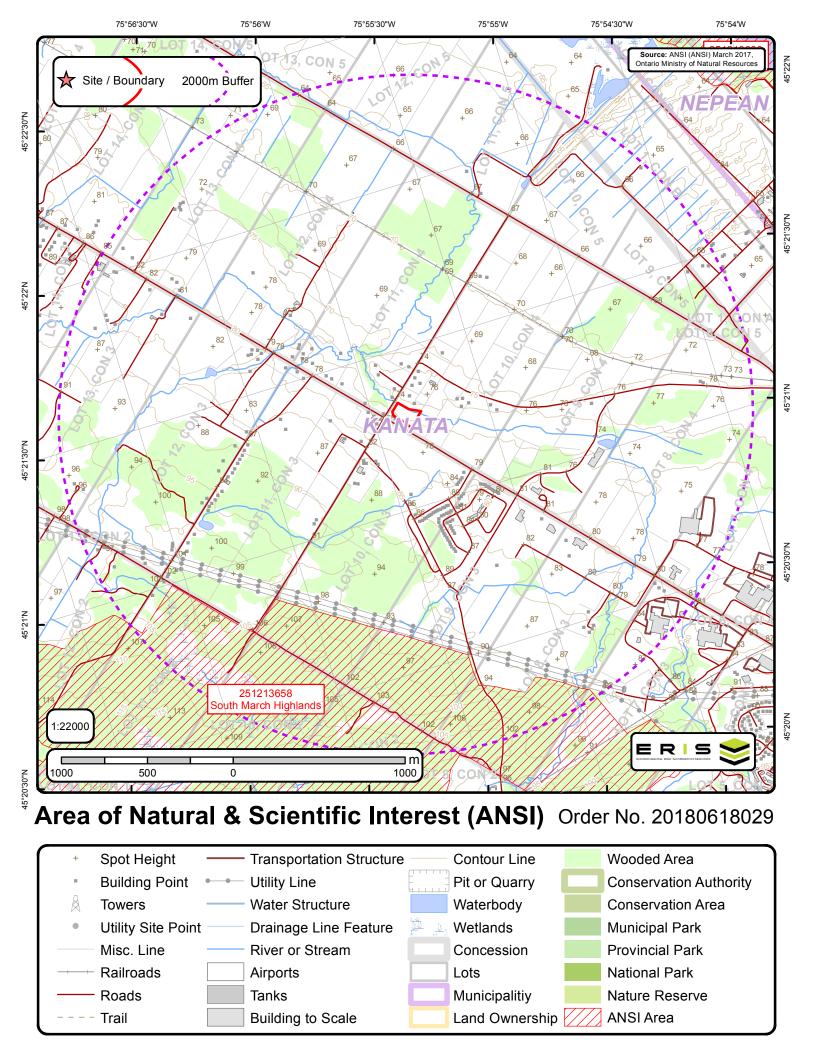
Epoch (Primary) - A name given to a defined unit of geological time. Unique values which this field may contain (Domains) are:

LOWER ORDOVICIAN UPPER SILURIAN MIDDLE ORDOVICIAN LOWER DEVONTAN UPPER ORDOVICIAN MIDDLE DEVONIAN MIDDLE AND LOWER SILURIAN UPPER DEVONTAN

