



**Phase One Environmental  
Site Assessment  
1158 Second Line Road,  
Ottawa, Ontario**

**Client:**

Joey Theberge  
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**Project Number:**

OTT-00245054-A0

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**Date Submitted:**  
March 2, 2018

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*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
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## **Legal Notification**

This report was prepared by EXP Services Inc. for the account of **Theberge Homes Ltd.**

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

## Executive Summary

EXP Services Inc. (EXP) was retained by Theberge Homes to complete a Phase One Environmental Site Assessment (ESA) of the property referred to as 1158 Second Line Road, located in Ottawa, Ontario. The purpose of this Phase One ESA was to determine if past or present site activities have resulted in actual or potential contamination at the site. EXP understands that Theberge Homes Ltd. plans to re-develop the land as medium density residential. Consequently, this Phase One ESA will be used in support of the City of Ottawa Site Plan Approval permitting requirements and a Record of Site Condition (RSC) is not required.

A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended by Ontario Regulation 511/09 (O.Reg. 153/04), and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third party reliance are outlined in Section 8 of this report.

Please note that general environmental management and housekeeping practices were reviewed as part of this assessment insofar as they could impact the environmental condition of the property, however, a detailed review of regulatory compliance issues was beyond the scope of our investigation. This Phase One ESA does not constitute an audit of environmental management practices, indicate geotechnical conditions or identify geologic hazards.

A written response from some regulatory agencies typically requires several months to receive. If upon receipt of the response from the regulatory agencies, significant environmental issues are identified, EXP will forward their response to the client as an addendum to this report.

The Site is currently occupied by a residential structure and has an area of 0.8 hectares. It is located on the north side of Second Line Road approximately 240 m southwest from the Old Carp Road and Second Line Road intersection. It is legally described as CON 3 PT LOT 11 RP 5R-1715; PARTS 1 & 2. The property identification number is 045260207. At the time of the investigation, the property was 80% woodlot and 20% building/driveway. The site was previously undeveloped until the mid 1990's when it was developed and a residential structure was constructed at the Site.

The surrounding area of the Site was observed to be vacant to the west (wetlands), a utility corridor to the east (Hydro) and residential to the north (Goward Drive) and south (Whernside Terrace). No environmentally sensitive activities or infrastructures on the surrounding properties, present any environmental concerns to the Site. Observations pertaining to the adjacent properties were made from the boundaries of the Site.

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the northeast. The closest body of water is the South March Wetlands, located approximately 120 m west of the Site. Regional groundwater flow direction is inferred to be in the eastern direction towards the Rideau River.

Based on the results of the Phase One ESA completed at 1158 Second Line Road in Ottawa, EXP has identified the following areas of potential environmental concern:

**Table EX-1: Areas of Potential Environmental Concern**

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
1. Potential On-Site contamination from a historic AST located at 1158 Second Line Road	North side of residence	#28: Gasoline and Associated Products Storage in Fixed Tanks	On-Site	Petroleum Hydrocarbons (PHCs), Benzene, Toluene, Ethylbenzene and Xylene (BTEX)	Soil

Based on the findings of the Phase One ESA, a Phase Two ESA is required to assess the soil conditions at the Site.

The AST located in the basement was observed to be in good condition with no staining or odours and no records of spills. Therefore, it is recommended that a sample of soil at the ground surface, beneath the vent and fill pipes be obtained and analyzed for the above contaminants of concern. The vent and fill pipes represent the worst-case scenario as they would be the location where spills or overfilling issues of the AST would occur. Groundwater contamination is not a concern.

*This executive summary is a brief synopsis of the report and should not be read in lieu of reading the report in its entirety.*

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# 1. Introduction

EXP Services Inc. (EXP) was retained by Theberge Homes Ltd. to complete a Phase One Environmental Site Assessment (ESA) of the property referred to as 1158 Second Line Road, located in Ottawa, Ontario. A site location plan is presented on Figure 1 in Appendix B. At the time of the investigation, the Site was owned by Mr. Adel Houssari.

Owner Contact: Mr. Adel Houssari and Mrs. Nada Harb  
1158 Second Line Road  
Ottawa, Ontario K2K 1X7

A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended by Ontario Regulation 511/09 (O.Reg. 153/04), and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. The scope of report and third-party reliance are outlined in Appendix A.

## 1.1 Objective

The purpose of this Phase One ESA was to determine if past or present site activities have resulted in actual or potential contamination at the site. EXP understands that Theberge Homes Ltd. plans to re-develop the land as medium density residential. Consequently, this Phase One ESA will be used in support of the City of Ottawa Site Plan Approval permitting requirements and a Record of Site Condition (RSC) is not required.

## 1.2 Phase One Property Information

The Site is currently occupied by a residential structure and has an area of 0.8 hectares. It is located on the north side of Second Line Road approximately 240 m southwest from the Old Carp Road and Second Line Road intersection. It is legally described as CON 3 PT LOT 11 RP 5R-1715; PARTS 1 & 2. The property identification number is 045260207. At the time of the investigation, the property was 80% woodlot and 20% building/driveway. The site was previously undeveloped until the mid 1990's when it was developed and a single family residential structure was constructed at the Site.

At the time of the investigation, the property was predominately woodlot with gravel and landscaping located around the residence. The site was previously undeveloped until it was developed in the late 1990's for residential use. There is currently one (1) residential building present at the Site. The property is currently serviced a private sewage system and private potable water well. The neighbouring residential properties to the north and south are expected to be serviced by City of Ottawa water and sewage.

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the northeast. The closest body of water is the South March Wetlands, located approximately 120 m west of the Site. Regional groundwater flow direction is inferred to be in the eastern direction towards the Rideau River.

The approximate Universal Transverse Mercator (UTM) coordinates for the Site centroid is NAD83, Zone 18, 425677.33 m E, 5022173.13 m N. The UTM coordinates were based on an estimate derived using Google Earth™. The accuracy of the centroid is estimated to range from 5 to 50 m.

## 2. Scope of Investigation

The scope of work for the Phase One ESA consisted of the following activities:

- Reviewing the historical occupancy of the site through the use of available archived and relevant municipal and business directories, fire insurance plans (FIPs), topographical maps, and aerial photographs;
- Contacting municipal and provincial agencies to determine the existence of records of environmental regulatory non-compliance, if any, and reviewing such records where available;
- Obtaining an EcoLog Environmental Risk Information Services Ltd. (ERIS) report for the site and surrounding properties within a 250 metre radius of the site;
- Reviewing available geological maps, well records and utility maps for the vicinity of the site;
- Obtaining a search of land title and assessment rolls for the site;
- Conducting at least one site reconnaissance of the site and building facilities in order to identify the presence of actual and/or potential environmental contaminants or concerns of significance;
- Conducting interviews with designated site representative(s) as a resource for current and historical site information, as well as to provide EXP staff with unrestricted access to all areas of the site and site buildings (as required by O.Reg 153/04);
- Reviewing the current use of the site and any land use practices that may have impacted its environmental condition;
- Reviewing the current use of the surrounding properties and any land use practices that may have impacted the environmental condition of the site; and,
- Preparing a report to document the findings.

In completing the scope of work, EXP did not conduct any intrusive investigations, including sampling, analyses, or monitoring.

EXP has confirmed neither the completeness nor the accuracy of any of the records that were obtained or of any of the statements made by others.

EXP personnel who conducted assessment work for this project included Matthew Laneville, B.A., and Mark McCalla, P. Geo. An outline of their qualifications is provided in Appendix A.

## 3. Records Review

### 3.1 Phase One ESA Study Area Determination

The Phase One ESA study area consisted of the neighbourhood and extending a distance of 250 metres from the Site. Surrounding properties consist of vacant to the east and west and residential to the north and south. A site plan is presented as Figure 2 in Appendix B.

### 3.2 First Developed Use Determination

Based on a review of historical aerial photographs, chain of title for the property, historical maps, and other records review, it appears that the Site was developed as residential in the late 1990s.

### 3.3 Fire Insurance Plans

A search of The Catalogue of Canadian Fire Insurance Plans 1875 – 1975 (Catalogue) was conducted to determine if fire insurance plans for the site existed. No fire insurance plans exist for the site or surrounding area.

### 3.4 Chain of Title

A chain of title was obtained from Read Abstracts Inc. for the subject site. Based on the information gathered from the title search, the following was found:

Mr Adel Houssari and Mrs. Nada Harb have been the owners of the Site since December 2009. Before 2009 the property changed hands ten (10) times dating back to June 1875. The Site has had exclusively private ownership since 1875. No notable environmental concerns were identified based on the title search.

Refer to Appendix C for the title search.

### 3.5 Previous Reports

The following previous reports were provided to EXP for review.

- *Phase I Environmental Site Assessment – 1158 Second Line Road, Ottawa, Ontario*, dated October 16, 2012, prepared by EXP Services Inc.

The report indicated that an above ground storage tank was present in the basement to provide fuel to the oil fired central air furnace. It was also noted that a potable water well and septic system are present at the Site. EXP did not identify any areas of potential environmental concern based on the Site review and review of historical documents.

- *Stage 1 and 2 Archaeological Assessment for 1158 Second Line Road, Part of Lot 11, Concession 3, Registered Plan 5R-1715 – Parts 1 & 2 and Plan 5R-2564 – Parts 1 & 2 Geographic Township of March, Ottawa, Ontario*, dated September 10, 2013, prepared by The Archaeologist Inc.

The report indicates that a Stage 1 and Stage 2 archaeological assessment was performed at 1158 Second Line Road. The Stage 1 assessment was conducted in order to determine the possibility of archeological artifacts being present at the Site. The Stage 1 assessment indicated that there was potential for archaeological artifacts to be present at the Site. Based on this discovery a Stage 2 assessment was performed which included a test pit survey. The Stage 2 assessment did not identify any archeological resources.

- *1158 Second Line Road, Ottawa, Ontario – Environmental Impact Assessment and Tree Conservation Report. Phase I Environmental Site Assessment*, dated September 2013, prepared by CJB Environmental Inc. 400-445 Saint-Jean-Baptiste, Quebec City, Quebec G2E 5N7.

The report indicated that the property located to southwest of the Site is considered as a Natural Environmental Area based on the City of Ottawa's official plan and is considered an Area of Natural and Scientific Interest. The study did not identify any species at risk at the time of the investigation. It was noted that special attention was given to the Whip-poor-will and the Blanding's Turtle, and the study did not identify either of these species as being present at the Site. The Site was not found to have any wetland/swamp habitats. This report also included the 2013 assessment of the former Township of March Closed Landfill (March Landfill) located within a 500 m radius of the Site.

- *Clearance Letter for March Landfill, Development of 1158 Second Line Road*, dated April 2013, prepared by AMEC Environment and Infrastructure. 300-210 Colonnade Road South, Ottawa, Ontario K2E 7L5.

This letter indicated that the former March Landfill is located approximately 370 m south of the Site. The former March Landfill was operated by the former Township of March between 1963 and 1974. It was noted that groundwater contamination (petroleum hydrocarbons, petroleum aromatic hydrocarbons, and volatile organic compounds) was observed to be present and was delineated over a distance of 1.5 km heading toward the southeast from the landfill. The groundwater plume was monitored from 2000-2013 and is located at least 310 m south of the Site. The data acquired from the studies (since 2000) show that the former March Landfill poses no environmental concern with respect to the Site.

### 3.6 Regulatory Environmental Source Information

The appropriate regulatory agencies at the provincial and municipal levels were contacted to obtain information regarding environmental permits, past or pending environmental control orders or complaints, outstanding environmental regulatory non-compliance issues and Sewer Use By-Law infractions. EXP did not identify the need to contact any federal agencies.

The following agencies were contacted:

- The Ontario Ministry of the Environment and Climate Change (MOECC) Freedom of Information, Protection of Privacy Office; and,
- The City of Ottawa.

Written responses from the regulatory agencies and copies of the requests are included in Appendix C.

#### 3.6.1 Ontario Ministry of the Environment and Climate Change Records

Records pertaining to the site were requested from the MOECC through the *Freedom of Information and Protection of Privacy Act* (FOI). A response has not yet been received. A copy of the request is provided in Appendix C.

- On February 13, 2018, the MOECC Environmental Bill of Rights (EBR) registry website was searched by ERIS for postings in the vicinity of the subject site using 250 m radius. No areas of potential environmental concern were identified.
- On February 13, 2018, the MOECC Hazardous Waste Information Network (HWIN) database was searched by ERIS for registered waste generators in the vicinity of the subject site. No postings were listed.

- On February 13, 2018, the MOECC Brownfields Registry website was searched by ERIS for postings of Records of Site Condition (RSC). No postings for the Site or for the surrounding properties were listed.

### 3.6.2 Municipal Records

#### 3.6.3.1 City Hall Records

A request for the Site was made to the City of Ottawa for the Hazardous Land Use Index (HLUI). A response (received October 2012) which indicated that the subject property is within 500 m of a City owned former landfill. A data gap analysis was conducted on this former landfill site to identify any potential human health risks associated with the site's current land use and none were identified. No APECs were identified. A copy of the reply is provided in Appendix C.

#### 3.6.3.2 City Directory Search

EXP reviewed city directories dating from 1961 to 2011 from an ERIS search of Vernon's Ottawa in order to identify the occupancy history of the site and neighbouring properties for potential environmental concerns. A copy of the directory search is included in Appendix D. The following table summarizes the directory search.

**Table 1: City Directory Search**

Address	Direction from Site	Year	Occupant	Concern (yes/no)
1158 Second Line Road	Subject site	2001/02 – 2011	Residential (one tenant)	No
		1961 – 1996/97	Not listed	
1155 Second Line Road	Adjacent to the west (across Second Line Road)	1961 - 2011	Not listed	No
1190 Second Line Road	80 m northwest from Site	1961 - 2011	Not listed	No
1220 Second Line Road	220 m northwest from Site	1992 - 2011	Residential (one tenant)	No
		1961 - 1987	Not listed	
1292 Old Carp Road	186 m north from Site	2011	Not listed	No
		1996/97 – 2006/07	Residential (one tenant)	
		1961 - 1992	Not listed	
1350 Old Carp Road	160 m west from Site	2011	Residential (two tenants)	No
		1992 – 2006/07	Residential (one tenant)	
		1961 - 1987	Not listed	

Based on a review of the city directories, none of the surrounding properties were identified as potential sources of environmental concern to the site.

### 3.6.3 Land Use Documents

A review of the following publications was carried out as part of this Phase One ESA:

- Old Landfill Management Strategy Phase 1 – Identification of Sites, City of Ottawa, Ontario (Golder Associates, October 2004);
- Inventory of Coal Gasification Plant Waste Sites in Ontario (Intera, April 1987);
- Mapping and Assessment of Former Industrial Sites – City of Ottawa (Intera, July 1988); and,
- Ontario Inventory of PCB Storage Sites (Ontario Ministry of the Environment; 1993).

#### 3.6.4 Old Landfill Management Strategy Phase 1 – Identification of Sites - Golder (2004)

No former landfills were identified within 250 m of the subject site. In addition, there is no visual evidence of a landfill in the area. A former landfill was located approximately 370 m to the south from the edge of the Site. Since 2000, the landfill has been monitored and groundwater contamination was identified. A contaminant plume consisting petroleum hydrocarbons, petroleum aromatic hydrocarbons, and volatile organic compounds was discovered. This plume is located approximately 300 m to the southeast from the Site and is observed to be headed in an easterly direction. A data gap analysis was conducted on this former landfill site to identify any potential human health risks associated with the site's current land use and none were identified.

Based on the distance of the plume from the Site and groundwater flow direction, this does not represent a PCA.

#### 3.6.5 Inventory of Coal Gasification Plant Waste Sites in Ontario - Ontario MOE (1987)

There were no coal gasification plants identified within 250 m of the subject site.

#### 3.6.6 Mapping and Assess Former Industrial Sites – Intera (1988)

There are no Intera sites identified within 250 m of the subject Site.

#### 3.6.7 Ontario Inventory of PCB Storage Sites - Ontario MOE (1993)

No records pertaining to PCB storage sites were identified within 250 m of the subject site in this document.

### 3.7 EcoLog ERIS Database Search

A search of provincial and federal databases for records pertaining to the subject site and properties within 250 metres of the subject site was conducted by EcoLog Environmental Risk Information Services (or EcoLog ERIS). EcoLog ERIS is an environmental database and information service provider. EXP has confirmed neither the completeness nor the accuracy of the records that were provided. A summary of the more significant findings is provided below. A copy of the EcoLog ERIS report is provided in Appendix D.

Based on the EcoLog search, the following was identified:

- One listing was identified for the Site. The listing consisted of a record of an ERIS historical search and does not represent an APEC.

- The property located at 108 Whernside Terrace (50 m east from the Site), had a historic incident where an unknown quantity of natural gas was released in 2008. Due to the nature of this incident, it does not represent an APEC to the Site.
- A waste generator was identified along Second Line Road (90 m west southwest from the Site) in 2013. The wastes generated included halogenated solvents and landfill leachates. This is likely in response to the City of Ottawa's monitoring of the historic landfill located 400 m to the south from the Site and was generated to address the purge water from the wells associated with this ongoing study. This landfill was assessed by AMEC Environment and Infrastructure (AMEC) in 2013 and it was found that a contaminant plume is originating from the landfill and heading north northeast from the landfill and is approximately 300 m south from the Site. It was reported that the landfill has been annually monitored since 2000 and does not pose a risk to the Site. Based on the waste generated and the 2013 study by AMEC this does not represent an APEC to the Site.
- Several water wells were identified in the study area, but do not represent APECs.

### 3.8 Physical Setting Review

#### 3.8.1 Aerial Photographs

The following table summarizes the development and land use history of the subject site and adjacent properties as depicted on the reviewed aerial photographs.

**Table 2: Development and Land Use History Summary**

Aerial Photograph (year)	Details
1946	The subject Site and surrounding properties appear to be undeveloped. The utility corridor is present to the northeast from the Site.
1968	The subject Site and surrounding properties appear to be undeveloped. The utility corridor is present to the northeast from the Site.
1987	The subject Site and surrounding properties appear to be undeveloped. The utility corridor is present to the northeast from the Site.
1993	The subject Site appears undeveloped, the surrounding properties also appear undeveloped. A utility corridor (Hydro) can be seen to the north of the Site and a wetland is located to the South.
1999	The subject Site has been developed to its current configuration. Surrounding properties remain vacant with the exception of the utility corridor to the north of the Site.
2002	The subject Site remains unchanged. The properties to the west and south remain vacant. The property to the southeast and across the utility corridor have begun undergoing development (clearing of land)
2005	The subject Site remains unchanged. The property to the northwest of the Site has begun to be developed (clearing of land). Surrounding properties to the south, southeast and north remain unchanged.
2007	The subject Site remains unchanged. Surrounding properties (with the exception of the wetlands to the southwest) have begun undergoing residential development as road networks have been created and the appearance of foundations can be seen.



Aerial Photograph (year)	Details
2008	The subject Site remains unchanged. Surrounding properties (with the exception of the wetlands to the southwest) have completed residential development. Additionally, the properties across the utility (corridor) have undergone residential development.
2009-2017	The Site and surrounding properties remain unchanged.

Based on the review of the aerial photography, APECs were not identified.

### 3.8.2 Geology, Hydrogeology and Topography

The following information sources were reviewed to determine the nature of the subsurface materials at the site:

1. *Bedrock Geology of Southern Ontario* – Ontario Geological Survey. Scale 1:50,000. Electronic resource Issued 2003.
2. *Surficial Geology of Southern Ontario* – Ontario Geological Survey. Scale 1:50,000. Electronic resource Issued 2003.
3. Ontario Geotechnical Boreholes – Electronic Resource.
4. MOE Water Well Records – Electronic Resource.
5. Department of Natural Resources, Topographic Mapping. Electronic Resource.

Based on review of the above information, the subject Site is located in the physiographic region known as the Nepean Formation. The bedrock in the general area is a combination of sandstone and granite at a depth of approximately 0.3 - 2 m with regards to the sandstone. Granite was also observed at a depth of 30-35 m. With respect to surficial geology, beneath any fill, the site is underlain by Paleozoic bedrock.

The local topography of the Site relatively flat. The area around the house was observed to be on a slight hill and therefore has a slight downward slope towards the northeast. Regional groundwater flow direction, based on the previous landfill studies is reported to be in the eastern direction towards the Rideau River (approximately 9 km to the east of the Site).

### 3.8.3 Fill Materials

Significant amounts of fill are not present at the Site. The Site is along the same topography when compared to the neighbouring properties.

### 3.8.4 Water Bodies and Areas of Natural Significance (ANSI)

There were no water bodies on the subject site. The nearest surface water body to the subject Site is the South March Highlands located approximately 120 m to the west from the Site. The subject site is not located in close proximity to an ANSI, according to the Ministry of Natural Resources Natural Heritage website.

Based on previously reported information, groundwater flow is to the east toward the Rideau River located 9 km west of the Site.



### **3.8.5 Well Records**

Local MOECC water wells records show that bedrock was found at 0.3 - 2 m from surface. The overburden consists of sand and sandy clay from the ground surface to 0.6 – 2.0 m. Bedrock in the area was found to be sandstone and granite.

### **3.9 Site Operating Records**

No site operating records were available for review.

### **3.10 Summary of Records Review**

Based on a review of the available records, PCAs were not identified.

## 4. Interviews

Interviews were attempted by EXP with any individuals identified to be the most knowledgeable about both the current and historical site uses. The purpose of interviews is to obtain information to assist in identifying areas of potential environmental concern and identify details of potentially contaminating activities or potential contaminant pathways, in, on or below the site.

During the completion of this Phase One ESA, the following individual was interviewed:

- Mr. Adel Houssari, current owner of the Site, was interviewed in person on the day of the Site visit.

He indicated that the Site was developed in the late 1990s, when a single-family residence was constructed at the Site. Prior to this the Site was undeveloped. Mr. Houssari indicated that the residence is now heated by a forced air propane furnace, however the aboveground storage tank (no longer in use) is still present within the basement as the residence was originally heated by a forced air oil fired furnace (PCA1). The Site is serviced by a septic system located to the south of the residence and a private potable water well located to the north of the residence.

## 5. Site Reconnaissance

### 5.1 General Requirements

On February 8, 2018, Mr. Matthew Laneville, B.A. of EXP conducted the site visit for the property. The Site visit was conducted in accordance with EXP's internal health and safety protocols and with the Ministry of Labour health and safety regulations. The purpose of the site visit was to assess the current conditions of the Site.

The general environmental management and housekeeping practices at the site were reviewed as part of this assessment insofar as they could impact the environmental condition of the property; however, a detailed review of regulatory compliance issues was beyond the scope of EXP's investigation.

Observations of the subject property and surrounding properties were conducted. The exterior observations were recorded by walking over the grounds at approximately 9:00am. The temperature was approximately -0.3 °C and overcast. Adjoining properties were observed from within the grounds of the Site.

Mr. Laneville was accompanied by Mr. Houssari during the site visit. Photographs were taken at the Site on February 8, 2018 and are included in Appendix E.