UPPER SILURIAN TO LOWER 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 SUPERTOR GRENVILLE



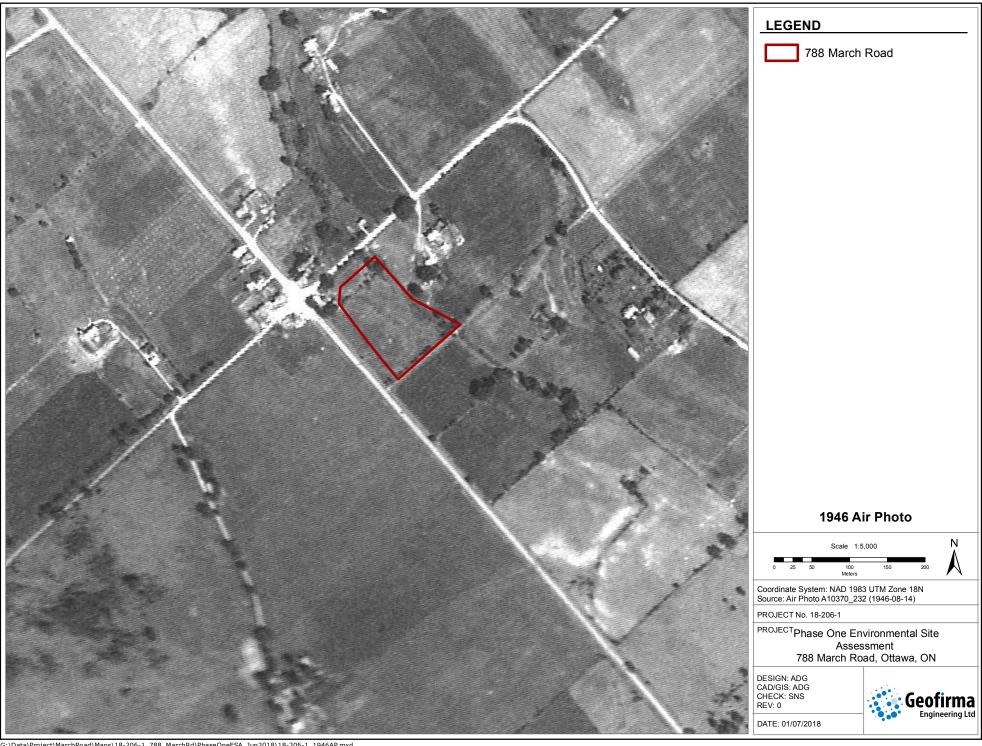


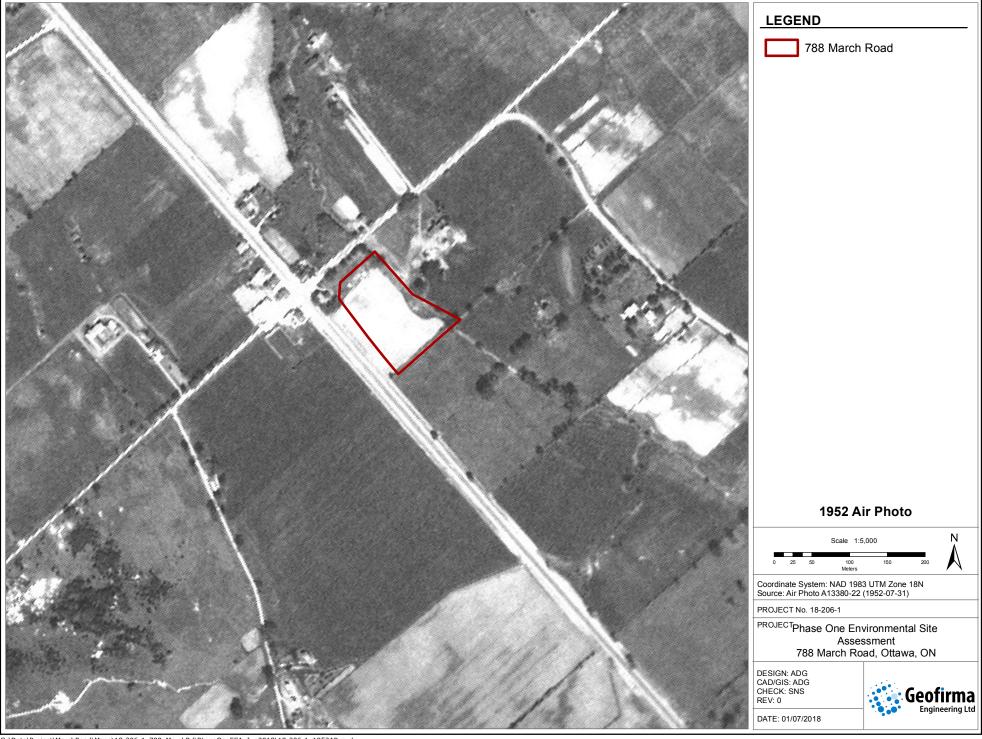


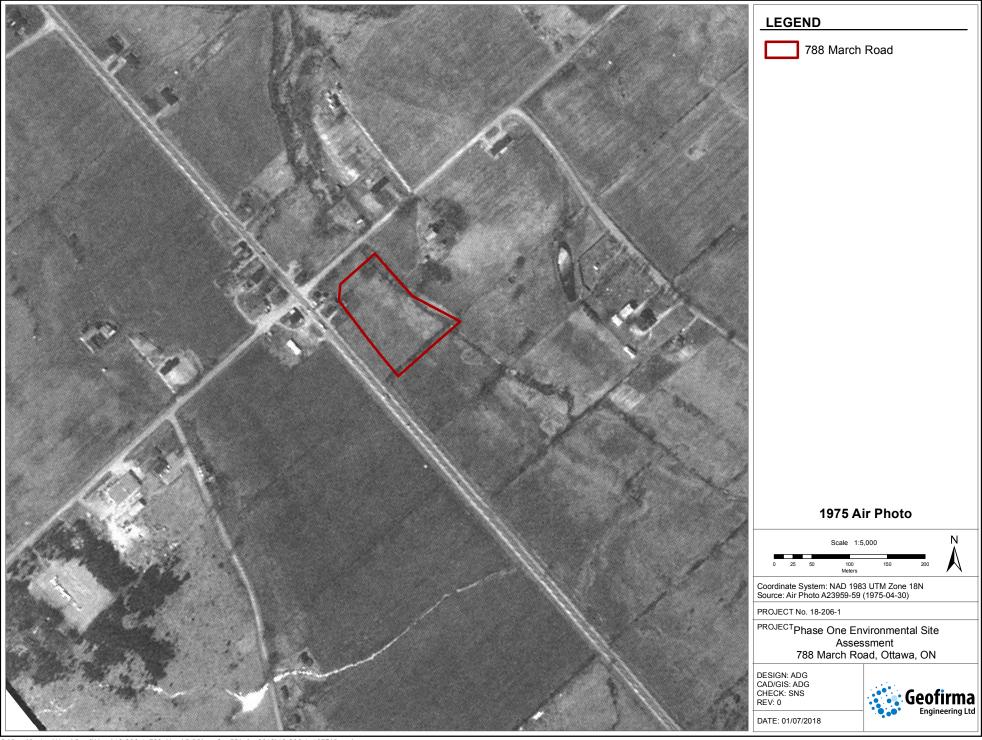
ANSI Name: South March Highlands D: 251213658 Type: Candidate ANSI, Life Science Significance: Provincial Management Plan: No Area (sqm): 8955569.866 Comments:

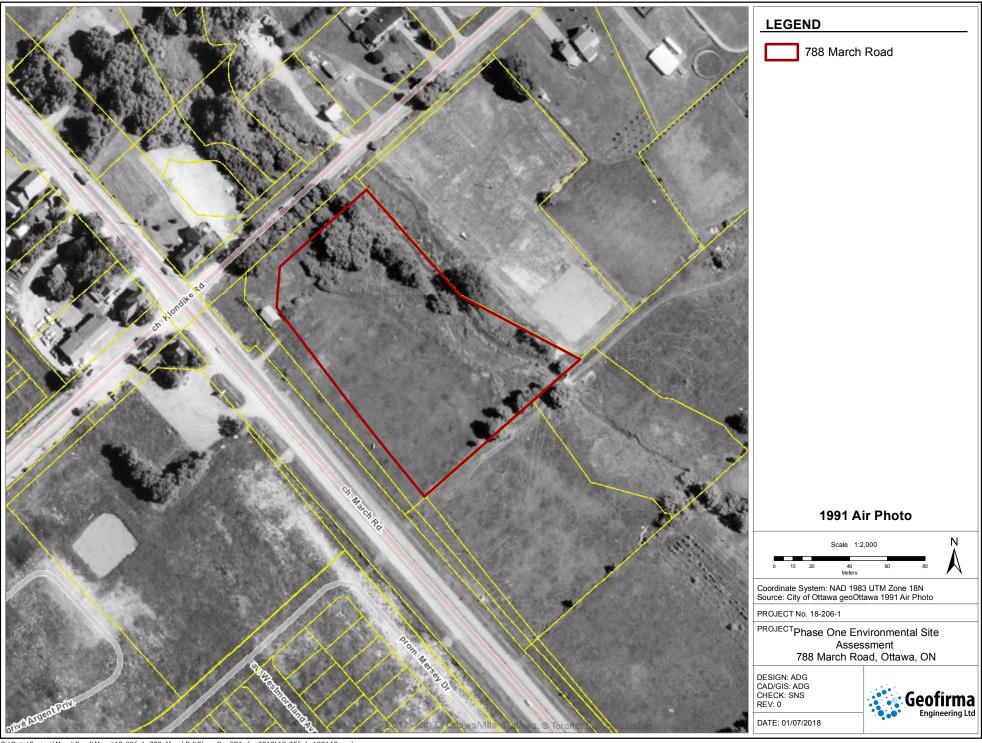
APPENDIX D

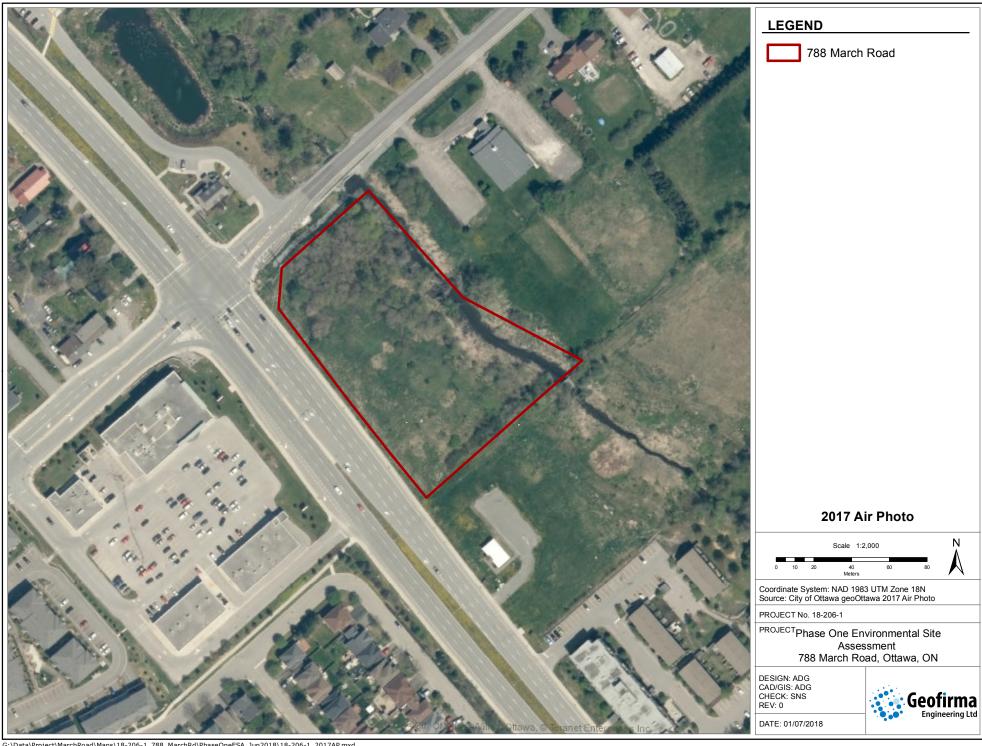
Aerial Photographs











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