### 5.2 Specific Observations at Phase One ESA Property

#### 5.2.1 Site Description and Buildings

The Site is currently occupied by single-family residence (bungalow with full height basement) and has an area of 0.8 hectares. The residence is currently serviced by a private well and sewage system. At the time of the investigation, the Site was mostly treed. Areas around the residence were observed to be landscaped or gravel covered to facilitate driveways and parking areas.

The properties to the north and south is anticipated to be municipally serviced by City of Ottawa water and sewer.

#### 5.2.2 Heating and Cooling Systems

Heating within the office building is provided by a propane fired forced air furnace and cooling is provided by a central air conditioning system. Historically the residence was heated by an oil fired forced air furnace. The AST was observed to be empty and within the northern section of the residence basement. The historic use and presence of the AST is considered a PCA (PCA1/APEC1).

#### 5.2.3 Site Utilities and Services

The Site utilities and services identified at the Site are summarized in the table below:

**Table 3: Summary of Utilities**

Utility	Source
Potable Water	Private Well
Propane (heating source)	Budget (propane tanks)
Sanitary System	Private (septic tank and bed)
Storm Water	Municipal
Electricity	Hydro Ottawa

**5.2.4 Site Use**

At the time of the investigation, the Site was occupied by a single-family residence.

**5.2.5 Drains, Pits and Sumps**

A sump pit was observed in the north corner (basement) of the Site building. No visual indications of impact were noted when the sump was examined. The sump was observed to be dry at the time of the Site visit.

**5.2.6 Storage Tanks**

**5.2.6.1 Underground Storage Tanks**

EXP did not observe any underground storage tanks (UST) during the site reconnaissance. No visual evidence such as fill / vent pipes, levelometers or oil fill lines associated with USTs were observed at the site.

**5.2.6.2 Aboveground Storage Tanks**

One AST was identified at the subject Site and are summarized in the table below.

**Table 4: Summary of Aboveground Storage Tanks**

AST#	Location	Type	Volume (approximately)		Contents	Year	
			Litres	Gallons (UK)		Installed	Removed
AST-1	North side of basement	Steel	910	200	Furnace Oil	2000	Still present however no longer in use

AST-1 was located inside the building along the northern wall in the basement.

Although this tank is considered newer and in good condition the historic use of furnace oil at the Site is considered a PCA (PCA1/APEC1).

**5.2.7 Chemical Storage and Handling and Floor Condition**

No chemicals were observed at the Site.

**5.2.8 Areas of Stained Soil, Pavement or Stressed Vegetation**

Areas of stained soil, pavement or stressed vegetation were difficult to ascertain due to snow coverage.

**5.2.9 Fill, Debris and Methane**

The Site is similar in elevation to the surrounding properties. It is anticipated that fill was not imported to the Site during development as bedrock is located approximately close to the surface based on local well records. There are no sources of methane at the surface of the Site.

### 5.2.10 Air Emissions

Regulatory control of air emissions in Ontario is the responsibility of the MOECC. According to the Environmental Protection Act (EPA), a Certificate of Approval (CofA) (Air) is required for the ongoing operation of any equipment that may discharge a contaminant into the natural environment if the equipment was installed, modified or altered after June 29th, 1988. Retroactive approval should be sought for equipment installed and unchanged between 1972 and June 29th, 1988 when the requirement for a CofA was added to the EPA. Unless explicitly exempted, most industrial processes or modifications to industrial processes and equipment require a CofA. The EPA provides a list of specific equipment and conditions, which are exempt from CofA (Air) requirements (i.e. fuel burning equipment for comfort heating in a building using natural gas or number 2 fuel oil at a rate of less than 1.5 million British Thermal Units per hour [BTU/hour]).

No air emissions concerns were identified at the time of the site visit.

### 5.2.11 Odours

No strong odours were detected during the site visit.

### 5.2.12 Noise

No excessive noise was detected during the site visit.

### 5.2.13 Special Attention Items, Hazardous Building Materials and Designated Substances

#### 5.2.13.1 Asbestos

Asbestos-containing materials (ACMs) are fibrous hydrated silicates, and can be found in building materials as either "unbound" or "bound" asbestos. Friable asbestos refers to materials where the asbestos fibres can be separated from the material with which it is associated. Non-Friable asbestos refers to asbestos, which is associated with a binding agent (such as tar or cement). Friable asbestos is commonly found in boiler and pipe insulation. Non-Friable asbestos is typically found in roofing tars, floor and ceiling tiles, and asbestos-containing cement.

ACMs in the workplace are defined as a Designated Substance under the Ontario Occupational Health and Safety Act (OHSA). Under OHSA, persons in the workplace are required to be notified of the presence of ACMs once they are suspected to be present, and if there is a potential for workers to be exposed. The use of ACMs was discontinued in Canada in the late 1970s/early 1980s, although non-friable asbestos can still be found in recently constructed buildings.

Based on the age of the building at the Site (constructed mid-late 1990's), it is EXP's opinion that it is unlikely for ACMs to be present within the Site building. EXP did not conduct any sampling for asbestos during the site reconnaissance.

#### 5.2.13.2 Lead

Lead has frequently been used in oil-based paints, roofing materials, cornices, tank linings, electrical conduits and soft solders for tinplate and plumbing. The use of lead based paints (LBPs) was phased out circa 1976. Paint that was produced or used between 1976 and 1980 may contain small amounts of lead. Paint that was produced or used prior to 1950 may contain high levels of lead. The main concern regarding lead paint is its potential to become lead dust or chips either through deterioration and/or mechanical means (i.e., sanding, abrasion, etc.). Exposure to lead dust or chips occurs by ingestion or inhalation.

Based on the age of the building at the Site (constructed mid-late 1990's), it is EXP's opinion that it is unlikely for LBPs to be contained within the Site buildings. The painted surfaces noted during EXP's site visit were observed to be in good condition.

#### **5.2.13.3 Mercury**

Mercury could be found in some batteries, light bulbs, old paints, thermostats, old mirrors, etc. Based on an investigation by Consumer and Corporate Affairs Canada, and an assessment of potential health risks by Health and Welfare Canada, in 1991 the decision was made to eliminate the use of mercury compounds in indoor latex paints. The Canadian Paint and Coatings Association (CPCA) supported the withdrawal and all Canadian manufacturers and formulators of the preservative voluntarily agreed to remove "interior uses" from their product labels.

Mercury containing equipment was not observed during the Site visit. Based on the age of the building (constructed mid-late 1990's), it is unlikely for mercury containing paints to be present at the Site.

#### **5.2.13.4 Polychlorinated Biphenyls (PCBs)**

The manufacture of PCBs in North America was prohibited under the Toxic Substances Control Act (1977). Their use as a constituent of new products manufactured in or imported into Canada was prohibited by regulations in 1977 and 1980. As such, sites developed or significantly renovated after 1980 are unlikely to have PCBs-containing equipment on the Site. Potential equipment, which could contain PCBs include fluorescent mercury and sodium vapour light ballasts, oil filled capacitors and transformers. Any electrical equipment containing PCBs must be disposed in accordance with Ontario Regulation 362 when it is removed from service. Ongoing operation of equipment containing PCBs is permissible.

A review of the Site was conducted to evaluate the potential presence of PCBs-containing equipment in use or stored at the Site.

Potential sources of PCBs were not observed during the Site visit.

#### **5.2.13.5 Urea Formaldehyde Foam Insulation**

Formaldehyde is a pungent, colourless gas commonly used in water solution as a preservative and disinfectant. It is also a basis for major plastics, including durable adhesives. It occurs naturally in the human body and in the outdoor environment. Formaldehyde is used to bond plywood, particleboard, carpets and fabrics, and it contributes to "that new house smell."

Formaldehyde is also a by-product of combustion; it is found in tobacco smoke, vehicle exhaust and the fumes from furnaces, fireplaces and wood stoves. While small amounts of formaldehyde are harmless, it is an irritating and toxic gas in significant concentrations. Symptoms of overexposure to formaldehyde include irritation to eyes, nose and throat; persistent cough and respiratory distress; skin irritation; nausea; headache; and dizziness.

Urea-formaldehyde foam insulation (UFFI) was developed in Europe in the 1950s as an improved means of insulating difficult-to-reach cavities in the walls. It is typically made at a construction site from a mixture of urea-formaldehyde resin, a foaming agent and compressed air. When the mixture is injected into the wall, urea and formaldehyde unite and "cure" into an insulating foam plastic.

During the 1970s, when concerns about energy efficiency led to efforts to improve building insulation in Canada, UFFI became an important insulation product for existing buildings. Most installations occurred between 1977 and the further use of UFFI was banned in Canada in 1980.

No evidence of UFFI was observed during the site visit.

#### **5.2.13.6 Radon**

Radon is a colourless, odourless, radioactive gas that occurs naturally in the environment. It comes from the natural breakdown of uranium in soils and rocks. Exposure to high levels of radon increases the risk of developing lung cancer. This relationship has prompted concern that radon levels in some Canadian buildings may pose a health risk. Radon gas can move through small spaces in the soil and rock and seep into a building through cracks in concrete, sumps, joints and basement drains. Concrete-block walls are particularly porous to radon and radon trapped in water from wells can be released into the air when the water is used.

Due to the potential health concerns associated with radon, Health Canada released a guideline in June 2007 for a maximum acceptable level of radon gas of 200 Becquerel's per cubic metre (Bq/m<sup>3</sup>). Where radon gas is present and the annual radon concentration exceeds 200 Bq/m<sup>3</sup> in the normal occupancy area, Health Canada recommends taking the necessary actions to reduce radon levels.

Based on local well records and geologic investigations, the bedrock underlying the Site is sandstone. Based on the rock type, radon gas is not considered a concern.

#### **5.2.13.7 Mould**

Mould is found in the natural environment and is required for the breakdown of plant debris such as leaves and wood. Mould spores are found in the air in both the indoor and outdoor environments. In order for mould to grow it requires a food source (i.e. gypsum wallboard, wallpaper, wood, etc.) combined with moist conditions. Mould can have an impact on human health depending on the species and concentration of the airborne mould spores. Health effects can include allergies and mucous membrane irritation.

Currently there are no regulations governing mould; however, there are several guidelines addressing mould assessments and abatement. At the moment, the industry standards include the Canadian Construction Association (CCA) document 82-2004 titled "mould guidelines for the Canadian construction industry" and the Environmental Abatement Council of Ontario (EACO) guidelines titled "EACO Mould Abatement Guidelines, Edition 2 (2010)."

It is important to note that the Ministry of Labour (MOL) has governed protecting workers under the Occupational Health and Safety Act, which states that employers are required to take every precaution reasonable to protect their workers. This includes protecting workers from mould within workplace buildings.

No suspect mould was observed during the site visit.

#### **5.2.13.8 Other Substances**

No other special attention substances (such as acrylonitrile or isocyanates) were suspected to be present at the Site at the time of this Phase One ESA.

#### **5.2.14 Processing and Manufacturing Operations**

No processing or manufacturing operations were observed or reported to have been conducted at the Site.

#### **5.2.15 Hazardous Materials Use and Storage**

No hazardous materials are used or stored at the Site.

#### **5.2.16 Vehicle and Equipment Maintenance Areas**

Vehicle and equipment maintenance areas were not observed at the Site.

#### **5.2.17 Oil/Water Separators**

No oil water separators are present at the Site.

#### **5.2.18 Sewage and Wastewater Disposal**

Sewage generated at the Site is handled by the private septic system. No other wastewater is generated at the Site.

#### **5.2.19 Solid Waste Generation, Storage & Disposal**

Solid wastes generated at the Site are limited to household wastes and are picked up on a weekly basis through municipal services.

#### **5.2.20 Liquid Waste Generation, Storage & Disposal**

Liquid wastes generated at the Site are limited to household liquid wastes.

#### **5.2.21 Unidentified Substances**

No unidentified substances were observed on the Site at the time of the Site visit. No dumping or any other deleterious materials were identified.

#### **5.2.22 Hydraulic Lift Equipment**

No hydraulic equipment was observed the Site.

#### **5.2.23 Mechanical Equipment**

No mechanical equipment of concern was present on the Site.

#### **5.2.24 Abandoned and Existing Wells**

A private drinking water well is located on the north side of the Site building. Mr. Houssari, reported that he has never had any issues with the well.

#### **5.2.25 Roads, Parking Facilities and Right of Ways**

Access to the Site is via Second Line Road.

### **5.3 Adjacent and Surrounding Properties**

A visual inspection of the adjacent properties and properties within 250 m of the site was conducted from publicly accessible areas to identify the occupants and document the uses and sources of potential environmental concerns that may impact the Site. Refer to Figure 2 in Appendix B for the adjacent land uses.

The following land uses border the subject property:

- North: Residential;
- East: Utility Corridor (hydro) then residential;
- West: Wetlands; and,
- South: Residential.



The neighbouring properties are not considered to have caused any environmental concern to the Site.

#### **5.4 Summary of Site Reconnaissance**

Based on the site reconnaissance of the Phase One ESA, the AST located at the Site is a PCA (PCA#28 – Gasoline and Associated Products Stored in Fixed Tanks). Based on the historic use of heating oil at the Site and shallow soils present in the area this is considered an APEC.

## 6. Phase One ESA Conceptual Site Model

### 6.1 Current and Past Uses

Based on a review chain of title information, air photos, and other records, the Site had been developed as residential since the late 1990's.

### 6.2 Summary of Potentially Contaminating Activities

As per Ontario Regulation (O.Reg.) 153/04, a Potential Contaminating Activity (PCA) is defined as one of fifty-nine (59) industrial operations set out in Table 2 of Schedule D that occurs or has occurred in a Phase One study area. The following PCAs were identified:

- PCA1 – Current On-Site heating oil AST located along north side of the basement. (PCA#28 – Gasoline and Associated Products Stored in Fixed Tanks).

No potentially contaminating activities that took place within the vicinity of the Site (approximately 250 m radius) were identified.

### 6.3 Areas of Potential Environmental Concern

As a result of the PCAs, the report identified the following APECs at the Site:

- APEC 1 – (central eastern part of Site) Contaminated soil. This APEC is associated with PCA1. The PCOCs include PHC and BTEX.

It is noted that any significant uncertainty or absence of information has the ability to affect the Phase One Conceptual Site Model. However, based on the information and findings presented within the Phase One ESA, it is EXP's opinion that any uncertainty would be minimal, and it would not alter the validity of the model presented above.

### 6.4 Site Characteristics

In order to develop a conceptual model for the subject Site and surrounding study area, the following physical characteristics and pathways were considered. A conceptual site model showing the inferred groundwater flow direction and general site is shown in Figure 3 in Appendix B.

#### 6.4.1 Subsurface Stratigraphy

The bedrock in the general area is sandstone at a depth of approximately 0.3 - 2 m. Granite was also observed at a depth of 30-35 m. With respect to surficial geology, beneath any fill, the site is underlain by Paleozoic Sandstone bedrock.

#### 6.4.2 Estimated Groundwater Flow Direction

Topographically, the Site relatively flat with a slight downwards slope towards the northeast. Regional groundwater flow direction is to be in the eastern direction towards the Rideau River.

#### 6.4.3 Underground Utilities

Currently, the underground utilities at the Site include water and sewage (septic tank and bed) and electricity/telephone.

## 7. Findings and Recommendations

Based on the results of the Phase One ESA completed at 1158 Second Line Road in Ottawa, EXP has identified the following areas of potential environmental concern:

**Table 5: Areas of Potential Environmental Concern**

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
1. Potential On-Site contamination from a historic AST located at 1158 Second Line Road	North side of residence	#28: Gasoline and Associated Products Storage in Fixed Tanks	On-Site	Petroleum Hydrocarbons (PHCs), Benzene, Toluene, Ethylbenzene and Xylene (BTEX)	Soil

Based on the findings of the Phase One ESA, a Phase Two ESA is required to assess the soil conditions at the Site.

The AST located in the basement was observed to be in good condition with no staining or odours and no records of spills. Therefore, it is recommended that a sample of soil at the ground surface, beneath the vent and fill pipes be obtained and analyzed for the above contaminants of concern. The vent and fill pipes represent the worst-case scenario as they would be the location where spills or overfilling issues of the AST would occur. Groundwater contamination is not a concern.

## 8. References

1. AMEC Environment and Infrastructure; April 2013; *Clearance Letter for March Landfill, Development of 1158 Second Line Road.*
2. Canadian Standards Association; November 2001; *Z768-0 Phase I Environmental Site Assessment.*
3. CJB Environmental Inc.; September 2013; *1158 Second Line Road, Ottawa, Ontario – Environmental Impact Assessment and Tree Conservation Report. Phase I Environmental Site Assessment.*
4. Dubreuil, L. and C. Woods; 2002; *Catalogue of Canadian Fire Insurance Plans, 1875 – 1975.*
5. Department of Energy Mines and Resources, Surveys and Mapping Branch; 1976; *Ottawa Map 31 G/5, Scale 1:50,000.*
6. EXP Services Inc.; October 2016; *Phase I Environmental Site Assessment – 1158 Second Line Road, Ottawa, Ontario.*
- 7.
8. Geological Survey of Canada; 1982; *Generalized Bedrock Geology – Ottawa-Hull, Ontario-Quebec: Map 1508A. Scale 1:50,000.*
9. Geological Survey of Canada; 1976; *Surficial Geology – Ottawa, Ontario: Map 1507A. Scale 1:50,000.*
10. Golder Associates Inc.; October 2004; *Old Landfill Management Strategy, City of Ottawa.*
11. Intera Technologies Ltd.; July 1998; *Mapping and Assessment of Former Industrial Sites, City of Ottawa.*
12. Ministry of Labour (MOL); *Occupational Health and Safety Act.*
13. Ontario Ministry of the Environment, *Environmental Registry website* ([www.ene.gov.on.ca/envision/env\\_reg/ebr/english/index.htm](http://www.ene.gov.on.ca/envision/env_reg/ebr/english/index.htm))
14. Ontario Ministry of the Environment; 1993- 2003-2004; *Ontario Inventory of PCB Storage Sites.*
15. Ontario Ministry of the Environment; *Brownfields Registry website* ([www.ene.gov.on.ca/environet/BESR/index.htm](http://www.ene.gov.on.ca/environet/BESR/index.htm))
16. Ontario Ministry of the Environment; *Hazardous Waste Information Network website* ([www.hwin.ca](http://www.hwin.ca)).
17. Ontario Ministry of the Environment; November 1988; *Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario.*
18. Ontario Ministry of the Environment, Waste Management Branch; June 1991; *Waste Disposal Site Inventory.*
19. Ontario Ministry of the Environment and Intera Technologies Ltd.; June 1991; *Inventory of Coal Gasification Plant Waste Sites in Ontario;*
20. Ontario Ministry of Natural Resources, Natural Heritage website ([www.mnr.gov.on.ca/MNR/nhic/areas.cfm](http://www.mnr.gov.on.ca/MNR/nhic/areas.cfm)).

21. Technical Standards and Safety Authority; May 2007; *Environmental Management Protocol for Fuel Handling Sites in Ontario.*
22. The Archaeologist Inc.; September 2013; *Stage 1 and 2 Archaeological Assessment for 1158 Second Line Road, Part of Lot 11, Concession 3, Registered Plan 5R-1715 – Parts 1 & 2 and Plan 5R-2564 – Parts 1 & 2 Geographic Township of March, Ottawa, Ontario.*

## 9. Scope of Report, and Third Party Reliance

### Basis of Report

This report ("Report") is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the site the recommendations of EXP may require re-evaluation.

### Reliance on Information Provided

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by Theberge Homes Ltd. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by Theberge Homes Ltd. EXP has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to exp. If new information about the environmental conditions at the Site is found, the information should be provided to EXP so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

### Standard of Care

The Report has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale and in accordance with the MOE Reg. 511 standard. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

### Complete Report

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by Theberge Homes Ltd., communications between EXP and Theberge Homes Ltd., other reports, proposals or documents prepared by EXP for Theberge Homes Ltd. in connection with the site described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.

### Use of Report

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of Theberge Homes Ltd.. No other party may use or rely upon the Report in whole or in part without the written consent of EXP. Any use of the Report, or any portion of the Report, by a third party are the sole responsibility of such third party. EXP is not responsible for damages suffered by any third party resulting from unauthorised use of the Report.

## **Report Format**

Where EXP has submitted both electronic file and a hard copy of the Report, or any document forming part of the Report, only the signed and sealed hard copy shall be the original documents for record and working purposes. In the event of a dispute or discrepancy, the hard copy shall govern. Electronic files transmitted by EXP utilize specific software and hardware systems. EXP makes no representation about the compatibility of these files with Theberge Homes Ltd. current or future software and hardware systems. Regardless of format, the documents described herein are EXP's instruments of professional service and shall not be altered without the written consent of EXP.

We trust this report satisfies your immediate requirements. If you have any questions regarding the information in this report, please do not hesitate to contact this office.

*EXP Services Inc.*

*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
March 2, 2018*

# **Appendices**





*EXP Services Inc.*

*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
March 2, 2018*

# **Appendix A: Qualifications of Assessors**



## Qualifications of Assessors

EXP provides a full range of environmental services through a full-time Environmental Services Group. EXP's Earth and Environment Group has developed a strong working relationship with clients in both the private and public sectors and has developed a positive relationship with Ontario Ministry of the Environment. Personnel in the numerous branch offices form part of a large network of full-time dedicated environmental professionals in the EXP organization.

**Matthew Laneville**, B.A., has 11 years of experience in the environmental consulting field. Technical undertakings have included: project coordination; Phase I Environmental Site Assessments; ground water monitoring, environmental sampling and data evaluation; and technical report preparation.

**Mark McCalla**, P.Geo., is a senior Environmental Scientist with EXP who has 27 years of experience in the environmental consulting field. His technical undertakings have including work in the following fields: Phase I and II Environmental Site Assessments; Site Specific Risk Assessments; Petroleum and chlorinated hydrocarbon contaminated sites; Soil and groundwater remediation technologies; Hydrogeological, Terrain Analysis and Aggregate Assessments; Preparation of Ontario Ministry of Environment Certificate of Approvals and Records of Site Condition. Mr. McCalla is a Qualified Person for completing Phase I and II Environmental Site Assessments as per O.Reg 153/04

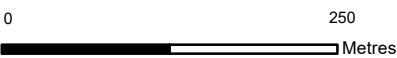
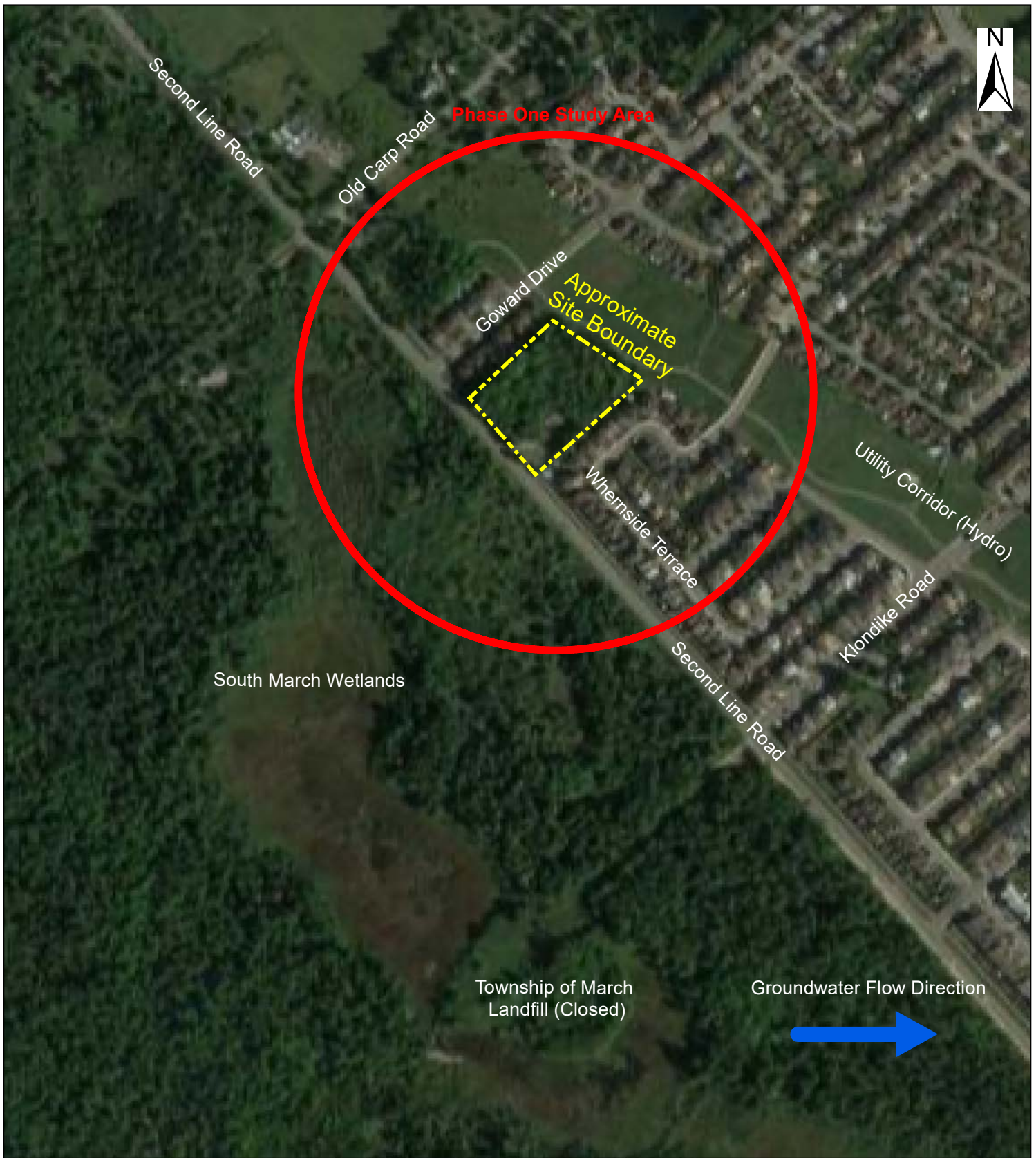
*EXP Services Inc.*

*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
March 2, 2018*

## **Appendix B: Figures**








**exp Services Inc.**  
 100-2650 Queensview Drive  
 Ottawa, Ontario  
 K2B 8H6  
 T - (613) - 688-1899  
 F - (613) - 225-7337

PROJECT TITLE:  
**PHASE ONE ENVIRONMENTAL  
 SITE ASSESSMENT**  
 1158 Second Line Road  
 Ottawa, Ontario

DRAWING TITLE:  
**SITE PLAN**

PROJECT No.:	DWN:
OTT-00245054-A0	ML
SCALE:	CHKD:
AS SHOWN	MM
DATE:	FIG. No.:
MARCH 2018	2





Legend

⊕ - Selection of monitoring wells associated with former landfill study

■ - Current on-Site Building    □ - Approximate location of interior AST



**exp Services Inc.**  
 100-2650 Queensview Drive  
 Ottawa, Ontario  
 K2B 8H6  
 T - (613) - 688-1899  
 F - (613) - 225-7337

PROJECT TITLE:

PHASE ONE ENVIRONMENTAL  
 SITE ASSESSMENT  
 1158 Second Line Road  
 Ottawa, Ontario

DRAWING TITLE:

CONCEPTUAL SITE MODEL

PROJECT No.:

OTT-00245054-A0

DWN:

ML

SCALE:

AS SHOWN

CHKD:

MM

DATE:

MARCH 2018

FIG. No.:

3

*EXP Services Inc.*

*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
March 2, 2018*

## **Appendix C: Title Search, Municipal & Provincial Records**





February 9, 2018

VIA FACSIMILE:  
416-314-4285

FOI Manager  
Freedom of Information & Protection of Privacy Office  
Ontario Ministry of the Environment  
12th Floor, 40 St. Clair Avenue West  
Toronto, Ontario M4V 1M2

Re: OTT-00245054-A0 **File Review Request**  
**1158 Old Second Line Road, Ottawa, Ontario**

Dear Sir or Madam:

I am sending a Freedom of Information Request to you for 1158 Old Second Line Road, Ottawa, Ontario. We are conducting an environmental site assessment and require any environmental concerns.

If possible, we would appreciate receiving the documentation by email ([kathy.radisch@exp.com](mailto:kathy.radisch@exp.com)) and by mail. If you have any questions, or require any further information, please do not hesitate to contact the undersigned at 613-688-1891, ext. 3296.

Yours truly,  
**exp Services Inc.**

A handwritten signature in blue ink that reads 'Kathy Radisch'.

Kathy Radisch  
Administrative Assistant  
Earth & Environment

Enclosures: FOI Form  
Credit Card Payment Form





File Number: C10-01-12-0246

October 16, 2012

Kathy Radisch  
exp Services Inc.  
2650 Queensview Drive, Unit 100  
Ottawa  
K2B 8H6

*Sent via email [Kathy.radisch@exp.com]*

Dear Kathy Radisch,

**Re: Information Request  
1158 Second Line Road, Ottawa, Ontario (“Subject Property”)**

**Internal Department Circulation**

The Infrastructure Services and Community Sustainability Department has the following information in response to your request for information regarding the Subject Property:

- The Disposals and Environmental Remediation Unit notes that the Subject Property is within 500 m of City owned former landfill Second Line Road Dump (Ka-01). A data gap analysis was conducted on this former landfill site to identify any potential human health risks associated with the site’s current land use, however none were identified.

**Search of Historical Land Use Inventory**

**This acknowledges receipt of the signed Disclaimer regarding your request for information from the City’s Historical Land Use Inventory (HLUI 2005) database for the Subject Property.**

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

The HLUI database was also searched for activity associated with properties located within 50m of the Subject Property. The following information was revealed:

*Shaping our future together  
Ensemble, formons notre avenir*

City of Ottawa  
Infrastructure Services and Community  
Sustainability Department  
Planning and Growth Management Branch

110 Laurier Avenue West, 4th Floor  
Ottawa, ON K1P 1J1  
Tel: (613) 580-2424 ext. 14743  
Fax: (613) 560-6006  
www.ottawa.ca

Ville d'Ottawa  
Services d'infrastructure et Viabilité des  
collectivités  
Direction de l'approbation des demandes  
d'aménagement et d'infrastructure

110, avenue Laurier Ouest, 4e étage  
Ottawa (Ontario) K1P 1J1  
Tél.: (613) 580-2424 ext. 14743  
Télééc: (613) 560-6006  
www.ottawa.ca

- There are no activities associated with the properties located within 50m of the Subject Property.

**Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an “as is” basis with no representation or warranty by the City with respect to the information’s accuracy or exhaustiveness in responding to the request.**

**Furthermore, the HLUI database and the results of this search in no way confirm the presence or absence of contamination or pollution of any kind. This information is provided on the assumption that it will not be relied upon by any person for any purpose whatsoever. The City of Ottawa denies all liability to any persons attempting to rely on any information provided from the HLUI database.**

**Please note that in responding to your request, the City of Ottawa does not guarantee or comment on the environmental condition of the Subject Property. You may wish to contact the Ontario Ministry of Environment for additional information.**

If you have any further questions or comments, please contact Stream Shen at 613-580-2424 ext. 14743 or [HLUI@ottawa.ca](mailto:HLUI@ottawa.ca).

Sincerely,



*Stream Shen for*  
Michael J. Boughton, MCIP, RPP  
Senior Planner  
Development Review (Suburban Services)  
Infrastructure Services and Community Sustainability

MB/SS

cc: File no. C10-01-12-0246



## READ Abstracts Limited

---

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4

Email: [search@readsearch.com](mailto:search@readsearch.com)

Tel.: 613-236-0664

Fax: 613-236-3677

### ENVIRONMENTAL SEARCH

February 26, 2018

EXP Services Inc.  
Attn: Kathy Radisch

#### BRIEF DESCRIPTION OF LAND:

1158 Second Line Road., Ottawa  
Part of Lot 11, Concession 3 March, being Parts 1 and 2 on 5R1715

PIN: 04526-0207

LAST REGISTERED OWNER:     HARB, nada  
  HOUSSARI, Adel

#### CHAIN OF TITLE:

Deed MH266 registered June 16, 1875  
From John Armstrong to Robert Armstrong

Deed MH2052 registered November 2, 1910  
From Robert Armstrong to Robert Richardson

Deed MH3736 registered March 10, 1948  
From Robert Richardson to Lucy B. Gore, Margaret H. Dool and Susanna L. Bidgood

Deed MH3966 registered September 9, 1953  
From Lucy B. Gore, Margaret H. Dool and Susanna L. Bidgood to Lionel Pelland

Deed MH4530 registered March 22, 1966  
From Lionel Pelland to Lucy B. Gore, Margaret H. Dool and Susanna L. Bidgood

Deed NS248705 registered July 31, 1987  
From Lucy B. Gore, Margaret H. Dool and Susanna L. Bidgood to Joseph Williams and  
Carolyn Jeanne Williams

Deed N364413 registered November 14, 1986  
From Joseph Williams and Carolyn Jeanne Williams to Michael Page McLaughlin

Deed N460071 registered October 7, 1988  
From Michael Page McLaughlin to Eleanor Marie Barr

Deed N754937 registered May 29, 1997  
From Eleanor Marie Barr to Gordon Charles Piche and Ruth Elizabeth Piche

Deed OC558245 registered January 27, 2006  
From Gordon Charles Piche and Ruth Elizabeth Piche to Jeff Snider and Darlene Snider

Deed oC1063650 registered December 18, 2009  
From Jeff Snider and Darlene Snider to Nada Harb and Adel Houssari

*EXP Services Inc.*

*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
March 2, 2018*

## **Appendix D: EcoLog Reports**



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## **Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY**

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# Executive Summary

## Property Information:

**Project Property:** *Phase One ESA  
1158 Old 2 Line Rd Ottawa ON K2W0H9*

**Project No:** *OTT-00245054-A0*

## **Coordinates:**

**Latitude:** *45.349249*  
**Longitude:** *-75.948556*  
**UTM Northing:** *5,022,186.32*  
**UTM Easting:** *425,694.91*  
**UTM Zone:** *UTM Zone 18T*

**Elevation:** *347 FT  
105.85 M*

## Order Information:

**Order No:** *20180206218*  
**Date Requested:** *February 6, 2018*  
**Requested by:** *exp Services Inc.*  
**Report Type:** *Standard Report*

## Historical/Products:

**Aerial Photographs** *National Collection - Digital (PDF)*  
**City Directory Search** *Subject Site plus 5 Adjacent Properties*

## Executive Summary: Report Summary

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.25 km</i>	<i>Total</i>
AAGR	<i>Abandoned Aggregate Inventory</i>	Y	0	0	0
AGR	<i>Aggregate Inventory</i>	Y	0	0	0
AMIS	<i>Abandoned Mine Information System</i>	Y	0	0	0
ANDR	<i>Anderson's Waste Disposal Sites</i>	Y	0	0	0
AUWR	<i>Automobile Wrecking &amp; Supplies</i>	Y	0	0	0
BORE	<i>Borehole</i>	Y	0	1	1
CA	<i>Certificates of Approval</i>	Y	0	0	0
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
COAL	<i>Inventory of Coal Gasification Plants and Coal Tar Sites</i>	Y	0	0	0
CONV	<i>Compliance and Convictions</i>	Y	0	0	0
CPU	<i>Certificates of Property Use</i>	Y	0	0	0
DRL	<i>Drill Hole Database</i>	Y	0	0	0
EASR	<i>Environmental Activity and Sector Registry</i>	Y	0	0	0
EBR	<i>Environmental Registry</i>	Y	0	0	0
ECA	<i>Environmental Compliance Approval</i>	Y	0	0	0
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	1	0	1
EIIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
EMHE	<i>Emergency Management Historical Event</i>	Y	0	0	0
EXP	<i>List of TSSA Expired Facilities</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FOFT	<i>Fisheries &amp; Oceans Fuel Tanks</i>	Y	0	0	0
FST	<i>Fuel Storage Tank</i>	Y	0	0	0
FSTH	<i>Fuel Storage Tank - Historic</i>	Y	0	0	0
GEN	<i>Ontario Regulation 347 Waste Generators Summary</i>	Y	0	1	1
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
HINC	<i>TSSA Historic Incidents</i>	Y	0	1	1
IAFT	<i>Indian &amp; Northern Affairs Fuel Tanks</i>	Y	0	0	0
INC	<i>TSSA Incidents</i>	Y	0	0	0
LIMO	<i>Landfill Inventory Management Ontario</i>	Y	0	0	0
MINE	<i>Canadian Mine Locations</i>	Y	0	0	0
MNR	<i>Mineral Occurrences</i>	Y	0	0	0
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0



<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Within 0.25 km</b>	<b>Total</b>
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0
NDFT	<i>National Defense &amp; Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense &amp; Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence &amp; Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBW	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGW	<i>Oil and Gas Wells</i>	Y	0	0	0
OOGW	<i>Ontario Oil and Gas Wells</i>	Y	0	0	0
OPCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
ORD	<i>Orders</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PES	<i>Pesticide Register</i>	Y	0	0	0
PINC	<i>TSSA Pipeline Incidents</i>	Y	0	0	0
PRT	<i>Private and Retail Fuel Storage Tanks</i>	Y	0	0	0
PTTW	<i>Permit to Take Water</i>	Y	0	0	0
REC	<i>Ontario Regulation 347 Waste Receivers Summary</i>	Y	0	0	0
RSC	<i>Record of Site Condition</i>	Y	0	0	0
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	0	0
SPL	<i>Ontario Spills</i>	Y	0	0	0
SRDS	<i>Wastewater Discharger Registration Database</i>	Y	0	0	0
TANK	<i>Anderson's Storage Tanks</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
VAR	<i>TSSA Variances for Abandonment of Underground Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Sites - MOE CA Inventory</i>	Y	0	0	0
WDSH	<i>Waste Disposal Sites - MOE 1991 Historical Approval Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Information System</i>	Y	0	13	13
<b>Total:</b>			1	16	17

## Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
<a href="#">1</a>	EHS		1158 Second Line Road Kanata ON K2K 1X7	SSW/39.4	0.72	<a href="#">13</a>

## Executive Summary: Site Report Summary - Surrounding Properties

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
<a href="#">2</a>	WWIS		lot 11 con 3 KANATA ON	SE/58.3	0.02	<a href="#">13</a>
<a href="#">3</a>	WWIS		lot 11 ON	SE/59.8	0.02	<a href="#">14</a>
<a href="#">4</a>	GEN	CITY OF OTTAWA	250 METERS W OF THE INTERSECTION OF 2ND LINE RD AND KLONDIKE RD OTTAWA ON	WSW/88.9	1.02	<a href="#">17</a>
<a href="#">5</a>	WWIS		lot 11 ON	S/92.6	0.99	<a href="#">18</a>
<a href="#">6</a>	WWIS		lot 11 con 3 KANATA ON	S/96.4	0.99	<a href="#">21</a>
<a href="#">7</a>	WWIS		lot 11 con 3 ON	S/97.8	0.99	<a href="#">22</a>
<a href="#">8</a>	HINC		108 WHERNSIDE TERRACE OTTAWA ON	S/111.3	1.74	<a href="#">25</a>
<a href="#">9</a>	WWIS		lot 10 con 3 ON	SW/194.1	0.97	<a href="#">25</a>
<a href="#">10</a>	BORE		ON	NW/207.0	-2.28	<a href="#">28</a>
<a href="#">11</a>	WWIS		lot 11 ON	SSE/210.1	1.88	<a href="#">29</a>
<a href="#">12</a>	WWIS		lot 11 con 3 KANATA ON	ESE/216.3	-0.75	<a href="#">32</a>
<a href="#">13</a>	WWIS		lot 11 con 3 ON	WNW/216.5	-1.91	<a href="#">37</a>
<a href="#">14</a>	WWIS		lot 11 con 3 ON	NW/219.6	-2.28	<a href="#">40</a>
<a href="#">15</a>	WWIS		lot 11 con 3 ON	WNW/224.7	-1.91	<a href="#">42</a>
<a href="#">16</a>	WWIS		lot 11 con 3 ON	NW/233.9	-3.01	<a href="#">45</a>
<a href="#">17</a>	WWIS		lot 11 con 3 ON	NNW/250.1	-1.94	<a href="#">50</a>

# Executive Summary: Summary By Data Source

## **BORE - Borehole**

A search of the BORE database, dated 1875-Jul 2014 has found that there are 1 BORE site(s) within approximately 0.25 kilometers of the project property.

<b><u>Lower Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	ON	NW	206.96	<a href="#"><u>10</u></a>

## **EHS - ERIS Historical Searches**

A search of the EHS database, dated 1999-Aug 2016 has found that there are 1 EHS site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	1158 Second Line Road Kanata ON K2K 1X7	SSW	39.44	<a href="#"><u>1</u></a>

## **GEN - Ontario Regulation 347 Waste Generators Summary**

A search of the GEN database, dated 1986-Jun 2017 has found that there are 1 GEN site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
CITY OF OTTAWA	250 METERS W OF THE INTERSECTION OF 2ND LINE RD AND KLONDIKE RD OTTAWA ON	WSW	88.90	<a href="#"><u>4</u></a>

## **HINC - TSSA Historic Incidents**

A search of the HINC database, dated 2006-June 2009\* has found that there are 1 HINC site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	108 WHERNSIDE TERRACE OTTAWA ON	S	111.27	<a href="#"><u>8</u></a>

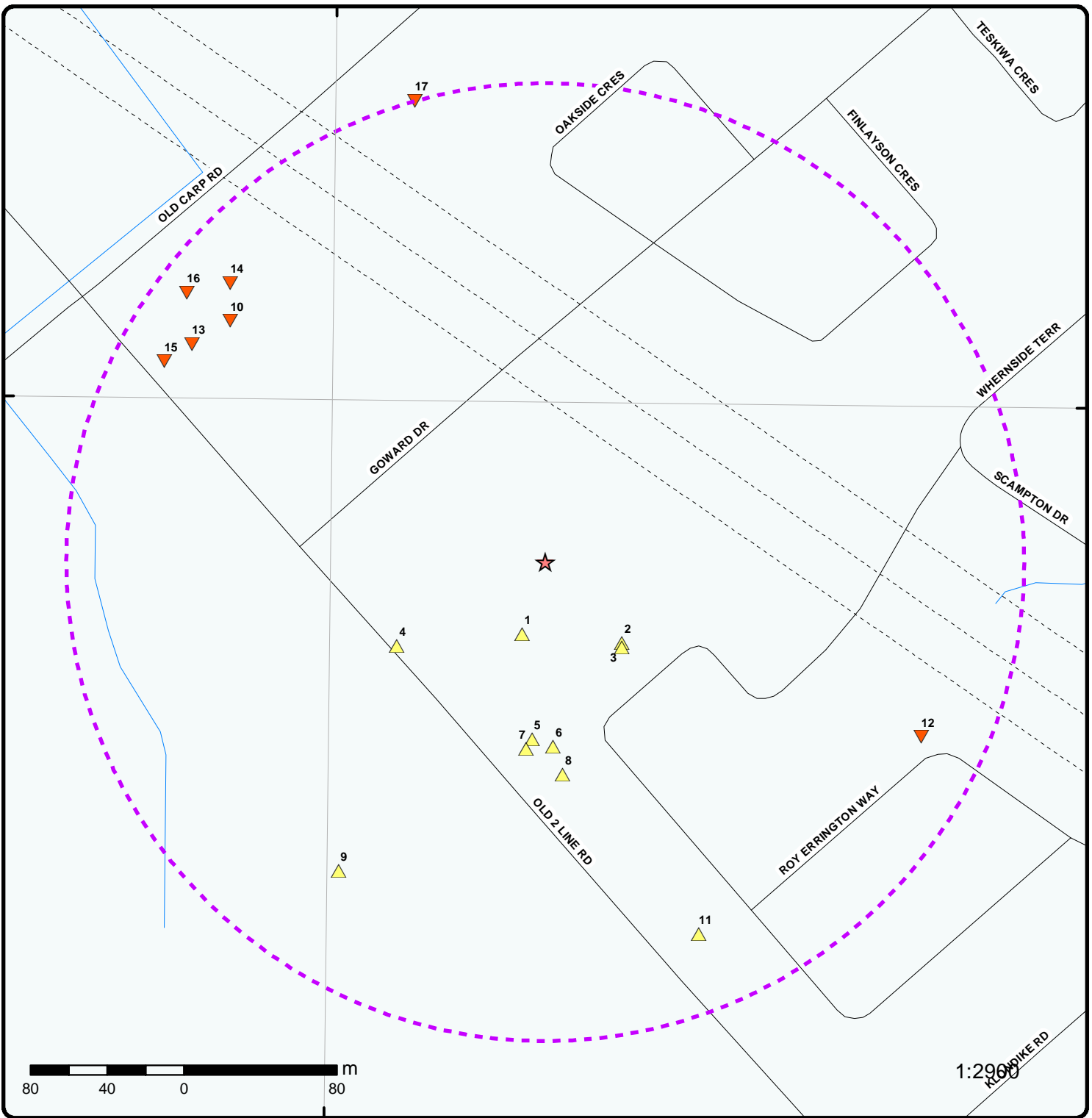
## **WWIS - Water Well Information System**

A search of the WWIS database, dated Mar 31, 2017 has found that there are 13 WWIS site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	lot 11 con 3 KANATA ON	SE	58.30	<a href="#"><u>2</u></a>

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 11 ON	SE	59.81	<a href="#"><u>3</u></a>
	lot 11 ON	S	92.62	<a href="#"><u>5</u></a>
	lot 11 con 3 KANATA ON	S	96.36	<a href="#"><u>6</u></a>
	lot 11 con 3 ON	S	97.83	<a href="#"><u>7</u></a>
	lot 10 con 3 ON	SW	194.06	<a href="#"><u>9</u></a>
	lot 11 ON	SSE	210.14	<a href="#"><u>11</u></a>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 11 con 3 KANATA ON	ESE	216.31	<a href="#"><u>12</u></a>
	lot 11 con 3 ON	WNW	216.55	<a href="#"><u>13</u></a>
	lot 11 con 3 ON	NW	219.62	<a href="#"><u>14</u></a>
	lot 11 con 3 ON	WNW	224.75	<a href="#"><u>15</u></a>
	lot 11 con 3 ON	NW	233.94	<a href="#"><u>16</u></a>
	lot 11 con 3 ON	NNW	250.09	<a href="#"><u>17</u></a>



### Map : 0.25 Kilometer Radius

Order No: 20180206218  
 Address: 1158 Old 2 Line Rd, Ottawa, ON, K2W0H9



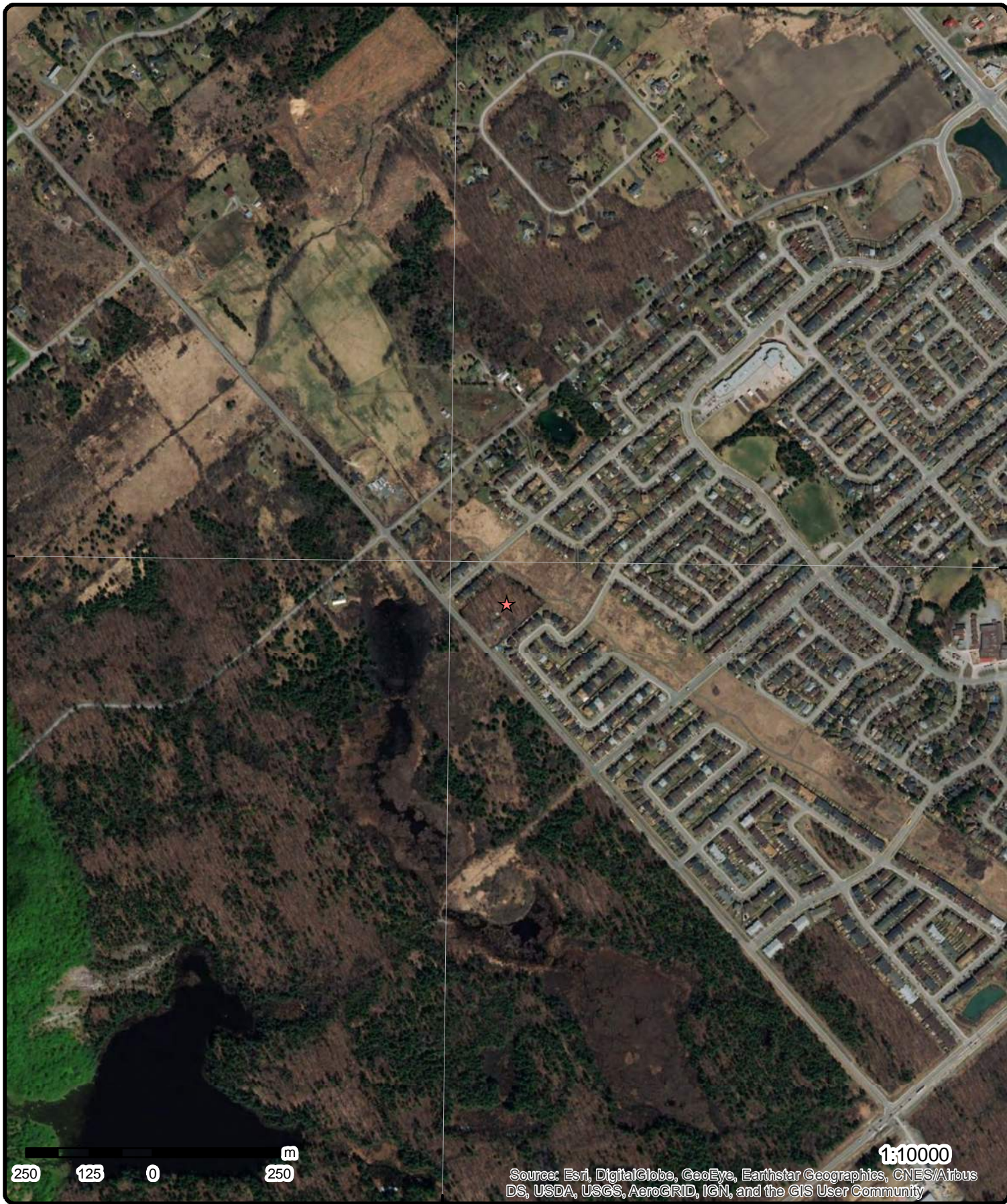
Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range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



75°57'W

45°21'N

45°21'N



250 125 0 250 m

1:10000

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Aerial (2016)

Address: 1158 Old 2 Line Rd, Ottawa, ON, K2W0H9

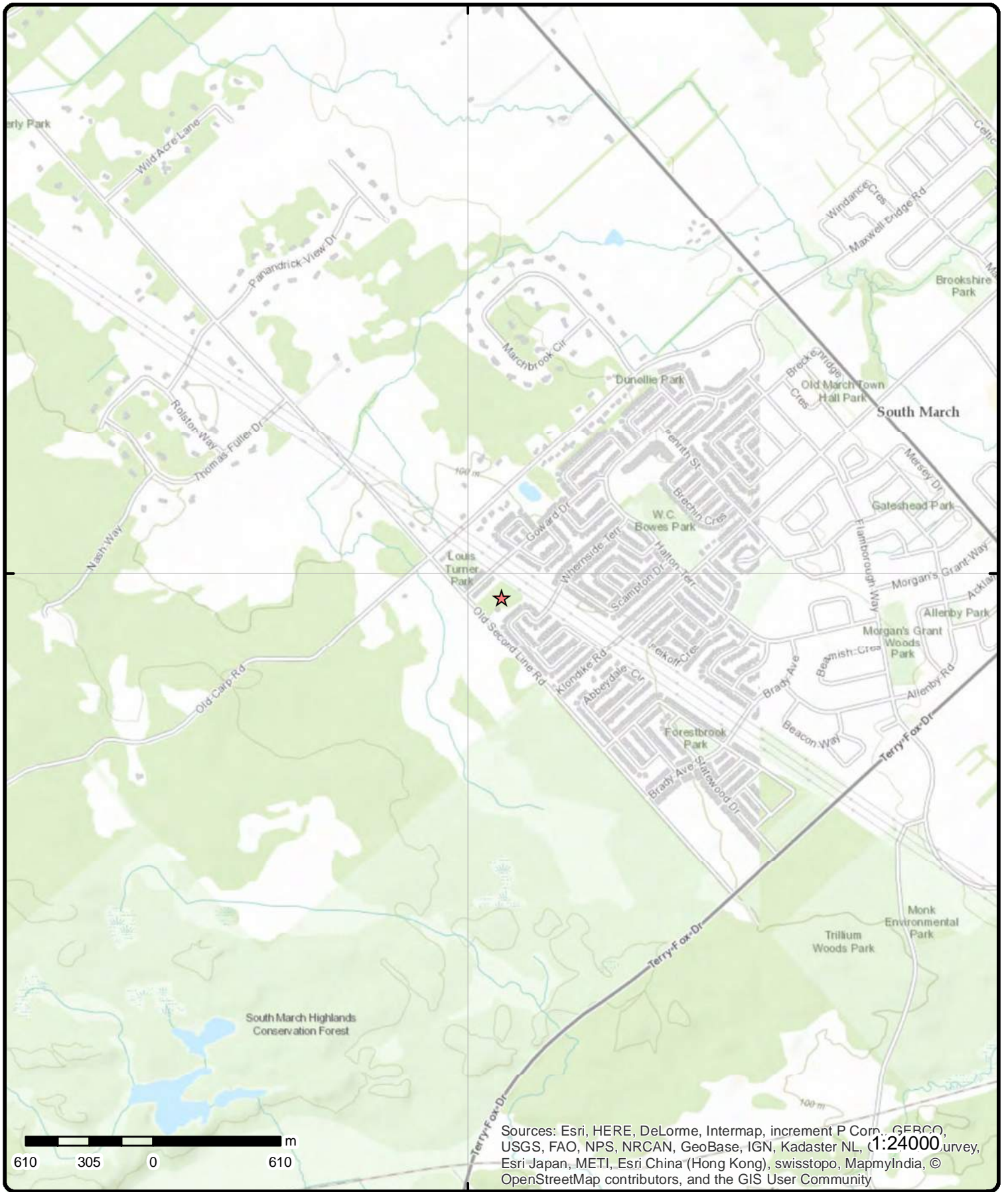
Source: ESRI World Imagery

Order No: 20180206218



© ERIS Information Limited Partnership





# Topographic Map

Address: 1158 Old 2 Line Rd, Ottawa, ON, K2W0H9

Source: ESRI World Topographic Map

Order No: 20180206218



© ERIS Information Limited Partnership



# Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<u>1</u>	1 of 1	SSW/39.4	106.6	1158 Second Line Road Kanata ON K2K 1X7	EHS

**Postal Code:**  
**City:**  
**Address2:**  
**Address1:**  
**Provstate:**  
**Order No.:** 20120928026  
**Addit. Info Ordered::** Fire Insur. Maps and/or Site Plans  
**Report Date:** 10-OCT-12  
**Report Type:** Standard Report  
**Search Radius (km):** .25

<u>2</u>	1 of 1	SE/58.3	105.9	lot 11 con 3 KANATA ON	WWIS
----------	--------	---------	-------	---------------------------	------

<p> <b>Well ID:</b> 7041118  <b>Construction Date:</b>  <b>Primary Water Use:</b>  <b>Sec. Water Use:</b>  <b>Final Well Status:</b> Abandoned-Other  <b>Water Type:</b>  <b>Casing Material:</b>  <b>Audit No:</b> Z55556  <b>Tag:</b>  <b>Construction Method:</b>  <b>Elevation (m):</b>  <b>Elevation Reliability:</b>  <b>Depth to Bedrock:</b>  <b>Well Depth:</b>  <b>Overburden/Bedrock:</b>  <b>Pump Rate:</b>  <b>Static Water Level:</b>  <b>Flowing (Y/N):</b>  <b>Flow Rate:</b>  <b>Clear/Cloudy:</b> </p>	<p> <b>Data Entry Status:</b>  <b>Data Src:</b>  <b>Date Received:</b> 2/21/2007  <b>Selected Flag:</b> 1  <b>Abandonment Rec:</b> Yes  <b>Contractor:</b> 1119  <b>Form Version:</b> 3  <b>Owner:</b>  <b>Street Name:</b> 2ND LINE &amp; KLONDIKE RD  <b>County:</b> OTTAWA-CARLETON  <b>Municipality:</b> MARCH TOWNSHIP  <b>Site Info:</b>  <b>Lot:</b> 011  <b>Concession:</b> 03  <b>Concession Name:</b> CON  <b>Easting NAD83:</b>  <b>Northing NAD83:</b>  <b>Zone:</b>  <b>UTM Reliability:</b> </p>
--	--

**Bore Hole Information**

<p> <b>Bore Hole ID:</b> 11763611  <b>DP2BR:</b>  <b>Code OB:</b> u  <b>Code OB Desc:</b> all layers are unknown type  <b>Open Hole:</b>  <b>Elevation:</b> 101.391937  <b>Elevrc:</b>  <b>Remarks:</b>  <b>Elevrc Desc:</b>  <b>Location Source Date:</b>  <b>Improvement Location Source:</b>  <b>Improvement Location Method:</b>  <b>Source Revision Comment:</b> </p>	<p> <b>Spatial Status:</b>  <b>Cluster Kind:</b>  <b>UTMRC:</b> 3  <b>UTMRC Desc:</b> margin of error : 10 - 30 m  <b>Location Method:</b> wwr  <b>Org CS:</b> UTM83  <b>Date Completed:</b> 11/29/2006             </p>
--	--

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
---------	-------------------	----------------------------	------------------	------	----

Supplier Comment:

Overburden and Bedrock  
Materials Interval

Formation ID: 933092821  
 Layer: 1  
 Color:  
 General Color:  
 Mat1:  
 Most Common Material:  
 Mat2:  
 Other Materials:  
 Mat3:  
 Other Materials:  
 Formation Top Depth: 0.00  
 Formation End Depth: 23.47  
 Formation End Depth UOM: m

Annular Space/Abandonment  
Sealing Record

Plug ID: 933314530  
 Layer: 1  
 Plug From: 23.47  
 Plug To: 21.94  
 Plug Depth UOM: m

Plug ID: 933314531  
 Layer: 2  
 Plug From: 21.94  
 Plug To: 0.00  
 Plug Depth UOM: m

Method of Construction & Well  
Use

Method Construction ID: 967041118  
 Method Construction Code:  
 Method Construction:  
 Other Method Construction:

Pipe Information

Pipe ID: 11771301  
 Casing No: 1  
 Comment:  
 Alt Name:

<u>3</u>	1 of 1	SE/59.8	105.9	lot 11 ON	WWIS
Well ID:	1532713			Data Entry Status:	
Construction Date:				Data Src:	1
Primary Water Use:	Not Used			Date Received:	4/16/2002
Sec. Water Use:				Selected Flag:	1
Final Well Status:	Test Hole			Abandonment Rec:	
Water Type:				Contractor:	1119
Casing Material:				Form Version:	1
Audit No:	237822			Owner:	
Tag:				Street Name:	
Construction Method:				County:	OTTAWA-CARLETON

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Elevation (m):</b>				<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	011
<b>Well Depth:</b>				<b>Concession:</b>	
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					

**Bore Hole Information**

<b>Bore Hole ID:</b>	10523841	<b>Spatial Status:</b>	Improved
<b>DP2BR:</b>	7	<b>Cluster Kind:</b>	
<b>Code OB:</b>	r	<b>UTMRC:</b>	3
<b>Code OB Desc:</b>	Bedrock	<b>UTMRC Desc:</b>	margin of error : 10 - 30 m
<b>Open Hole:</b>		<b>Location Method:</b>	
<b>Elevation:</b>	101.414909	<b>Org CS:</b>	N83
<b>Elevrc:</b>		<b>Date Completed:</b>	3/28/2002
<b>Remarks:</b>			
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>	1999-2004 MOE Water Well Data Improvement Project		
<b>Improvement Location Method:</b>	GIS10000		
<b>Source Revision Comment:</b>	Northing and/or Easting field has been changed. Location estimated from sketch map.		
<b>Supplier Comment:</b>	Accuracy was not specified from source. Within 20m horizontal accuracy assumed as worst case using GIS at a scale of 1:10000.		

**Overburden and Bedrock**

**Materials Interval**

<b>Formation ID:</b>	932857519
<b>Layer:</b>	1
<b>Color:</b>	
<b>General Color:</b>	
<b>Mat1:</b>	05
<b>Most Common Material:</b>	CLAY
<b>Mat2:</b>	81
<b>Other Materials:</b>	SANDY
<b>Mat3:</b>	
<b>Other Materials:</b>	
<b>Formation Top Depth:</b>	0.00
<b>Formation End Depth:</b>	7.00
<b>Formation End Depth UOM:</b>	ft
<b>Formation ID:</b>	932857520
<b>Layer:</b>	2
<b>Color:</b>	2
<b>General Color:</b>	GREY
<b>Mat1:</b>	18
<b>Most Common Material:</b>	SANDSTONE
<b>Mat2:</b>	
<b>Other Materials:</b>	
<b>Mat3:</b>	
<b>Other Materials:</b>	
<b>Formation Top Depth:</b>	7.00
<b>Formation End Depth:</b>	78.00
<b>Formation End Depth UOM:</b>	ft

**Annular Space/Abandonment**

**Sealing Record**

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Plug ID:</b>		933225359			
<b>Layer:</b>		1			
<b>Plug From:</b>		2.00			
<b>Plug To:</b>		14.00			
<b>Plug Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961532713			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		11072411			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930095424			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		8.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930095425			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930095426			
<b>Layer:</b>		3			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Results of Well Yield Testing</u></b>					
<b>Pump Test ID:</b>		991532713			
<b>Pump Set At:</b>					
<b>Static Level:</b>		10.00			
<b>Final Level After Pumping:</b>		70.00			
<b>Recommended Pump Depth:</b>		70.00			
<b>Pumping Rate:</b>		30.00			
<b>Flowing Rate:</b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Recommended Pump Rate:</b>		30.00			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>		2			
<b>Water State After Test:</b>		CLOUDY			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
<b><u>Draw Down &amp; Recovery</u></b>					
<b>Pump Test Detail ID:</b>		934117889			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934401501			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934662024			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934918908			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b><u>Water Details</u></b>					
<b>Water ID:</b>		934016399			
<b>Layer:</b>		1			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		15.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		934016400			
<b>Layer:</b>		2			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		40.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		934016401			
<b>Layer:</b>		3			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		59.00			
<b>Water Found Depth UOM:</b>		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Generator No.:	ON4654815			PO Box No.:	
Status:				Country:	
Approval Years:	2013			Choice of Contact:	
Contam. Facility:				Co Admin:	
MHSW Facility:				Phone No. Admin:	
SIC Code:	913910				
SIC Description:					
<b>--Details--</b>					
Waste Code:		241			
Waste Description:		HALOGENATED SOLVENTS			
Waste Code:		149			
Waste Description:		LANDFILL LEACHATES			

<u>5</u>	1 of 1	S/92.6	106.8	lot 11 ON	WWIS
Well ID:	1532714			Data Entry Status:	
Construction Date:				Data Src:	1
Primary Water Use:	Not Used			Date Received:	4/16/2002
Sec. Water Use:				Selected Flag:	1
Final Well Status:	Test Hole			Abandonment Rec:	
Water Type:				Contractor:	1119
Casing Material:				Form Version:	1
Audit No:	237821			Owner:	
Tag:				Street Name:	
Construction Method:				County:	OTTAWA-CARLETON
Elevation (m):				Municipality:	MARCH TOWNSHIP
Elevation Reliability:				Site Info:	
Depth to Bedrock:				Lot:	011
Well Depth:				Concession:	
Overburden/Bedrock:				Concession Name:	CON
Pump Rate:				Easting NAD83:	
Static Water Level:				Northing NAD83:	
Flowing (Y/N):				Zone:	
Flow Rate:				UTM Reliability:	
Clear/Cloudy:					
<b><u>Bore Hole Information</u></b>					
Bore Hole ID:	10523842			Spatial Status:	Improved
DP2BR:	1			Cluster Kind:	
Code OB:	r			UTMRC:	3
Code OB Desc:	Bedrock			UTMRC Desc:	margin of error : 10 - 30 m
Open Hole:				Location Method:	
Elevation:	103.106353			Org CS:	N83
Elevrc:				Date Completed:	3/28/2002
Remarks:					
Elevrc Desc:					
Location Source Date:					
Improvement Location Source:	1999-2004 MOE Water Well Data Improvement Project				
Improvement Location Method:	GIS10000				
Source Revision Comment:	Northing and/or Easting field has been changed. Location estimated from sketch map.				
Supplier Comment:	Accuracy was not specified from source. Within 20m horizontal accuracy assumed as worst case using GIS at a scale of 1:10000.				
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
Formation ID:	932857521				

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Layer:</b>		1			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>		05			
<b>Most Common Material:</b>		CLAY			
<b>Mat2:</b>		81			
<b>Other Materials:</b>		SANDY			
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0.00			
<b>Formation End Depth:</b>		1.00			
<b>Formation End Depth UOM:</b>		ft			
<b>Formation ID:</b>		932857522			
<b>Layer:</b>		2			
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		1.00			
<b>Formation End Depth:</b>		82.00			
<b>Formation End Depth UOM:</b>		ft			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		933225360			
<b>Layer:</b>		1			
<b>Plug From:</b>		2.00			
<b>Plug To:</b>		8.00			
<b>Plug Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961532714			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		11072412			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930095427			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		8.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Casing ID:</b>		930095428			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930095429			
<b>Layer:</b>		3			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Results of Well Yield Testing</u></b>					
<b>Pump Test ID:</b>		991532714			
<b>Pump Set At:</b>					
<b>Static Level:</b>		10.00			
<b>Final Level After Pumping:</b>		80.00			
<b>Recommended Pump Depth:</b>		80.00			
<b>Pumping Rate:</b>		20.00			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		20.00			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>		2			
<b>Water State After Test:</b>		CLOUDY			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
<b><u>Draw Down &amp; Recovery</u></b>					
<b>Pump Test Detail ID:</b>		934117890			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934401502			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934662025			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		10.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934918909			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		10.00			



Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Test Level UOM:</b>		ft			
<b><u>Water Details</u></b>					
<b>Water ID:</b>	934016402				
<b>Layer:</b>	1				
<b>Kind Code:</b>	5				
<b>Kind:</b>	Not stated				
<b>Water Found Depth:</b>	16.00				
<b>Water Found Depth UOM:</b>	ft				
<b>Water ID:</b>	934016403				
<b>Layer:</b>	2				
<b>Kind Code:</b>	5				
<b>Kind:</b>	Not stated				
<b>Water Found Depth:</b>	54.00				
<b>Water Found Depth UOM:</b>	ft				
<b>Water ID:</b>	934016404				
<b>Layer:</b>	3				
<b>Kind Code:</b>	5				
<b>Kind:</b>	Not stated				
<b>Water Found Depth:</b>	64.00				
<b>Water Found Depth UOM:</b>	ft				

[6](#) 1 of 1 S/96.4 106.8 lot 11 con 3 KANATA ON [WWIS](#)

<b>Well ID:</b>	7041119	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	
<b>Primary Water Use:</b>		<b>Date Received:</b>	2/21/2007
<b>Sec. Water Use:</b>		<b>Selected Flag:</b>	1
<b>Final Well Status:</b>	Abandoned-Other	<b>Abandonment Rec:</b>	Yes
<b>Water Type:</b>		<b>Contractor:</b>	1119
<b>Casing Material:</b>		<b>Form Version:</b>	3
<b>Audit No:</b>	Z55557	<b>Owner:</b>	
<b>Tag:</b>		<b>Street Name:</b>	2ND LINE & KLONDIKE RD
<b>Construction Method:</b>		<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>		<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	011
<b>Well Depth:</b>		<b>Concession:</b>	03
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	CON
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**Bore Hole Information**

<b>Bore Hole ID:</b>	11763612	<b>Spatial Status:</b>	
<b>DP2BR:</b>		<b>Cluster Kind:</b>	
<b>Code OB:</b>	u	<b>UTMRC:</b>	3
<b>Code OB Desc:</b>	all layers are unknown type	<b>UTMRC Desc:</b>	margin of error : 10 - 30 m
<b>Open Hole:</b>		<b>Location Method:</b>	wwr
<b>Elevation:</b>	102.895706	<b>Org CS:</b>	UTM83
<b>Elevrc:</b>		<b>Date Completed:</b>	11/29/2006
<b>Remarks:</b>			
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>			
<b>Improvement Location Method:</b>			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<i>Source Revision Comment:</i>					
<i>Supplier Comment:</i>					
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<i>Formation ID:</i>		933092822			
<i>Layer:</i>		1			
<i>Color:</i>					
<i>General Color:</i>					
<i>Mat1:</i>					
<i>Most Common Material:</i>					
<i>Mat2:</i>					
<i>Other Materials:</i>					
<i>Mat3:</i>					
<i>Other Materials:</i>					
<i>Formation Top Depth:</i>		0.00			
<i>Formation End Depth:</i>		24.38			
<i>Formation End Depth UOM:</i>		m			
<b><u>Annular Space/Abandonment</u></b>					
<b><u>Sealing Record</u></b>					
<i>Plug ID:</i>		933314532			
<i>Layer:</i>		1			
<i>Plug From:</i>		24.38			
<i>Plug To:</i>		23.47			
<i>Plug Depth UOM:</i>		m			
<i>Plug ID:</i>		933314533			
<i>Layer:</i>		2			
<i>Plug From:</i>		23.47			
<i>Plug To:</i>		0.00			
<i>Plug Depth UOM:</i>		m			
<b><u>Method of Construction &amp; Well</u></b>					
<b><u>Use</u></b>					
<i>Method Construction ID:</i>		967041119			
<i>Method Construction Code:</i>					
<i>Method Construction:</i>					
<i>Other Method Construction:</i>					
<b><u>Pipe Information</u></b>					
<i>Pipe ID:</i>		11771302			
<i>Casing No:</i>		1			
<i>Comment:</i>					
<i>Alt Name:</i>					

<a href="#">7</a>	1 of 1	S/97.8	106.8	lot 11 con 3 ON	WWIS
<i>Well ID:</i>	1531790			<i>Data Entry Status:</i>	
<i>Construction Date:</i>				<i>Data Src:</i>	1
<i>Primary Water Use:</i>	Not Used			<i>Date Received:</i>	4/3/2001
<i>Sec. Water Use:</i>				<i>Selected Flag:</i>	1
<i>Final Well Status:</i>	Test Hole			<i>Abandonment Rec:</i>	
<i>Water Type:</i>				<i>Contractor:</i>	1119
<i>Casing Material:</i>				<i>Form Version:</i>	1
<i>Audit No:</i>	229477			<i>Owner:</i>	
<i>Tag:</i>				<i>Street Name:</i>	

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Construction Method:</b>				<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>				<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	011
<b>Well Depth:</b>				<b>Concession:</b>	03
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	CON
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					

### Bore Hole Information

<b>Bore Hole ID:</b>	10053324	<b>Spatial Status:</b>	Improved
<b>DP2BR:</b>	2	<b>Cluster Kind:</b>	
<b>Code OB:</b>	r	<b>UTMRC:</b>	3
<b>Code OB Desc:</b>	Bedrock	<b>UTMRC Desc:</b>	margin of error : 10 - 30 m
<b>Open Hole:</b>		<b>Location Method:</b>	
<b>Elevation:</b>	103.273956	<b>Org CS:</b>	N83
<b>Elevrc:</b>		<b>Date Completed:</b>	1/9/2001
<b>Remarks:</b>			
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>	1999-2004 MOE Water Well Data Improvement Project		
<b>Improvement Location Method:</b>	GIS		
<b>Source Revision Comment:</b>	Northing and/or Easting field has been changed. Location estimated from sketch map.		
<b>Supplier Comment:</b>	Determined to be an improvement rather than a Lot Centroid in December 2009.		

### Overburden and Bedrock

#### Materials Interval

<b>Formation ID:</b>	931079541
<b>Layer:</b>	1
<b>Color:</b>	
<b>General Color:</b>	
<b>Mat1:</b>	28
<b>Most Common Material:</b>	SAND
<b>Mat2:</b>	
<b>Other Materials:</b>	
<b>Mat3:</b>	
<b>Other Materials:</b>	
<b>Formation Top Depth:</b>	0.00
<b>Formation End Depth:</b>	2.00
<b>Formation End Depth UOM:</b>	ft
<b>Formation ID:</b>	931079542
<b>Layer:</b>	2
<b>Color:</b>	
<b>General Color:</b>	
<b>Mat1:</b>	18
<b>Most Common Material:</b>	SANDSTONE
<b>Mat2:</b>	
<b>Other Materials:</b>	
<b>Mat3:</b>	
<b>Other Materials:</b>	
<b>Formation Top Depth:</b>	2.00
<b>Formation End Depth:</b>	125.00
<b>Formation End Depth UOM:</b>	ft
<b>Formation ID:</b>	931079543
<b>Layer:</b>	3
<b>Color:</b>	4
<b>General Color:</b>	GREEN

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Mat1:</b>		21			
<b>Most Common Material:</b>		GRANITE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		125.00			
<b>Formation End Depth:</b>		150.00			
<b>Formation End Depth UOM:</b>		ft			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		933116950			
<b>Layer:</b>		1			
<b>Plug From:</b>		2.00			
<b>Plug To:</b>		7.00			
<b>Plug Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961531790			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		10601894			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930093432			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		8.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930093433			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930093434			
<b>Layer:</b>		3			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Water Details</u></b>					
<b>Water ID:</b>		933492385			
<b>Layer:</b>		1			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		58.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		933492386			
<b>Layer:</b>		2			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		98.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		933492387			
<b>Layer:</b>		3			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		115.00			
<b>Water Found Depth UOM:</b>		ft			

<u>8</u>	1 of 1	S/111.3	107.6	108 WHERNSIDE TERRACE OTTAWA ON	HINC
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**External File Num:** FS INC 0803-01044  
**Date of Occurrence:** 2/20/2008  
**Fuel Occurrence Type:** Pipeline Strike  
**Fuel Type Involved:** Natural Gas  
**Status Desc::** Completed - Causal Analysis(End)  
**Job Type Desc::** Incident/Near-Miss Occurrence (FS)  
**Oper. Type Involved::** Construction Site (pipeline strike)  
**Service Interruptions::** Yes  
**Property Damage::** Yes  
**Fuel Life Cycle Stage::** Transmission, Distribution and Transportation  
**Root Cause::** Root Cause: Equipment/Material/Component:No Procedures:Yes Maintenance:No Design:No Training:No  
Management:Yes Human Factors:Yes  
**Reported Details::**  
**Fuel Category::** Gaseous Fuel  
**Occurrence Type::** Incident  
**Affiliation::** Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)  
**County Name::** Ottawa  
**Approx. Quant. Rel::**  
**Nearby body of water::**  
**Enter Drainage Syst.::**  
**Approx. Quant. Unit::**  
**Environmental Impact::**

<u>9</u>	1 of 1	SW/194.1	106.8	lot 10 con 3 ON	WWIS
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<b>Well ID:</b>	1531966	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	1
<b>Primary Water Use:</b>		<b>Date Received:</b>	6/12/2001
<b>Sec. Water Use:</b>		<b>Selected Flag:</b>	1
<b>Final Well Status:</b>	Test Hole	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	1119

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Casing Material:</b>				<b>Form Version:</b>	1
<b>Audit No:</b>	229507			<b>Owner:</b>	
<b>Tag:</b>				<b>Street Name:</b>	
<b>Construction Method:</b>				<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>				<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	010
<b>Well Depth:</b>				<b>Concession:</b>	03
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	CON
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					
<b><u>Bore Hole Information</u></b>					
<b>Bore Hole ID:</b>	10053499			<b>Spatial Status:</b>	Improved
<b>DP2BR:</b>	1			<b>Cluster Kind:</b>	
<b>Code OB:</b>	r			<b>UTMRC:</b>	3
<b>Code OB Desc:</b>	Bedrock			<b>UTMRC Desc:</b>	margin of error : 10 - 30 m
<b>Open Hole:</b>				<b>Location Method:</b>	
<b>Elevation:</b>	105.460281			<b>Org CS:</b>	N83
<b>Elevrc:</b>				<b>Date Completed:</b>	4/3/2001
<b>Remarks:</b>					
<b>Elevrc Desc:</b>					
<b>Location Source Date:</b>					
<b>Improvement Location Source:</b>	1999-2004 MOE Water Well Data Improvement Project				
<b>Improvement Location Method:</b>	GIS				
<b>Source Revision Comment:</b>	Northing and/or Easting field has been changed. Location estimated from sketch map.				
<b>Supplier Comment:</b>	Determined to be an improvement rather than a Lot Centroid in December 2009.				
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>	931080066				
<b>Layer:</b>	1				
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>	05				
<b>Most Common Material:</b>	CLAY				
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>	0.00				
<b>Formation End Depth:</b>	1.00				
<b>Formation End Depth UOM:</b>	ft				
<b>Formation ID:</b>	931080067				
<b>Layer:</b>	2				
<b>Color:</b>	2				
<b>General Color:</b>	GREY				
<b>Mat1:</b>	18				
<b>Most Common Material:</b>	SANDSTONE				
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>	1.00				
<b>Formation End Depth:</b>	122.00				
<b>Formation End Depth UOM:</b>	ft				
<b>Formation ID:</b>	931080068				

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Layer:</b>	3				
<b>Color:</b>	2				
<b>General Color:</b>	GREY				
<b>Mat1:</b>	21				
<b>Most Common Material:</b>	GRANITE				
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>	122.00				
<b>Formation End Depth:</b>	150.00				
<b>Formation End Depth UOM:</b>	ft				
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>	933117095				
<b>Layer:</b>	1				
<b>Plug From:</b>	0.00				
<b>Plug To:</b>	4.00				
<b>Plug Depth UOM:</b>	ft				
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>	961531966				
<b>Method Construction Code:</b>	5				
<b>Method Construction:</b>	Air Percussion				
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>	10602069				
<b>Casing No:</b>	1				
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>	930093794				
<b>Layer:</b>	1				
<b>Material:</b>					
<b>Open Hole or Material:</b>					
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>	10.00				
<b>Casing Diameter UOM:</b>	inch				
<b>Casing Depth UOM:</b>	ft				
<b>Casing ID:</b>	930093795				
<b>Layer:</b>	2				
<b>Material:</b>	4				
<b>Open Hole or Material:</b>	OPEN HOLE				
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>	8.00				
<b>Casing Diameter UOM:</b>	inch				
<b>Casing Depth UOM:</b>	ft				
<b>Casing ID:</b>	930093796				
<b>Layer:</b>	3				
<b>Material:</b>	4				

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Water Details</u></b>					
<b>Water ID:</b>		933492612			
<b>Layer:</b>		1			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		32.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		933492613			
<b>Layer:</b>		2			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		35.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		933492614			
<b>Layer:</b>		3			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		47.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		933492615			
<b>Layer:</b>		4			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		80.00			
<b>Water Found Depth UOM:</b>		ft			

<b>10</b>	<b>1 of 1</b>	<b>NW/207.0</b>	<b>103.6</b>	<b>ON</b>	<b>BORE</b>
<b>Borehole ID:</b>		609797		<b>Type:</b> Borehole	
<b>Use:</b>				<b>Status::</b>	
<b>Drill Method::</b>				<b>UTM Zone::</b> 18	
<b>Easting::</b>		425531		<b>Northing::</b> 5022312	
<b>Location Accuracy::</b>				<b>Orig. Ground Elev m::</b> 103	
<b>Elev. Reliability Note::</b>				<b>DEM Ground Elev m::</b> 101	
<b>Total Depth m::</b>		-999		<b>Primary Name::</b>	
<b>Township::</b>				<b>Concession::</b>	
<b>Lot::</b>				<b>Municipality:</b>	
<b>Completion Date::</b>				<b>Static Water Level::</b> -999.9	
<b>Primary Water Use::</b>				<b>Sec. Water Use::</b>	
<b>--Details--</b>					
<b>Stratum ID:</b>		218384117		<b>Top Depth(m):</b> 0.0	
<b>Bottom Depth(m):</b>		1.8		<b>Stratum Desc:</b> CLAY.	
<b>Stratum ID:</b>		218384118		<b>Top Depth(m):</b> 1.8	
<b>Bottom Depth(m):</b>				<b>Stratum Desc:</b> BEDROCK,SANDSTONE. E. GREY. LIMESTONE,CLAY. BLUE. SANDSTONE,QUARTZITE.BLACK. LIMESTONE.	



Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<a href="#">11</a>	1 of 1	SSE/210.1	107.7	lot 11 ON	WWIS
<b>Well ID:</b> 1532715 <b>Construction Date:</b> <b>Primary Water Use:</b> Not Used <b>Sec. Water Use:</b> <b>Final Well Status:</b> Test Hole <b>Water Type:</b> <b>Casing Material:</b> <b>Audit No:</b> 237820 <b>Tag:</b> <b>Construction Method:</b> <b>Elevation (m):</b> <b>Elevation Reliability:</b> <b>Depth to Bedrock:</b> <b>Well Depth:</b> <b>Overburden/Bedrock:</b> <b>Pump Rate:</b> <b>Static Water Level:</b> <b>Flowing (Y/N):</b> <b>Flow Rate:</b> <b>Clear/Cloudy:</b>		<b>Data Entry Status:</b> <b>Data Src:</b> 1 <b>Date Received:</b> 4/16/2002 <b>Selected Flag:</b> 1 <b>Abandonment Rec:</b> <b>Contractor:</b> 1119 <b>Form Version:</b> 1 <b>Owner:</b> <b>Street Name:</b> <b>County:</b> OTTAWA-CARLETON <b>Municipality:</b> MARCH TOWNSHIP <b>Site Info:</b> <b>Lot:</b> 011 <b>Concession:</b> <b>Concession Name:</b> <b>Easting NAD83:</b> <b>Northing NAD83:</b> <b>Zone:</b> <b>UTM Reliability:</b>			
<b><u>Bore Hole Information</u></b>					
<b>Bore Hole ID:</b> 10523843 <b>DP2BR:</b> 1 <b>Code OB:</b> r <b>Code OB Desc:</b> Bedrock <b>Open Hole:</b> <b>Elevation:</b> 103.628562 <b>Elevrc:</b> <b>Remarks:</b> <b>Elevrc Desc:</b> <b>Location Source Date:</b> <b>Improvement Location Source:</b> 1999-2004 MOE Water Well Data Improvement Project <b>Improvement Location Method:</b> GIS10000 <b>Source Revision Comment:</b> Northing and/or Easting field has been changed. Location estimated from sketch map. <b>Supplier Comment:</b> Accuracy was not specified from source. Within 20m horizontal accuracy assumed as worst case using GIS at a scale of 1:10000.		<b>Spatial Status:</b> Improved <b>Cluster Kind:</b> <b>UTMRC:</b> 3 <b>UTMRC Desc:</b> margin of error : 10 - 30 m <b>Location Method:</b> <b>Org CS:</b> N83 <b>Date Completed:</b> 3/27/2002			
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b> 932857523 <b>Layer:</b> 1 <b>Color:</b> <b>General Color:</b> <b>Mat1:</b> 05 <b>Most Common Material:</b> CLAY <b>Mat2:</b> 81 <b>Other Materials:</b> SANDY <b>Mat3:</b> 12 <b>Other Materials:</b> STONES <b>Formation Top Depth:</b> 0.00 <b>Formation End Depth:</b> 1.00 <b>Formation End Depth UOM:</b> ft		<b>Formation ID:</b> 932857524 <b>Layer:</b> 2 <b>Color:</b> 2 <b>General Color:</b> GREY			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		1.00			
<b>Formation End Depth:</b>		82.00			
<b>Formation End Depth UOM:</b>		ft			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		933225361			
<b>Layer:</b>		1			
<b>Plug From:</b>		2.00			
<b>Plug To:</b>		7.00			
<b>Plug Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961532715			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		11072413			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930095430			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		8.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930095431			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930095432			
<b>Layer:</b>		3			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Results of Well Yield Testing</u></b>					
<b>Pump Test ID:</b>		991532715			
<b>Pump Set At:</b>					
<b>Static Level:</b>		30.00			
<b>Final Level After Pumping:</b>		80.00			
<b>Recommended Pump Depth:</b>		80.00			
<b>Pumping Rate:</b>		25.00			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		25.00			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>		2			
<b>Water State After Test:</b>		CLOUDY			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
<b><u>Draw Down &amp; Recovery</u></b>					
<b>Pump Test Detail ID:</b>		934117891			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		30.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934401503			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		30.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934662026			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		30.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934918910			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		30.00			
<b>Test Level UOM:</b>		ft			
<b><u>Water Details</u></b>					
<b>Water ID:</b>		934016405			
<b>Layer:</b>		1			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		16.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		934016406			
<b>Layer:</b>		2			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		44.00			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		934016407			
<b>Layer:</b>		3			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		56.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		934016408			
<b>Layer:</b>		4			
<b>Kind Code:</b>		5			
<b>Kind:</b>		Not stated			
<b>Water Found Depth:</b>		64.00			
<b>Water Found Depth UOM:</b>		ft			

<u>12</u>	1 of 1	ESE/216.3	105.1	lot 11 con 3 KANATA ON	WWIS
<b>Well ID:</b>	7045769			<b>Data Entry Status:</b>	
<b>Construction Date:</b>				<b>Data Src:</b>	
<b>Primary Water Use:</b>				<b>Date Received:</b>	6/28/2007
<b>Sec. Water Use:</b>				<b>Selected Flag:</b>	1
<b>Final Well Status:</b>	Test Hole			<b>Abandonment Rec:</b>	
<b>Water Type:</b>				<b>Contractor:</b>	1119
<b>Casing Material:</b>				<b>Form Version:</b>	3
<b>Audit No:</b>	Z64703			<b>Owner:</b>	
<b>Tag:</b>	A052457			<b>Street Name:</b>	KLONDIKE & SECOND LINE
<b>Construction Method:</b>				<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>				<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>				<b>Site Info:</b>	
<b>Depth to Bedrock:</b>				<b>Lot:</b>	011
<b>Well Depth:</b>				<b>Concession:</b>	03
<b>Overburden/Bedrock:</b>				<b>Concession Name:</b>	CON
<b>Pump Rate:</b>				<b>Easting NAD83:</b>	
<b>Static Water Level:</b>				<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>				<b>Zone:</b>	
<b>Flow Rate:</b>				<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>					
<b><u>Bore Hole Information</u></b>					
<b>Bore Hole ID:</b>	11768040			<b>Spatial Status:</b>	
<b>DP2BR:</b>	0			<b>Cluster Kind:</b>	
<b>Code OB:</b>	r			<b>UTMRC:</b>	3
<b>Code OB Desc:</b>	Bedrock			<b>UTMRC Desc:</b>	margin of error : 10 - 30 m
<b>Open Hole:</b>				<b>Location Method:</b>	wwr
<b>Elevation:</b>	101.026824			<b>Org CS:</b>	UTM83
<b>Elevrc:</b>				<b>Date Completed:</b>	10/27/2006
<b>Remarks:</b>					
<b>Elevrc Desc:</b>					
<b>Location Source Date:</b>					
<b>Improvement Location Source:</b>					
<b>Improvement Location Method:</b>					
<b>Source Revision Comment:</b>					
<b>Supplier Comment:</b>					
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>	933106615				
<b>Layer:</b>	1				
<b>Color:</b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>General Color:</b>					
<b>Mat1:</b>		26			
<b>Most Common Material:</b>		ROCK			
<b>Mat2:</b>		01			
<b>Other Materials:</b>		FILL			
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0.00			
<b>Formation End Depth:</b>		0.91			
<b>Formation End Depth UOM:</b>		m			
<b>Formation ID:</b>		933106616			
<b>Layer:</b>		2			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0.91			
<b>Formation End Depth:</b>		60.96			
<b>Formation End Depth UOM:</b>		m			
<b><u>Annular Space/Abandonment</u></b>					
<b><u>Sealing Record</u></b>					
<b>Plug ID:</b>		933322405			
<b>Layer:</b>		1			
<b>Plug From:</b>		60.96			
<b>Plug To:</b>		54.25			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322406			
<b>Layer:</b>		2			
<b>Plug From:</b>		54.25			
<b>Plug To:</b>		43.89			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322407			
<b>Layer:</b>		3			
<b>Plug From:</b>		43.89			
<b>Plug To:</b>		40.54			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322408			
<b>Layer:</b>		4			
<b>Plug From:</b>		40.54			
<b>Plug To:</b>		33.83			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322409			
<b>Layer:</b>		5			
<b>Plug From:</b>		33.83			
<b>Plug To:</b>		30.02			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322410			
<b>Layer:</b>		7			
<b>Plug From:</b>		30.02			
<b>Plug To:</b>		27.70			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322411			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Layer:</b>		8			
<b>Plug From:</b>		27.70			
<b>Plug To:</b>		23.77			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322412			
<b>Layer:</b>		9			
<b>Plug From:</b>		23.77			
<b>Plug To:</b>		17.07			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322413			
<b>Layer:</b>		10			
<b>Plug From:</b>		17.07			
<b>Plug To:</b>		13.41			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322414			
<b>Layer:</b>		11			
<b>Plug From:</b>		13.41			
<b>Plug To:</b>		7.90			
<b>Plug Depth UOM:</b>		m			
<b>Plug ID:</b>		933322415			
<b>Layer:</b>		12			
<b>Plug From:</b>		7.90			
<b>Plug To:</b>		5.02			
<b>Plug Depth UOM:</b>		m			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		967045769			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		11775730			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930901905			
<b>Layer:</b>		1			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		2.74			
<b>Casing Diameter:</b>		20.32			
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901906			
<b>Layer:</b>		2			
<b>Material:</b>		5			
<b>Open Hole or Material:</b>		PLASTIC			
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		6.01			
<b>Casing Diameter:</b>		1.25			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901907			
<b>Layer:</b>		3			
<b>Material:</b>					
<b>Open Hole or Material:</b>					
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		13.74			
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901908			
<b>Layer:</b>		4			
<b>Material:</b>					
<b>Open Hole or Material:</b>					
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		24.10			
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901909			
<b>Layer:</b>		5			
<b>Material:</b>		5			
<b>Open Hole or Material:</b>		PLASTIC			
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		30.50			
<b>Casing Diameter:</b>		1.25			
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901910			
<b>Layer:</b>		6			
<b>Material:</b>					
<b>Open Hole or Material:</b>					
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		42.06			
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901911			
<b>Layer:</b>		7			
<b>Material:</b>					
<b>Open Hole or Material:</b>					
<b>Depth From:</b>		0.00			
<b>Depth To:</b>		55.87			
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		930901912			
<b>Layer:</b>		8			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>		58.80			
<b>Depth To:</b>		60.96			
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			

**Construction Record - Screen**



<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Screen ID:</b>		933425251			
<b>Layer:</b>		1			
<b>Slot:</b>		10			
<b>Screen Top Depth:</b>		6.01			
<b>Screen End Depth:</b>		7.62			
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>		m			
<b>Screen Diameter UOM:</b>		cm			
<b>Screen Diameter:</b>		1.25			
<b>Screen ID:</b>		933425252			
<b>Layer:</b>		2			
<b>Slot:</b>					
<b>Screen Top Depth:</b>		24.10			
<b>Screen End Depth:</b>		27.13			
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>		m			
<b>Screen Diameter UOM:</b>		cm			
<b>Screen Diameter:</b>					
<b>Screen ID:</b>		933425253			
<b>Layer:</b>		3			
<b>Slot:</b>					
<b>Screen Top Depth:</b>		30.50			
<b>Screen End Depth:</b>		33.53			
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>		m			
<b>Screen Diameter UOM:</b>		cm			
<b>Screen Diameter:</b>					
<b>Screen ID:</b>		933425254			
<b>Layer:</b>		4			
<b>Slot:</b>					
<b>Screen Top Depth:</b>		42.06			
<b>Screen End Depth:</b>		43.60			
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>		m			
<b>Screen Diameter UOM:</b>		cm			
<b>Screen Diameter:</b>					
<b>Screen ID:</b>		933425255			
<b>Layer:</b>		5			
<b>Slot:</b>					
<b>Screen Top Depth:</b>		55.78			
<b>Screen End Depth:</b>		58.80			
<b>Screen Material:</b>					
<b>Screen Depth UOM:</b>		m			
<b>Screen Diameter UOM:</b>		cm			
<b>Screen Diameter:</b>					
<b><u>Water Details</u></b>					
<b>Water ID:</b>		934087556			
<b>Layer:</b>		1			
<b>Kind Code:</b>					
<b>Kind:</b>					
<b>Water Found Depth:</b>		26.20			
<b>Water Found Depth UOM:</b>		m			
<b>Water ID:</b>		934087557			
<b>Layer:</b>		2			
<b>Kind Code:</b>					
<b>Kind:</b>					
<b>Water Found Depth:</b>		39.60			
<b>Water Found Depth UOM:</b>		m			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b><u>Hole Diameter</u></b>					
Hole ID:		11854935			
Diameter:		20.32			
Depth From:		0.00			
Depth To:		30.50			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
Hole ID:		11854936			
Diameter:		15.23			
Depth From:		30.50			
Depth To:		60.96			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			

<a href="#">13</a>	1 of 1	WNW/216.5	103.9	lot 11 con 3 ON	WWIS
Well ID:	1529737			Data Entry Status:	
Construction Date:				Data Src:	1
Primary Water Use:	Domestic			Date Received:	12/8/1997
Sec. Water Use:				Selected Flag:	1
Final Well Status:	Water Supply			Abandonment Rec:	
Water Type:				Contractor:	1119
Casing Material:				Form Version:	1
Audit No:	175291			Owner:	
Tag:				Street Name:	
Construction Method:				County:	OTTAWA-CARLETON
Elevation (m):				Municipality:	MARCH TOWNSHIP
Elevation Reliability:				Site Info:	
Depth to Bedrock:				Lot:	011
Well Depth:				Concession:	03
Overburden/Bedrock:				Concession Name:	CON
Pump Rate:				Easting NAD83:	
Static Water Level:				Northing NAD83:	
Flowing (Y/N):				Zone:	
Flow Rate:				UTM Reliability:	
Clear/Cloudy:					

**Bore Hole Information**

Bore Hole ID:	10051272	Spatial Status:	
DP2BR:	1	Cluster Kind:	
Code OB:	r	UTMRC:	5
Code OB Desc:	Bedrock	UTMRC Desc:	margin of error : 100 m - 300 m
Open Hole:		Location Method:	gis
Elevation:	102.259101	Org CS:	
Elevrc:		Date Completed:	8/12/1997
Remarks:			
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

**Overburden and Bedrock  
Materials Interval**

Formation ID: 931073685

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Layer:</b>		1			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>	28				
<b>Most Common Material:</b>		SAND			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>	0.00				
<b>Formation End Depth:</b>	1.00				
<b>Formation End Depth UOM:</b>		ft			
<b>Formation ID:</b>		931073686			
<b>Layer:</b>		2			
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>	15				
<b>Most Common Material:</b>		LIMESTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>	1.00				
<b>Formation End Depth:</b>	70.00				
<b>Formation End Depth UOM:</b>		ft			
<b><u>Annular Space/Abandonment Sealing Record</u></b>					
<b>Plug ID:</b>		933114804			
<b>Layer:</b>		1			
<b>Plug From:</b>	2.00				
<b>Plug To:</b>	44.00				
<b>Plug Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961529737			
<b>Method Construction Code:</b>	5				
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		10599842			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930089497			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>	42.00				
<b>Casing Diameter:</b>	6.00				
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Casing ID:</b>		930089498			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>		44.00			
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930089499			
<b>Layer:</b>		3			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>		70.00			
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Results of Well Yield Testing</u></b>					
<b>Pump Test ID:</b>		991529737			
<b>Pump Set At:</b>					
<b>Static Level:</b>		12.00			
<b>Final Level After Pumping:</b>		60.00			
<b>Recommended Pump Depth:</b>		60.00			
<b>Pumping Rate:</b>		8.00			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		8.00			
<b>Levels UOM:</b>		ft			
<b>Rate UOM:</b>		GPM			
<b>Water State After Test Code:</b>		2			
<b>Water State After Test:</b>		CLOUDY			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
<b><u>Draw Down &amp; Recovery</u></b>					
<b>Pump Test Detail ID:</b>		934116686			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		12.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934391660			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		12.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934660822			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		45			
<b>Test Level:</b>		12.00			
<b>Test Level UOM:</b>		ft			
<b>Pump Test Detail ID:</b>		934909359			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		12.00			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Test Level UOM:		ft			
<b><u>Water Details</u></b>					
Water ID:	933489777				
Layer:	1				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	51.00				
Water Found Depth UOM:	ft				
Water ID:	933489778				
Layer:	2				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	63.00				
Water Found Depth UOM:	ft				

<a href="#">14</a>	1 of 1	NW/219.6	103.6	lot 11 con 3 ON	WWIS
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<b>Well ID:</b>	1503350	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	1
<b>Primary Water Use:</b>	Domestic	<b>Date Received:</b>	11/3/1958
<b>Sec. Water Use:</b>	0	<b>Selected Flag:</b>	1
<b>Final Well Status:</b>	Water Supply	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	1603
<b>Casing Material:</b>		<b>Form Version:</b>	1
<b>Audit No:</b>		<b>Owner:</b>	
<b>Tag:</b>		<b>Street Name:</b>	
<b>Construction Method:</b>		<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>		<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	011
<b>Well Depth:</b>		<b>Concession:</b>	03
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	CON
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**Bore Hole Information**

<b>Bore Hole ID:</b>	10025393	<b>Spatial Status:</b>	
<b>DP2BR:</b>	6	<b>Cluster Kind:</b>	
<b>Code OB:</b>	r	<b>UTMRC:</b>	5
<b>Code OB Desc:</b>	Bedrock	<b>UTMRC Desc:</b>	margin of error : 100 m - 300 m
<b>Open Hole:</b>		<b>Location Method:</b>	p5
<b>Elevation:</b>	101.755912	<b>Org CS:</b>	
<b>Elevrc:</b>		<b>Date Completed:</b>	10/20/1958
<b>Remarks:</b>			
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>			
<b>Improvement Location Method:</b>			
<b>Source Revision Comment:</b>			
<b>Supplier Comment:</b>			

**Overburden and Bedrock**

**Materials Interval**

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Formation ID:</b>		930996639			
<b>Layer:</b>		1			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>		05			
<b>Most Common Material:</b>		CLAY			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0.00			
<b>Formation End Depth:</b>		6.00			
<b>Formation End Depth UOM:</b>		ft			
<b>Formation ID:</b>		930996640			
<b>Layer:</b>		2			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		6.00			
<b>Formation End Depth:</b>		52.00			
<b>Formation End Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961503350			
<b>Method Construction Code:</b>		7			
<b>Method Construction:</b>		Diamond			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		10573963			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930043538			
<b>Layer:</b>		1			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>		10.00			
<b>Casing Diameter:</b>		2.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930043539			
<b>Layer:</b>		2			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>		52.00			
<b>Casing Diameter:</b>		2.00			
<b>Casing Diameter UOM:</b>		inch			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Casing Depth UOM:		ft			
<b><u>Results of Well Yield Testing</u></b>					
Pump Test ID:	991503350				
Pump Set At:					
Static Level:	0.00				
Final Level After Pumping:	25.00				
Recommended Pump Depth:					
Pumping Rate:	10.00				
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:	4				
Pumping Duration MIN:	0				
Flowing:	N				
<b><u>Water Details</u></b>					
Water ID:	933456244				
Layer:	1				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	52.00				
Water Found Depth UOM:	ft				

<a href="#">15</a>	1 of 1	WNW/224.7	103.9	lot 11 con 3 ON	WWIS
Well ID:	1531791			Data Entry Status:	
Construction Date:				Data Src:	1
Primary Water Use:	Not Used			Date Received:	4/3/2001
Sec. Water Use:				Selected Flag:	1
Final Well Status:	Test Hole			Abandonment Rec:	
Water Type:				Contractor:	1119
Casing Material:				Form Version:	1
Audit No:	229478			Owner:	
Tag:				Street Name:	
Construction Method:				County:	OTTAWA-CARLETON
Elevation (m):				Municipality:	MARCH TOWNSHIP
Elevation Reliability:				Site Info:	
Depth to Bedrock:				Lot:	011
Well Depth:				Concession:	03
Overburden/Bedrock:				Concession Name:	CON
Pump Rate:				Easting NAD83:	
Static Water Level:				Northing NAD83:	
Flowing (Y/N):				Zone:	
Flow Rate:				UTM Reliability:	
Clear/Cloudy:					

**Bore Hole Information**

Bore Hole ID:	10053325	Spatial Status:	Improved
DP2BR:	1	Cluster Kind:	
Code OB:	r	UTMRC:	3
Code OB Desc:	Bedrock	UTMRC Desc:	margin of error : 10 - 30 m
Open Hole:		Location Method:	
Elevation:	102.755035	Org CS:	N83



<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Elevrc:</b>				<b>Date Completed:</b>	1/10/2001
<b>Remarks:</b>					
<b>Elevrc Desc:</b>					
<b>Location Source Date:</b>					
<b>Improvement Location Source:</b>		1999-2004 MOE Water Well Data Improvement Project			
<b>Improvement Location Method:</b>		GIS			
<b>Source Revision Comment:</b>		Northing and/or Easting field has been changed. Location estimated from sketch map.			
<b>Supplier Comment:</b>		Determined to be an improvement rather than a Lot Centroid in December 2009.			
<b><u>Overburden and Bedrock</u></b>					
<b><u>Materials Interval</u></b>					
<b>Formation ID:</b>		931079544			
<b>Layer:</b>		1			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>		05			
<b>Most Common Material:</b>		CLAY			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0.00			
<b>Formation End Depth:</b>		1.00			
<b>Formation End Depth UOM:</b>		ft			
<b>Formation ID:</b>		931079545			
<b>Layer:</b>		2			
<b>Color:</b>					
<b>General Color:</b>					
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		1.00			
<b>Formation End Depth:</b>		115.00			
<b>Formation End Depth UOM:</b>		ft			
<b>Formation ID:</b>		931079546			
<b>Layer:</b>		3			
<b>Color:</b>		4			
<b>General Color:</b>		GREEN			
<b>Mat1:</b>		21			
<b>Most Common Material:</b>		GRANITE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		115.00			
<b>Formation End Depth:</b>		150.00			
<b>Formation End Depth UOM:</b>		ft			
<b><u>Annular Space/Abandonment</u></b>					
<b><u>Sealing Record</u></b>					
<b>Plug ID:</b>		933116951			
<b>Layer:</b>		1			
<b>Plug From:</b>		2.00			
<b>Plug To:</b>		7.00			
<b>Plug Depth UOM:</b>		ft			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>	<i>DB</i>
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		961531791			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		10601895			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930093435			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		8.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930093436			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930093437			
<b>Layer:</b>		3			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Water Details</u></b>					
<b>Water ID:</b>		933492388			
<b>Layer:</b>		1			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		48.00			
<b>Water Found Depth UOM:</b>		ft			
<b>Water ID:</b>		933492389			
<b>Layer:</b>		2			
<b>Kind Code:</b>		1			
<b>Kind:</b>		FRESH			
<b>Water Found Depth:</b>		60.00			
<b>Water Found Depth UOM:</b>		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Water ID:		933492390			
Layer:		3			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		83.00			
Water Found Depth UOM:		ft			
Water ID:		933492391			
Layer:		4			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		132.00			
Water Found Depth UOM:		ft			

[16](#)      1 of 1      NW/233.9      102.8      lot 11 con 3  
ON      WWIS

<b>Well ID:</b>	7052093	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	
<b>Primary Water Use:</b>	Domestic	<b>Date Received:</b>	11/5/2007
<b>Sec. Water Use:</b>		<b>Selected Flag:</b>	1
<b>Final Well Status:</b>	Water Supply	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	1558
<b>Casing Material:</b>		<b>Form Version:</b>	3
<b>Audit No:</b>	Z58675	<b>Owner:</b>	
<b>Tag:</b>	A041940	<b>Street Name:</b>	
<b>Construction Method:</b>		<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>		<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	011
<b>Well Depth:</b>		<b>Concession:</b>	03
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	CON
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**Bore Hole Information**

<b>Bore Hole ID:</b>	23052093	<b>Spatial Status:</b>	
<b>DP2BR:</b>		<b>Cluster Kind:</b>	
<b>Code OB:</b>		<b>UTMRC:</b>	3
<b>Code OB Desc:</b>		<b>UTMRC Desc:</b>	margin of error : 10 - 30 m
<b>Open Hole:</b>		<b>Location Method:</b>	wwr
<b>Elevation:</b>	101.718574	<b>Org CS:</b>	UTM83
<b>Elevrc:</b>		<b>Date Completed:</b>	6/27/2007
<b>Remarks:</b>			
<b>Elevrc Desc:</b>			
<b>Location Source Date:</b>			
<b>Improvement Location Source:</b>			
<b>Improvement Location Method:</b>			
<b>Source Revision Comment:</b>			
<b>Supplier Comment:</b>			

**Overburden and Bedrock**

**Materials Interval**

<b>Formation ID:</b>	30152093
<b>Layer:</b>	1
<b>Color:</b>	6
<b>General Color:</b>	BROWN
<b>Mat1:</b>	02

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Most Common Material:</b>		TOPSOIL			
<b>Mat2:</b>		12			
<b>Other Materials:</b>		STONES			
<b>Mat3:</b>		79			
<b>Other Materials:</b>		PACKED			
<b>Formation Top Depth:</b>		0.00			
<b>Formation End Depth:</b>		2.13			
<b>Formation End Depth UOM:</b>		m			
<b>Formation ID:</b>		30252093			
<b>Layer:</b>		2			
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>		73			
<b>Other Materials:</b>		HARD			
<b>Formation Top Depth:</b>		2.13			
<b>Formation End Depth:</b>		52.72			
<b>Formation End Depth UOM:</b>		m			
<b><u>Method of Construction &amp; Well Use</u></b>					
<b>Method Construction ID:</b>		25952093			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		29052093			
<b>Casing No:</b>		0			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		42152093			
<b>Layer:</b>		1			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>		-0.45			
<b>Depth To:</b>		6.40			
<b>Casing Diameter:</b>		15.88			
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b>Casing ID:</b>		42252093			
<b>Layer:</b>		2			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>		6.40			
<b>Depth To:</b>		52.72			
<b>Casing Diameter:</b>					
<b>Casing Diameter UOM:</b>		cm			
<b>Casing Depth UOM:</b>		m			
<b><u>Results of Well Yield Testing</u></b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Pump Test ID:</b>		27052093			
<b>Pump Set At:</b>		38.09			
<b>Static Level:</b>		5.30			
<b>Final Level After Pumping:</b>		10.80			
<b>Recommended Pump Depth:</b>		30.47			
<b>Pumping Rate:</b>		22.75			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>		22.75			
<b>Levels UOM:</b>		m			
<b>Rate UOM:</b>		LPM			
<b>Water State After Test Code:</b>		1			
<b>Water State After Test:</b>		CLEAR			
<b>Pumping Test Method:</b>		1			
<b>Pumping Duration HR:</b>		1			
<b>Pumping Duration MIN:</b>		0			
<b>Flowing:</b>		N			
 <b><u>Draw Down &amp; Recovery</u></b>					
<b>Pump Test Detail ID:</b>		45054151			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		1			
<b>Test Level:</b>		8.85			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054150			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		1			
<b>Test Level:</b>		6.80			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054148			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		2			
<b>Test Level:</b>		7.48			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054149			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		2			
<b>Test Level:</b>		7.77			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054142			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		3			
<b>Test Level:</b>		8.10			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054146			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		3			
<b>Test Level:</b>		7.21			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054144			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		4			
<b>Test Level:</b>		6.91			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054145			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		4			
<b>Test Level:</b>		8.42			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054152			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		5			
<b>Test Level:</b>		6.70			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054143			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		5			
<b>Test Level:</b>		8.79			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054155			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		10			
<b>Test Level:</b>		6.10			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054161			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		10			
<b>Test Level:</b>		9.75			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054167			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		10.06			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054147			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		15			
<b>Test Level:</b>		5.94			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054165			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		20			
<b>Test Level:</b>		5.88			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054153			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		20			
<b>Test Level:</b>		10.19			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054160			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		25			
<b>Test Level:</b>		10.29			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054156			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		25			
<b>Test Level:</b>		5.82			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054158			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		5.78			

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054157			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		30			
<b>Test Level:</b>		10.39			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054159			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		40			
<b>Test Level:</b>		10.54			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054164			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		40			
<b>Test Level:</b>		5.70			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054166			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		50			
<b>Test Level:</b>		10.65			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054154			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		50			
<b>Test Level:</b>		5.64			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054162			
<b>Test Type:</b>		Draw Down			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		10.80			
<b>Test Level UOM:</b>		m			
<b>Pump Test Detail ID:</b>		45054163			
<b>Test Type:</b>		Recovery			
<b>Test Duration:</b>		60			
<b>Test Level:</b>		5.61			
<b>Test Level UOM:</b>		m			
<b><u>Water Details</u></b>					
<b>Water ID:</b>		41152093			
<b>Layer:</b>		1			
<b>Kind Code:</b>					
<b>Kind:</b>					
<b>Water Found Depth:</b>		8.53			
<b>Water Found Depth UOM:</b>		m			
<b>Water ID:</b>		41252093			
<b>Layer:</b>		2			
<b>Kind Code:</b>					
<b>Kind:</b>					
<b>Water Found Depth:</b>		51.50			
<b>Water Found Depth UOM:</b>		m			
<b><u>Hole Diameter</u></b>					
<b>Hole ID:</b>		46005679			
<b>Diameter:</b>		22.75			



Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Depth From:		0.00			
Depth To:		6.40			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
Hole ID:		46005680			
Diameter:		14.91			
Depth From:		6.40			
Depth To:		52.72			
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			

<a href="#">17</a>	1 of 1	NNW/250.1	103.9	lot 11 con 3 ON	WWIS
Well ID:	1532247			Data Entry Status:	
Construction Date:				Data Src:	1
Primary Water Use:	Domestic			Date Received:	9/20/2001
Sec. Water Use:				Selected Flag:	1
Final Well Status:	Water Supply			Abandonment Rec:	
Water Type:				Contractor:	1119
Casing Material:				Form Version:	1
Audit No:	232812			Owner:	
Tag:				Street Name:	
Construction Method:				County:	OTTAWA-CARLETON
Elevation (m):				Municipality:	MARCH TOWNSHIP
Elevation Reliability:				Site Info:	
Depth to Bedrock:				Lot:	011
Well Depth:				Concession:	03
Overburden/Bedrock:				Concession Name:	CON
Pump Rate:				Easting NAD83:	
Static Water Level:				Northing NAD83:	
Flowing (Y/N):				Zone:	
Flow Rate:				UTM Reliability:	
Clear/Cloudy:					

#### Bore Hole Information

Bore Hole ID:	10516697	Spatial Status:	Improved
DP2BR:	5	Cluster Kind:	
Code OB:	r	UTMRC:	3
Code OB Desc:	Bedrock	UTMRC Desc:	margin of error : 10 - 30 m
Open Hole:		Location Method:	
Elevation:	101.486267	Org CS:	N83
Elevrc:		Date Completed:	8/3/2001
Remarks:			
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:	1999-2004 MOE Water Well Data Improvement Project		
Improvement Location Method:	GIS		
Source Revision Comment:	Northing and/or Easting field has been changed. Location estimated from sketch map.		
Supplier Comment:	Determined to be an improvement rather than a Lot Centroid in December 2009.		

#### Overburden and Bedrock

##### Materials Interval

Formation ID:	932832280
Layer:	1
Color:	
General Color:	
Mat1:	28
Most Common Material:	SAND
Mat2:	

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		0.00			
<b>Formation End Depth:</b>		5.00			
<b>Formation End Depth UOM:</b>		ft			
<b>Formation ID:</b>		932832281			
<b>Layer:</b>		2			
<b>Color:</b>		2			
<b>General Color:</b>		GREY			
<b>Mat1:</b>		18			
<b>Most Common Material:</b>		SANDSTONE			
<b>Mat2:</b>					
<b>Other Materials:</b>					
<b>Mat3:</b>					
<b>Other Materials:</b>					
<b>Formation Top Depth:</b>		5.00			
<b>Formation End Depth:</b>		140.00			
<b>Formation End Depth UOM:</b>		ft			
<b><u>Annular Space/Abandonment</u></b>					
<b><u>Sealing Record</u></b>					
<b>Plug ID:</b>		933219697			
<b>Layer:</b>		1			
<b>Plug From:</b>		0.00			
<b>Plug To:</b>		4.00			
<b>Plug Depth UOM:</b>		ft			
<b><u>Method of Construction &amp; Well</u></b>					
<b><u>Use</u></b>					
<b>Method Construction ID:</b>		961532247			
<b>Method Construction Code:</b>		5			
<b>Method Construction:</b>		Air Percussion			
<b>Other Method Construction:</b>					
<b><u>Pipe Information</u></b>					
<b>Pipe ID:</b>		11065267			
<b>Casing No:</b>		1			
<b>Comment:</b>					
<b>Alt Name:</b>					
<b><u>Construction Record - Casing</u></b>					
<b>Casing ID:</b>		930094415			
<b>Layer:</b>		1			
<b>Material:</b>		4			
<b>Open Hole or Material:</b>		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		8.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>		930094416			
<b>Layer:</b>		2			
<b>Material:</b>		1			
<b>Open Hole or Material:</b>		STEEL			
<b>Depth From:</b>					

<b>Map Key</b>	<b>Number of Records</b>	<b>Direction/ Distance (m)</b>	<b>Elevation (m)</b>	<b>Site</b>	<b>DB</b>
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b>Casing ID:</b>					
		930094417			
<b>Layer:</b>					
		3			
<b>Material:</b>					
		4			
<b>Open Hole or Material:</b>					
		OPEN HOLE			
<b>Depth From:</b>					
<b>Depth To:</b>					
<b>Casing Diameter:</b>		6.00			
<b>Casing Diameter UOM:</b>		inch			
<b>Casing Depth UOM:</b>		ft			
<b><u>Results of Well Yield Testing</u></b>					
<b>Pump Test ID:</b>					
		991532247			
<b>Pump Set At:</b>					
<b>Static Level:</b>					
		52.00			
<b>Final Level After Pumping:</b>					
		130.00			
<b>Recommended Pump Depth:</b>					
		130.00			
<b>Pumping Rate:</b>					
		5.00			
<b>Flowing Rate:</b>					
<b>Recommended Pump Rate:</b>					
		5.00			
<b>Levels UOM:</b>					
		ft			
<b>Rate UOM:</b>					
		GPM			
<b>Water State After Test Code:</b>					
		2			
<b>Water State After Test:</b>					
		CLOUDY			
<b>Pumping Test Method:</b>					
		1			
<b>Pumping Duration HR:</b>					
		1			
<b>Pumping Duration MIN:</b>					
<b>Flowing:</b>					
		N			
<b><u>Draw Down &amp; Recovery</u></b>					
<b>Pump Test Detail ID:</b>					
		934116234			
<b>Test Type:</b>					
		Recovery			
<b>Test Duration:</b>					
		15			
<b>Test Level:</b>					
		80.00			
<b>Test Level UOM:</b>					
		ft			
<b>Pump Test Detail ID:</b>					
		934399848			
<b>Test Type:</b>					
		Recovery			
<b>Test Duration:</b>					
		30			
<b>Test Level:</b>					
		52.00			
<b>Test Level UOM:</b>					
		ft			
<b>Pump Test Detail ID:</b>					
		934660370			
<b>Test Type:</b>					
		Recovery			
<b>Test Duration:</b>					
		45			
<b>Test Level:</b>					
		52.00			
<b>Test Level UOM:</b>					
		ft			
<b>Pump Test Detail ID:</b>					
		934917256			
<b>Test Type:</b>					
		Recovery			
<b>Test Duration:</b>					
		60			
<b>Test Level:</b>					
		52.00			
<b>Test Level UOM:</b>					
		ft			



# Unplottable Summary

Total: 15 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
AAGR		Lot 11 Con 3	Kanata ON	
CA	Morgan's Grant	Part of Lot 11, Concession 3	Ottawa ON	
CA		Lot 10, Lot 11, Conc. 2, Stonebridge Subd.	Ottawa ON	
CA		Lot 10, Lot 11, Conc. 2, Stonebridge Subd.	Ottawa ON	
CA	Monarch Corporation	Lot 11, Conc. 2 (Rideau Front)	Ottawa ON	
LIMO	The Corporation of the Township of Rideau	Part of Lot 11, Concession 3	City of Ottawa ON	
NCPL	City of Ottawa - Stonebridge Stormwater	Lot 11, Conc 2 Rideau Front	Ottawa ON	
NPCB	ONTARIO HYDRO	CARLING T.S.; CONC. 9, LOT 11, TWP CARLING	OTTAWA ON	
PTTW	Mattamy (Half Moon Bay) Limited	Lot 11, 12, Concession 3	Ottawa 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	

# Unplottable Report

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

**Database:**  
AAGR

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

---

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

**Database:**  
CA

**Certificate #:** 8692-54QSUG  
**Application Year:** 01  
**Issue Date:** 12/21/01  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** Minto Developments Inc.  
**Client Address::** 427 Laurier Avenue West, Suite 300  
**Client City::** Ottawa  
**Client Postal Code::** K1R 7Y2  
**Project Description::** Stormwater management facility providing water quantity and quality control.  
**Contaminants::**  
**Emission Control::**

---

**Site:** Lot 10, Lot 11, Conc. 2, Stonebridge Subd. Ottawa ON

**Database:**  
CA

**Certificate #:** 4838-4WDRDT  
**Application Year:** 01  
**Issue Date:** 5/4/01  
**Approval Type:** Municipal & Private sewage  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** Monarch Construction Limited  
**Client Address::** 3584 Jockvale Road  
**Client City::** Nepean  
**Client Postal Code::** K2C 3H2  
**Project Description::** Installation of storm and sanitary sewers to serve Stonebridge Phase 3  
**Contaminants::**  
**Emission Control::**

---

**Site:** Lot 10, Lot 11, Conc. 2, Stonebridge Subd. Ottawa ON

**Database:**  
CA

**Certificate #:** 2176-4WDR8J  
**Application Year:** 01  
**Issue Date:** 5/4/01  
**Approval Type:** Municipal & Private water  
**Status:** Approved  
**Application Type:** New Certificate of Approval  
**Client Name::** Monarch Construction Limited

**Client Address::** 3584 Jockvale Road  
**Client City::** Nepean  
**Client Postal Code::** K2C 3H2  
**Project Description::** Installation of a watermain re: Stonebridge Phase 3  
**Contaminants::**  
**Emission Control::**

---

**Site:** *Monarch Corporation*  
*Lot 11, Conc. 2 (Rideau Front) Ottawa ON*

**Database:**  
*CA*

**Certificate #:** 3682-8AKV3H  
**Application Year:** 2010  
**Issue Date:** 11/9/2010  
**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::**

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**Site:** *The Corporation of the Township of Rideau*  
*Part of Lot 11, Concession 3 City of Ottawa ON*

**Database:**  
*LIMO*

<b>C of A No:</b>	A461201	<b>Site County:</b>	Ottawa
<b>C of A Issue Date:</b>	11/17/1971	<b>MOE Region:</b>	Eastern
<b>C of A Issued to:</b>		<b>MOE District:</b>	Ottawa
<b>Operation Status:</b>	Closed	<b>Easting:</b>	
<b>Landfill Type:</b>		<b>Northing:</b>	
<b>Total Site Area:</b>		<b>Latitude:</b>	
<b>Footprint:</b>		<b>Longitude:</b>	
<b>Tot Apprvd Capac:</b>		<b>UTM Zone:</b>	
<b>Tot Aprv Cp Unit:</b>		<b>Data Source:</b>	small landfills
<b>Fill Rate:</b>		<b>Cntm Attn Zn:</b>	
<b>Fill Rate Unit:</b>		<b>Grndwtr Mntr:</b>	
<b>Est Remain Cap:</b>		<b>Surf Wtr Mntr:</b>	
<b>ERC Volume Unit:</b>		<b>Lst Rprting Yr:</b>	
<b>ERC Methodology:</b>		<b>Fin Assrnce:</b>	
<b>ERC Dt Last Det:</b>		<b>Nat Attnuatn:</b>	
<b>Total Waste Rec:</b>		<b>Liners:</b>	
<b>TWR Unit:</b>		<b>Cvr Material:</b>	
<b>TWR Methodology:</b>			
<b>Site Name:</b>	Pierces Corners Landfill		
<b>Air Emmis Monitor:</b>			
<b>Leachate Off-Site:</b>			
<b>Leachate On Site:</b>			
<b>Landfill Gas Manag (P):</b>			
<b>Landfill Gas Manag (F):</b>			
<b>Landfill Gas Manag (E):</b>			
<b>Req Col Lndfil Gas:</b>			
<b>Lndfil Gas Cllected:</b>			
<b>Lndfil Gas Mntr:</b>			
<b>Service Area:</b>			
<b>Approved Waste Type:</b>			

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**Site:** *City of Ottawa - Stonebridge Stormwater*  
*Lot 11, Conc 2 Rideau Front Ottawa ON*

**Database:**  
*NCPL*

**Year:** 2008  
**Discharge Type:** Industrial Sewage  
**Sector:** Miscellaneous Industrial  
**Type of Concern:** CofA/Permit Non-Compliance

**Contaminant::** ESCHERICHIA COLI  
**Status Report::**

**--Details--**

**Incident Date:** 5/15/2008  
**Limit/Unit/Freq:** 100 per 100 mL  
**Quantity Min/Max:** 184/800  
**Facility Action:** Conducting Study  
**Ministry Action:** Other Abatement Action Taken

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**Site:** **ONTARIO HYDRO**  
**CARLING T.S.; CONC. 9, LOT 11, TWP CARLING OTTAWA ON**

**Database:**  
**NPCB**

**Company Code:** O0860  
**Industry:** Utility  
**Site Status:**  
**Transaction Date:** 5/26/1988  
**Inspection Date:**

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**Site:** **Mattamy (Half Moon Bay) Limited**  
**Lot 11, 12, Concession 3 Ottawa ON**

**Database:**  
**PTTW**

**EBR Registry No.:** 010-5959  
**Ministry Ref. No.:** 8783-7PCUC4  
**Year:** 2009  
**Proposal Date:** 2/20/2009  
**Notice Date:**  
**Notice Type:** Instrument Proposal  
**Proponent Address:** 123 Huntmar Drive Ottawa Ontario Canada K2S 1B9  
**Instrument Type:** (OWRA s. 34) - Permit to take water  
**Location:** Lot 11, 12, Concession 3, Ottawa  
**Location Other:**

---

**Site:**  
**lot 11 ON**

**Database:**  
**WWIS**

<b>Well ID:</b>	1531176	<b>Data Entry Status:</b>	
<b>Construction Date:</b>		<b>Data Src:</b>	1
<b>Primary Water Use:</b>	Domestic	<b>Date Received:</b>	6/12/2000
<b>Sec. Water Use:</b>		<b>Selected Flag:</b>	1
<b>Final Well Status:</b>	Water Supply	<b>Abandonment Rec:</b>	
<b>Water Type:</b>		<b>Contractor:</b>	6006
<b>Casing Material:</b>		<b>Form Version:</b>	1
<b>Audit No:</b>	206814	<b>Owner:</b>	
<b>Tag:</b>		<b>Street Name:</b>	
<b>Construction Method:</b>		<b>County:</b>	OTTAWA-CARLETON
<b>Elevation (m):</b>		<b>Municipality:</b>	MARCH TOWNSHIP
<b>Elevation Reliability:</b>		<b>Site Info:</b>	
<b>Depth to Bedrock:</b>		<b>Lot:</b>	011
<b>Well Depth:</b>		<b>Concession:</b>	
<b>Overburden/Bedrock:</b>		<b>Concession Name:</b>	CON
<b>Pump Rate:</b>		<b>Easting NAD83:</b>	
<b>Static Water Level:</b>		<b>Northing NAD83:</b>	
<b>Flowing (Y/N):</b>		<b>Zone:</b>	
<b>Flow Rate:</b>		<b>UTM Reliability:</b>	
<b>Clear/Cloudy:</b>			

**Bore Hole Information**

<b>Bore Hole ID:</b>	10052710	<b>Spatial Status:</b>	
<b>DP2BR:</b>	25	<b>Cluster Kind:</b>	
<b>Code OB:</b>	r	<b>UTMRC:</b>	9
<b>Code OB Desc:</b>	Bedrock	<b>UTMRC Desc:</b>	unknown UTM



**Open Hole:**  
**Elevation:**  
**Elevrc:**  
**Remarks:**  
**Elevrc Desc:**  
**Location Source Date:**  
**Improvement Location Source:**  
**Improvement Location Method:**  
**Source Revision Comment:**  
**Supplier Comment:**

**Location Method:** na  
**Org CS:**  
**Date Completed:** 5/26/2000

**Overburden and Bedrock**  
**Materials Interval**

**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:** 0.00  
**Formation End Depth:** 25.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931077739  
**Layer:** 2  
**Color:** 2  
**General Color:** GREY  
**Mat1:** 22  
**Most Common Material:** GREENSTONE  
**Mat2:** 73  
**Other Materials:** HARD  
**Mat3:**  
**Other Materials:**  
**Formation Top Depth:** 25.00  
**Formation End Depth:** 45.00  
**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:** 45.00  
**Formation End Depth:** 60.00  
**Formation End Depth UOM:** ft

**Annular Space/Abandonment**  
**Sealing Record**

**Plug ID:** 933116347  
**Layer:** 1  
**Plug From:** 0.00  
**Plug To:** 20.00  
**Plug Depth UOM:** ft

**Method of Construction & Well**  
**Use**

**Method Construction ID:** 961531176  
**Method Construction Code:** 4  
**Method Construction:** Rotary (Air)  
**Other Method Construction:**

**Pipe Information**

**Pipe ID:** 10601280  
**Casing No:** 1  
**Comment:**  
**Alt Name:**

**Construction Record - Casing**

**Casing ID:** 930092146  
**Layer:** 1  
**Material:** 1  
**Open Hole or Material:** STEEL  
**Depth From:**  
**Depth To:** 25.00  
**Casing Diameter:** 6.00  
**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:** 40.00  
**Casing Diameter:** 5.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Results of Well Yield Testing**

**Pump Test ID:** 991531176  
**Pump Set At:**  
**Static Level:** 7.00  
**Final Level After Pumping:** 50.00  
**Recommended Pump Depth:** 55.00  
**Pumping Rate:** 35.00  
**Flowing Rate:**  
**Recommended Pump Rate:** 15.00  
**Levels UOM:** ft  
**Rate UOM:** GPM  
**Water State After Test Code:** 1  
**Water State After Test:** CLEAR  
**Pumping Test Method:** 1  
**Pumping Duration HR:** 1  
**Pumping Duration MIN:** 0  
**Flowing:** N

**Draw Down & Recovery**

**Pump Test Detail ID:** 934121143  
**Test Type:** Recovery  
**Test Duration:** 15  
**Test Level:** 7.00  
**Test Level UOM:** ft

**Pump Test Detail ID:** 934396554  
**Test Type:** Recovery  
**Test Duration:** 30  
**Test Level:** 7.00

**Test Level UOM:** ft  
**Pump Test Detail ID:** 934665280  
**Test Type:** Recovery  
**Test Duration:** 45  
**Test Level:** 7.00  
**Test Level UOM:** ft  
**Pump Test Detail ID:** 934913408  
**Test Type:** Recovery  
**Test Duration:** 60  
**Test Level:** 7.00  
**Test Level UOM:** ft

**Water Details**

**Water ID:** 933491539  
**Layer:** 1  
**Kind Code:** 1  
**Kind:** FRESH  
**Water Found Depth:** 30.00  
**Water Found Depth UOM:** ft  
**Water ID:** 933491540  
**Layer:** 2  
**Kind Code:** 1  
**Kind:** FRESH  
**Water Found Depth:** 45.00  
**Water Found Depth UOM:** ft

**Site:** lot 11 ON

**Database:**  
 WWIS

**Well ID:** 1524142  
**Construction Date:**  
**Primary Water Use:** Domestic  
**Sec. Water Use:**  
**Final Well Status:** Water Supply  
**Water Type:**  
**Casing Material:**  
**Audit No:** 56282  
**Tag:**  
**Construction Method:**  
**Elevation (m):**  
**Elevation Reliability:**  
**Depth to Bedrock:**  
**Well Depth:**  
**Overburden/Bedrock:**  
**Pump Rate:**  
**Static Water Level:**  
**Flowing (Y/N):**  
**Flow Rate:**  
**Clear/Cloudy:**

**Data Entry Status:**  
**Data Src:** 1  
**Date Received:** 1/26/1990  
**Selected Flag:** 1  
**Abandonment Rec:**  
**Contractor:** 3644  
**Form Version:** 1  
**Owner:**  
**Street Name:**  
**County:** OTTAWA-CARLETON  
**Municipality:** MARCH TOWNSHIP  
**Site Info:**  
**Lot:** 011  
**Concession:**  
**Concession Name:**  
**Easting NAD83:**  
**Northing NAD83:**  
**Zone:**  
**UTM Reliability:**

**Bore Hole Information**

**Bore Hole ID:** 10045914  
**DP2BR:** 1  
**Code OB:** r  
**Code OB Desc:** Bedrock  
**Open Hole:**  
**Elevation:**  
**Elevrc:**  
**Remarks:**  
**Elevrc Desc:**  
**Location Source Date:**  
**Improvement Location Source:**  
**Improvement Location Method:**

**Spatial Status:**  
**Cluster Kind:**  
**UTMRC:** 9  
**UTMRC Desc:** unknown UTM  
**Location Method:** na  
**Org CS:**  
**Date Completed:** 8/30/1989

Source Revision Comment:  
Supplier Comment:

**Overburden and Bedrock  
Materials Interval**

Formation ID: 931056979  
Layer: 1  
Color: 2  
General Color: GREY  
Mat1: 05  
Most Common Material: CLAY  
Mat2: 11  
Other Materials: GRAVEL  
Mat3:  
Other Materials:  
Formation Top Depth: 0.00  
Formation End Depth: 1.00  
Formation End Depth UOM: ft

Formation ID: 931056980  
Layer: 2  
Color: 2  
General Color: GREY  
Mat1: 18  
Most Common Material: SANDSTONE  
Mat2: 73  
Other Materials: HARD  
Mat3:  
Other Materials:  
Formation Top Depth: 1.00  
Formation End Depth: 100.00  
Formation End Depth UOM: ft

**Method of Construction & Well  
Use**

Method Construction ID: 961524142  
Method Construction Code: 5  
Method Construction: Air Percussion  
Other Method Construction:

**Pipe Information**

Pipe ID: 10594484  
Casing No: 1  
Comment:  
Alt Name:

**Construction Record - Casing**

Casing ID: 930080381  
Layer: 1  
Material: 1  
Open Hole or Material: STEEL  
Depth From:  
Depth To: 22.00  
Casing Diameter: 6.00  
Casing Diameter UOM: inch  
Casing Depth UOM: ft

Casing ID: 930080382  
Layer: 2  
Material: 4  
Open Hole or Material: OPEN HOLE  
Depth From:

Depth To: 100.00  
Casing Diameter: 6.00  
Casing Diameter UOM: inch  
Casing Depth UOM: ft

**Results of Well Yield Testing**

Pump Test ID: 991524142  
Pump Set At:  
Static Level: 6.00  
Final Level After Pumping: 40.00  
Recommended Pump Depth: 40.00  
Pumping Rate: 30.00  
Flowing Rate:  
Recommended Pump Rate: 10.00  
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: 934107723  
Test Type:  
Test Duration: 15  
Test Level: 40.00  
Test Level UOM: ft

Pump Test Detail ID: 934391952  
Test Type:  
Test Duration: 30  
Test Level: 40.00  
Test Level UOM: ft

Pump Test Detail ID: 934652922  
Test Type:  
Test Duration: 45  
Test Level: 40.00  
Test Level UOM: ft

Pump Test Detail ID: 934910122  
Test Type:  
Test Duration: 60  
Test Level: 40.00  
Test Level UOM: ft

**Water Details**

Water ID: 933482687  
Layer: 1  
Kind Code: 1  
Kind: FRESH  
Water Found Depth: 63.00  
Water Found Depth UOM: ft

Water ID: 933482688  
Layer: 2  
Kind Code: 1  
Kind: FRESH  
Water Found Depth: 95.00  
Water Found Depth UOM: ft

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Site:

Database:

**Well ID:** 1526861  
**Construction Date:**  
**Primary Water Use:** Domestic  
**Sec. Water Use:**  
**Final Well Status:** Water Supply  
**Water Type:**  
**Casing Material:**  
**Audit No:** NA  
**Tag:**  
**Construction Method:**  
**Elevation (m):**  
**Elevation Reliability:**  
**Depth to Bedrock:**  
**Well Depth:**  
**Overburden/Bedrock:**  
**Pump Rate:**  
**Static Water Level:**  
**Flowing (Y/N):**  
**Flow Rate:**  
**Clear/Cloudy:**

**Data Entry Status:**  
**Data Src:** 1  
**Date Received:** 10/20/1992  
**Selected Flag:** 1  
**Abandonment Rec:**  
**Contractor:** 3323  
**Form Version:** 1  
**Owner:**  
**Street Name:**  
**County:** OTTAWA-CARLETON  
**Municipality:** MARCH TOWNSHIP  
**Site Info:**  
**Lot:** 011  
**Concession:**  
**Concession Name:**  
**Easting NAD83:**  
**Northing NAD83:**  
**Zone:**  
**UTM Reliability:**

#### Bore Hole Information

**Bore Hole ID:** 10048549  
**DP2BR:** 7  
**Code OB:** r  
**Code OB Desc:** Bedrock  
**Open Hole:**  
**Elevation:**  
**Elevrc:**  
**Remarks:**  
**Elevrc Desc:**  
**Location Source Date:**  
**Improvement Location Source:**  
**Improvement Location Method:**  
**Source Revision Comment:**  
**Supplier Comment:**

**Spatial Status:**  
**Cluster Kind:**  
**UTMRC:** 9  
**UTMRC Desc:** unknown UTM  
**Location Method:** na  
**Org CS:**  
**Date Completed:** 11/26/1986

#### Overburden and Bedrock

##### Materials Interval

**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:** 0.00  
**Formation End Depth:** 7.00  
**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:** 7.00

**Formation End Depth:** 125.00  
**Formation End Depth UOM:** ft  
  
**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:** 125.00  
**Formation End Depth:** 135.00  
**Formation End Depth UOM:** ft

**Annular Space/Abandonment  
Sealing Record**

**Plug ID:** 933112005  
**Layer:** 1  
**Plug From:** 0.00  
**Plug To:** 18.00  
**Plug Depth UOM:** ft

**Method of Construction & Well  
Use**

**Method Construction ID:** 961526861  
**Method Construction Code:** 5  
**Method Construction:** Air Percussion  
**Other Method Construction:**

**Pipe Information**

**Pipe ID:** 10597119  
**Casing No:** 1  
**Comment:**  
**Alt Name:**

**Construction Record - Casing**

**Casing ID:** 930085001  
**Layer:** 1  
**Material:** 1  
**Open Hole or Material:** STEEL  
**Depth From:**  
**Depth To:** 22.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Results of Well Yield Testing**

**Pump Test ID:** 991526861  
**Pump Set At:**  
**Static Level:** 6.00  
**Final Level After Pumping:** 130.00  
**Recommended Pump Depth:** 70.00  
**Pumping Rate:** 30.00  
**Flowing Rate:**  
**Recommended Pump Rate:** 10.00  
**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: 8.00  
Test Level UOM: ft

Pump Test Detail ID: 934392659  
Test Type:  
Test Duration: 30  
Test Level: 6.00  
Test Level UOM: ft

Pump Test Detail ID: 934653172  
Test Type:  
Test Duration: 45  
Test Level: 6.00  
Test Level UOM: ft

Pump Test Detail ID: 934910782  
Test Type:  
Test Duration: 60  
Test Level: 6.00  
Test Level UOM: ft

Water Details

Water ID: 933486311  
Layer: 1  
Kind Code: 1  
Kind: FRESH  
Water Found Depth: 130.00  
Water Found Depth UOM: ft

Site: lot 11 ON

Database:  
WWIS

Well ID: 1521489  
Construction Date:  
Primary Water Use: Domestic  
Sec. Water Use:  
Final Well Status: Water Supply  
Water Type:  
Casing Material:  
Audit No: 07100  
Tag:  
Construction Method:  
Elevation (m):  
Elevation Reliability:  
Depth to Bedrock:  
Well Depth:  
Overburden/Bedrock:  
Pump Rate:  
Static Water Level:  
Flowing (Y/N):  
Flow Rate:  
Clear/Cloudy:

Data Entry Status:  
Data Src: 1  
Date Received: 7/2/1987  
Selected Flag: 1  
Abandonment Rec:  
Contractor: 5222  
Form Version: 1  
Owner:  
Street Name:  
County: OTTAWA-CARLETON  
Municipality: MARCH TOWNSHIP  
Site Info:  
Lot: 011  
Concession:  
Concession Name:  
Easting NAD83:  
Northing NAD83:  
Zone:  
UTM Reliability:

Bore Hole Information



**Bore Hole ID:** 10043311  
**DP2BR:** 0  
**Code OB:** r  
**Code OB Desc:** Bedrock  
**Open Hole:**  
**Elevation:**  
**Elevrc:**  
**Remarks:**  
**Elevrc Desc:**  
**Location Source Date:**  
**Improvement Location Source:**  
**Improvement Location Method:**  
**Source Revision Comment:**  
**Supplier Comment:**

**Spatial Status:**  
**Cluster Kind:**  
**UTMRC:** 9  
**UTMRC Desc:** unknown UTM  
**Location Method:** na  
**Org CS:**  
**Date Completed:** 6/2/1987

**Overburden and Bedrock**  
**Materials Interval**

**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:** 0.00  
**Formation End Depth:** 38.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931048221  
**Layer:** 2  
**Color:** 1  
**General Color:** WHITE  
**Mat1:** 18  
**Most Common Material:** SANDSTONE  
**Mat2:** 90  
**Other Materials:** VERY  
**Mat3:** 73  
**Other Materials:** HARD  
**Formation Top Depth:** 38.00  
**Formation End Depth:** 70.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931048222  
**Layer:** 3  
**Color:** 2  
**General Color:** GREY  
**Mat1:** 21  
**Most Common Material:** GRANITE  
**Mat2:** 46  
**Other Materials:** QUARTZ  
**Mat3:** 73  
**Other Materials:** HARD  
**Formation Top Depth:** 70.00  
**Formation End Depth:** 115.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931048223  
**Layer:** 4  
**Color:** 1  
**General Color:** WHITE  
**Mat1:** 18  
**Most Common Material:** SANDSTONE  
**Mat2:** 73  
**Other Materials:** HARD  
**Mat3:**

**Other Materials:**  
**Formation Top Depth:** 115.00  
**Formation End Depth:** 125.00  
**Formation End Depth UOM:** ft

**Annular Space/Abandonment  
Sealing Record**

**Plug ID:** 933109483  
**Layer:** 1  
**Plug From:** 0.00  
**Plug To:** 22.00  
**Plug Depth UOM:** ft

**Method of Construction & Well  
Use**

**Method Construction ID:** 961521489  
**Method Construction Code:** 5  
**Method Construction:** Air Percussion  
**Other Method Construction:**

**Pipe Information**

**Pipe ID:** 10591881  
**Casing No:** 1  
**Comment:**  
**Alt Name:**

**Construction Record - Casing**

**Casing ID:** 930075643  
**Layer:** 1  
**Material:** 1  
**Open Hole or Material:** STEEL  
**Depth From:**  
**Depth To:** 22.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Casing ID:** 930075644  
**Layer:** 2  
**Material:** 4  
**Open Hole or Material:** OPEN HOLE  
**Depth From:**  
**Depth To:** 125.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Results of Well Yield Testing**

**Pump Test ID:** 991521489  
**Pump Set At:**  
**Static Level:** 3.00  
**Final Level After Pumping:** 55.00  
**Recommended Pump Depth:** 55.00  
**Pumping Rate:** 20.00  
**Flowing Rate:**  
**Recommended Pump Rate:** 7.00  
**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: 934106554  
Test Type: Draw Down  
Test Duration: 15  
Test Level: 55.00  
Test Level UOM: ft

Pump Test Detail ID: 934390654  
Test Type: Draw Down  
Test Duration: 30  
Test Level: 55.00  
Test Level UOM: ft

Pump Test Detail ID: 934651798  
Test Type: Draw Down  
Test Duration: 45  
Test Level: 55.00  
Test Level UOM: ft

Pump Test Detail ID: 934908889  
Test Type: Draw Down  
Test Duration: 60  
Test Level: 55.00  
Test Level UOM: ft

**Water Details**

Water ID: 933479074  
Layer: 1  
Kind Code: 1  
Kind: FRESH  
Water Found Depth: 70.00  
Water Found Depth UOM: ft

Water ID: 933479075  
Layer: 2  
Kind Code: 1  
Kind: FRESH  
Water Found Depth: 117.00  
Water Found Depth UOM: ft

**Site:** lot 11 ON

**Database:**  
WWIS

Well ID: 1520591  
Construction Date:  
Primary Water Use: Domestic  
Sec. Water Use:  
Final Well Status: Water Supply  
Water Type:  
Casing Material:  
Audit No: NA  
Tag:  
Construction Method:  
Elevation (m):  
Elevation Reliability:  
Depth to Bedrock:  
Well Depth:  
Overburden/Bedrock:  
Pump Rate:  
Static Water Level:  
Flowing (Y/N):  
Flow Rate:

Data Entry Status:  
Data Src: 1  
Date Received: 7/21/1986  
Selected Flag: 1  
Abandonment Rec:  
Contractor: 5222  
Form Version: 1  
Owner:  
Street Name:  
County: OTTAWA-CARLETON  
Municipality: MARCH TOWNSHIP  
Site Info:  
Lot: 011  
Concession:  
Concession Name:  
Easting NAD83:  
Northing NAD83:  
Zone:  
UTM Reliability:

Clear/Cloudy:

**Bore Hole Information**

**Bore Hole ID:** 10042433  
**DP2BR:** 7  
**Code OB:** r  
**Code OB Desc:** Bedrock  
**Open Hole:**  
**Elevation:**  
**Elevrc:**  
**Remarks:**  
**Elevrc Desc:**  
**Location Source Date:**  
**Improvement Location Source:**  
**Improvement Location Method:**  
**Source Revision Comment:**  
**Supplier Comment:**

**Spatial Status:**  
**Cluster Kind:**  
**UTMRC:** 9  
**UTMRC Desc:** unknown UTM  
**Location Method:** na  
**Org CS:**  
**Date Completed:** 7/2/1986

**Overburden and Bedrock**

**Materials Interval**

**Formation ID:** 931045242  
**Layer:** 1  
**Color:** 6  
**General Color:** BROWN  
**Mat1:** 05  
**Most Common Material:** CLAY  
**Mat2:** 81  
**Other Materials:** SANDY  
**Mat3:** 79  
**Other Materials:** PACKED  
**Formation Top Depth:** 0.00  
**Formation End Depth:** 7.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931045243  
**Layer:** 2  
**Color:** 1  
**General Color:** WHITE  
**Mat1:** 18  
**Most Common Material:** SANDSTONE  
**Mat2:** 18  
**Other Materials:** SANDSTONE  
**Mat3:** 73  
**Other Materials:** HARD  
**Formation Top Depth:** 7.00  
**Formation End Depth:** 35.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931045244  
**Layer:** 3  
**Color:** 1  
**General Color:** WHITE  
**Mat1:** 18  
**Most Common Material:** SANDSTONE  
**Mat2:** 73  
**Other Materials:** HARD  
**Mat3:**  
**Other Materials:**  
**Formation Top Depth:** 35.00  
**Formation End Depth:** 55.00  
**Formation End Depth UOM:** ft

**Annular Space/Abandonment**

**Sealing Record**

**Plug ID:** 933109161  
**Layer:** 1  
**Plug From:** 0.00  
**Plug To:** 22.00  
**Plug Depth UOM:** ft

**Method of Construction & Well Use**

**Method Construction ID:** 961520591  
**Method Construction Code:** 5  
**Method Construction:** Air Percussion  
**Other Method Construction:**

**Pipe Information**

**Pipe ID:** 10591003  
**Casing No:** 1  
**Comment:**  
**Alt Name:**

**Construction Record - Casing**

**Casing ID:** 930074062  
**Layer:** 1  
**Material:** 1  
**Open Hole or Material:** STEEL  
**Depth From:**  
**Depth To:** 22.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Casing ID:** 930074063  
**Layer:** 2  
**Material:** 4  
**Open Hole or Material:** OPEN HOLE  
**Depth From:**  
**Depth To:** 55.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Results of Well Yield Testing**

**Pump Test ID:** 991520591  
**Pump Set At:**  
**Static Level:** 5.00  
**Final Level After Pumping:** 30.00  
**Recommended Pump Depth:** 30.00  
**Pumping Rate:** 80.00  
**Flowing Rate:**  
**Recommended Pump Rate:** 25.00  
**Levels UOM:** ft  
**Rate UOM:** GPM  
**Water State After Test Code:** 1  
**Water State After Test:** CLEAR  
**Pumping Test Method:** 1  
**Pumping Duration HR:** 2  
**Pumping Duration MIN:** 0  
**Flowing:** N

**Draw Down & Recovery**

**Pump Test Detail ID:** 934112478  
**Test Type:** Draw Down

**Test Duration:** 15  
**Test Level:** 30.00  
**Test Level UOM:** ft  
  
**Pump Test Detail ID:** 934387341  
**Test Type:** Draw Down  
**Test Duration:** 30  
**Test Level:** 30.00  
**Test Level UOM:** ft  
  
**Pump Test Detail ID:** 934648364  
**Test Type:** Draw Down  
**Test Duration:** 45  
**Test Level:** 30.00  
**Test Level UOM:** ft  
  
**Pump Test Detail ID:** 934906146  
**Test Type:** Draw Down  
**Test Duration:** 60  
**Test Level:** 30.00  
**Test Level UOM:** ft

**Water Details**

**Water ID:** 933477876  
**Layer:** 1  
**Kind Code:** 1  
**Kind:** FRESH  
**Water Found Depth:** 33.00  
**Water Found Depth UOM:** ft  
  
**Water ID:** 933477877  
**Layer:** 2  
**Kind Code:** 1  
**Kind:** FRESH  
**Water Found Depth:** 49.00  
**Water Found Depth UOM:** ft

**Site:**  
 lot 11 ON

**Database:**  
 WWIS

<p> <b>Well ID:</b> 1520592  <b>Construction Date:</b>  <b>Primary Water Use:</b> Domestic  <b>Sec. Water Use:</b>  <b>Final Well Status:</b> Recharge Well  <b>Water Type:</b>  <b>Casing Material:</b>  <b>Audit No:</b> NA  <b>Tag:</b>  <b>Construction Method:</b>  <b>Elevation (m):</b>  <b>Elevation Reliability:</b>  <b>Depth to Bedrock:</b>  <b>Well Depth:</b>  <b>Overburden/Bedrock:</b>  <b>Pump Rate:</b>  <b>Static Water Level:</b>  <b>Flowing (Y/N):</b>  <b>Flow Rate:</b>  <b>Clear/Cloudy:</b> </p>	<p> <b>Data Entry Status:</b>  <b>Data Src:</b> 1  <b>Date Received:</b> 7/21/1986  <b>Selected Flag:</b> 1  <b>Abandonment Rec:</b>  <b>Contractor:</b> 5222  <b>Form Version:</b> 1  <b>Owner:</b>  <b>Street Name:</b>  <b>County:</b> OTTAWA-CARLETON  <b>Municipality:</b> MARCH TOWNSHIP  <b>Site Info:</b>  <b>Lot:</b> 011  <b>Concession:</b>  <b>Concession Name:</b>  <b>Easting NAD83:</b>  <b>Northing NAD83:</b>  <b>Zone:</b>  <b>UTM Reliability:</b> </p>
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**Bore Hole Information**

<p> <b>Bore Hole ID:</b> 10042434  <b>DP2BR:</b> 4  <b>Code OB:</b> r  <b>Code OB Desc:</b> Bedrock         </p>	<p> <b>Spatial Status:</b>  <b>Cluster Kind:</b>  <b>UTMRC:</b> 9  <b>UTMRC Desc:</b> unknown UTM         </p>
--	--

**Open Hole:**  
**Elevation:**  
**Elevrc:**  
**Remarks:**  
**Elevrc Desc:**  
**Location Source Date:**  
**Improvement Location Source:**  
**Improvement Location Method:**  
**Source Revision Comment:**  
**Supplier Comment:**

**Location Method:** na  
**Org CS:**  
**Date Completed:** 7/2/1986

**Overburden and Bedrock**  
**Materials Interval**

**Formation ID:** 931045245  
**Layer:** 1  
**Color:** 6  
**General Color:** BROWN  
**Mat1:** 05  
**Most Common Material:** CLAY  
**Mat2:** 81  
**Other Materials:** SANDY  
**Mat3:** 79  
**Other Materials:** PACKED  
**Formation Top Depth:** 0.00  
**Formation End Depth:** 4.00  
**Formation End Depth UOM:** ft

**Formation ID:** 931045246  
**Layer:** 2  
**Color:** 1  
**General Color:** WHITE  
**Mat1:** 18  
**Most Common Material:** SANDSTONE  
**Mat2:** 78  
**Other Materials:** MEDIUM-GRAINED  
**Mat3:** 73  
**Other Materials:** HARD  
**Formation Top Depth:** 4.00  
**Formation End Depth:** 30.00  
**Formation End Depth UOM:** ft

**Annular Space/Abandonment**  
**Sealing Record**

**Plug ID:** 933109162  
**Layer:** 1  
**Plug From:** 0.00  
**Plug To:** 22.00  
**Plug Depth UOM:** ft

**Method of Construction & Well**  
**Use**

**Method Construction ID:** 961520592  
**Method Construction Code:** 5  
**Method Construction:** Air Percussion  
**Other Method Construction:**

**Pipe Information**

**Pipe ID:** 10591004  
**Casing No:** 1  
**Comment:**  
**Alt Name:**

**Construction Record - Casing**

**Casing ID:** 930074064  
**Layer:** 1  
**Material:** 1  
**Open Hole or Material:** STEEL  
**Depth From:**  
**Depth To:** 22.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Casing ID:** 930074065  
**Layer:** 2  
**Material:** 4  
**Open Hole or Material:** OPEN HOLE  
**Depth From:**  
**Depth To:** 30.00  
**Casing Diameter:** 6.00  
**Casing Diameter UOM:** inch  
**Casing Depth UOM:** ft

**Results of Well Yield Testing**

**Pump Test ID:** 991520592  
**Pump Set At:**  
**Static Level:** 4.00  
**Final Level After Pumping:** 20.00  
**Recommended Pump Depth:** 20.00  
**Pumping Rate:** 30.00  
**Flowing Rate:**  
**Recommended Pump Rate:** 15.00  
**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:** 934112479  
**Test Type:** Draw Down  
**Test Duration:** 15  
**Test Level:** 20.00  
**Test Level UOM:** ft

**Pump Test Detail ID:** 934387342  
**Test Type:** Draw Down  
**Test Duration:** 30  
**Test Level:** 20.00  
**Test Level UOM:** ft

**Pump Test Detail ID:** 934648365  
**Test Type:** Draw Down  
**Test Duration:** 45  
**Test Level:** 20.00  
**Test Level UOM:** ft

**Pump Test Detail ID:** 934906147  
**Test Type:** Draw Down  
**Test Duration:** 60  
**Test Level:** 20.00  
**Test Level UOM:** ft



**Water Details**

**Water ID:** 933477878  
**Layer:** 1  
**Kind Code:** 1  
**Kind:** FRESH  
**Water Found Depth:** 27.00  
**Water Found Depth UOM:** ft

# Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. **Note:** Databases denoted with " \* " indicates that the database will no longer be updated. See the individual database description for more information.

## **Abandoned Aggregate Inventory:**

Provincial

[AAGR](#)

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.\*

**Government Publication Date: Sept 2002\***

## **Aggregate Inventory:**

Provincial

[AGR](#)

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

**Government Publication Date: Up to Sep 2017**

## **Abandoned Mine Information System:**

Provincial

[AMIS](#)

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

**Government Publication Date: 1800-Nov 2016**

## **Anderson's Waste Disposal Sites:**

Private

[ANDR](#)

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

**Government Publication Date: 1860s-Present**

## **Automobile Wrecking & Supplies:**

Private

[AUWR](#)

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

**Government Publication Date: 1999-May 2017**

## **Borehole:**

Provincial

[BORE](#)

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

**Government Publication Date: 1875-Jul 2014**

## **Certificates of Approval:**

Provincial

[CA](#)

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

**Government Publication Date: 1985-Oct 30, 2011\***

**Commercial Fuel Oil Tanks:**

Provincial [CFOT](#)

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

**Government Publication Date: Feb 28, 2017**

**Chemical Register:**

Private [CHEM](#)

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

**Government Publication Date: 1999-May 2017**

**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-Oct 2017**

**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**

**Environmental Activity and Sector Registry:**

Provincial [EASR](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

**Government Publication Date: Oct 2011-Oct 2017**

**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-Oct 2017**

**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-Oct 2017**

**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-Aug 2016**

**Environmental Issues Inventory System:**

Federal **EIIS**

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

**Government Publication Date: 1992-2001\***

**Emergency Management Historical Event:**

Provincial **EMHE**

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

**Government Publication Date: Dec 31, 2016**

**List of TSSA Expired Facilities:**

Provincial **EXP**

List of facilities with removed tanks which were once registered with the Fuels Safety Program of the Technical Standards and Safety Authority (TSSA). Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. Tanks which have been removed automatically fall under the expired facilities inventory held by TSSA.

**Government Publication Date: Feb 28, 2017**

**Federal Convictions:**

Federal **FCON**

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

**Government Publication Date: 1988-Jun 2007\***

**Contaminated Sites on Federal Land:**

Federal **FCS**

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

**Government Publication Date: Jun 2000-Dec 2017**

**Fisheries & Oceans Fuel Tanks:**

Federal **FOFT**

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

**Government Publication Date: 1964-Sep 2017**

**Fuel Storage Tank:**

Provincial **FST**

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

**Government Publication Date: Feb 28, 2017**

**Fuel Storage Tank - Historic:**

Provincial **FSTH**

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

**Government Publication Date: Pre-Jan 2010\***

**Ontario Regulation 347 Waste Generators Summary:**

Provincial **GEN**

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

**Government Publication Date: 1986-Jun 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 2015**

**TSSA Historic Incidents:**

Provincial **HINC**

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

**Government Publication Date: 2006-June 2009\***

**Indian & Northern Affairs Fuel Tanks:**

Federal **IAFT**

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

**Government Publication Date: 1950-Aug 2003\***

**TSSA Incidents:**

Provincial **INC**

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

**Government Publication Date: Feb 28, 2017**

**Landfill Inventory Management Ontario:**

Provincial **LIMO**

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

**Government Publication Date: Dec 31, 2013**

**Canadian Mine Locations:**

Private

MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

**Government Publication Date: 1998-2009\***

**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-Feb 2017**

**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, 2014**

**National Defense & Canadian Forces Fuel Tanks:**

Federal

NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

**Government Publication Date: Up to May 2001\***

**National Defense & Canadian Forces Spills:**

Federal

NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

**Government Publication Date: Mar 1999-Aug 2010**

**National Defence & Canadian Forces Waste Disposal Sites:**

Federal

NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

**Government Publication Date: 2001-Apr 2007\***

**National Energy Board Pipeline Incidents:**

Federal

NEBI

Locations of pipeline incidents from 2008 to present, made available by the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

**Government Publication Date: 2008-Dec 31, 2017**

**National Energy Board Wells:**

Federal

NEBW

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

**Government Publication Date: 1920-Feb 2003\***



**National Environmental Emergencies System (NEES):**

Federal

NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

**Government Publication Date: 1974-2003\***

**National PCB Inventory:**

Federal

NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

**Government Publication Date: 1988-2008\***

**National Pollutant Release Inventory:**

Federal

NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

**Government Publication Date: 1993-May 2017**

**Oil and Gas Wells:**

Private

OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at [www.nickles.com](http://www.nickles.com).

**Government Publication Date: 1988-Sep 2017**

**Ontario Oil and Gas Wells:**

Provincial

OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

**Government Publication Date: 1800-Oct 2017**

**Inventory of PCB Storage Sites:**

Provincial

OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

**Government Publication Date: 1987-Oct 2004; 2012-Dec 2013**

**Orders:**

Provincial

ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

**Government Publication Date: 1994-Oct 2017**

**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**

**Parks Canada Fuel Storage Tanks:**

Federal

PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

**Government Publication Date: 1920-Jan 2005\***

**Pesticide Register:**

Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

**Government Publication Date: 1988-Aug 2017**

**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-Oct 2017**

**Ontario Regulation 347 Waste Receivers Summary:**

Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

**Government Publication Date: 1986-2016**

**Record of Site Condition:**

Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.

RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

**Government Publication Date: 1997-Sept 2001, Oct 2004-Nov 2017**

**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-May 2017**

**Scott's Manufacturing Directory:**

Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

**Government Publication Date: 1992-Mar 2011\***

**Ontario Spills:**

Provincial SPL

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

**Government Publication Date: 1988-Sep 2017**



**Wastewater Discharger Registration Database:**

Provincial **SRDS**

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

**Government Publication Date: 1990-Dec 31, 2016**

**Anderson's Storage Tanks:**

Private **TANK**

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

**Government Publication Date: 1915-1953\***

**Transport Canada Fuel Storage Tanks:**

Federal **TCFT**

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

**Government Publication Date: 1970-Aug 2017**

**TSSA Variances for Abandonment of Underground Storage Tanks:**

Provincial **VAR**

List of variances granted for abandoned tanks. Under the Technical Standards and Safety Authority (TSSA) Liquid Fuels Handling Code and Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, an application may be sought for a variance from this code requirement.

**Government Publication Date: Feb 28, 2017**

**Waste Disposal Sites - MOE CA Inventory:**

Provincial **WDS**

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

**Government Publication Date: Oct 31, 2017**

**Waste Disposal Sites - MOE 1991 Historical Approval Inventory:**

Provincial **WDSH**

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

**Government Publication Date: Up to Oct 1990\***

**Water Well Information System:**

Provincial **WWIS**

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

**Government Publication Date: Mar 31, 2017**

# Definitions

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

**Detail Report:** This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

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

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

**Elevation:** The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

**Executive Summary:** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

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

**Map Key:** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

**Unplottables:** These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

*EXP Services Inc.*

*Theberge Homes Ltd.  
Phase One Environmental Site Assessment  
1158 Second Line Road, Ottawa, Ontario  
OTT-00245054-A0  
March 2, 2018*

# **Appendix E: Site Photographs**





**Photograph No. 1**

View of site from Second Line Road



**Photograph No. 2**

View from edge of Site driveway facing north showing undeveloped area of the Site and adjacent residential development





**Photograph No. 3**  
View from Site facing west



**Photograph No. 4**  
View from Site facing north



**Photograph No. 5**

View from Site facing south



**Photograph No. 6**

View from western extent of Site facing west





**Photograph No. 7**

View of the un-used on-Site AST located in basement along northern wall of residence (PCA1)



**Photograph No. 8**

View of vent and fill pipes located along northern exterior wall of on-Site residence (APEC1)



**Photograph No. 9**

View of propane tanks associated with propane fired forced air furnace



**Photograph No. 10**

View of private water well located at the Site





**Photograph No. 11**

View of groundwater monitoring well associated with former landfill monitoring program.  
Well is located directly adjacent to the south of the Site along Second Line Road.



**Photograph No. 12**

Representative view of interior of residence



**Photograph No. 13**

View of water treatment equipment associated with on-site potable water well.