



## **Phase I Environmental Site Assessment**

1154, 1172, 1176, 1180, and 1208 Old  
Montreal Road, Ottawa, Ontario

**Type of Document:**

Final

**Client:**

DCR/Phoenix Group of Companies  
18 Bentley Avenue  
Ottawa, Ontario K2E 6T8

**Project Number:**

OTT-00234493-A0

**exp** Services Inc.  
100-2650 Queensview Drive  
Ottawa, ON K2B 8H6  
Canada

**Date Submitted:**

August 19, 2016

# Phase I Environmental Site Assessment

1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, Ontario

**Type of Document:**

Final

**Client:**

DCR/Phoenix Group of Companies  
18 Bentley Avenue  
Ottawa, Ontario K2E 6T8

**Project Number:**

OTT-00234493-A0

**Prepared By:**

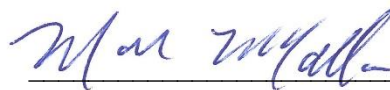
**exp**

100-2650 Queensview Drive  
Ottawa, ON K2B 8H6  
Canada  
T: 613 688-1899  
F: 613 225-7337  
www.exp.com



---

Taryn Glancy, P. Eng.  
Environmental Engineer  
Earth and Environment



---

Mark McCalla, P. Geo.  
Senior Geoscientist  
Earth and Environment

**Date Submitted:**

August 19, 2016

## Executive Summary

**Exp** Services Inc. (**exp**) was retained by Mike Boucher from DCR/Phoenix Group of Companies to complete a Phase I Environmental Site Assessment (ESA) of properties located at 1154, 1172, 1176, 1180, and 1208 Old Montreal Road, in Ottawa, Ontario. The purpose of this Phase I ESA was to determine if past or present site activities have resulted in actual or potential contamination at the site.

This Phase I ESA will be used for due diligence purposes in support of a potential real estate transaction. **Exp** understands this report will not be used to support a City of Ottawa permit application or to submit a Record of Site Condition due to a change in land use.

The work was completed in accordance with the general requirements of CSA Standard Z768-01, November 2001 (as amended), which outlines the protocol for Phase I Environmental Site Assessments. As per Z768-01, the scope of work included a review of historical land use and occupancy records, a visual reconnaissance of the subject site and surrounding properties; and interviews with person(s) having knowledge of past and present site activities.

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 I ESA does not constitute an audit of environmental management practices, indicate geotechnical conditions or identify geologic hazards.

A written response from some of the 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 located on the south side of Old Montreal Road, at 1154, 1172, 1176, 1180, and 1208 Old Montreal Road. At the time of the investigation, the site was used for residential and agricultural purposes. The surrounding properties are mostly residential and agricultural.

The site is rectangular in shape and covers a total area of 17 hectares (41.5 acres). Each of the 1154, 1172, 1176, and 1180 Old Montreal Road properties are occupied by residences with various sheds and garages, which are located in the northwest corner of the site. The remaining portion of the site described as the farm (i.e. 1208 Old Montreal Road) that consists of a residence and several barns/sheds in the northeast corner of the site, an unused farm field in the central portion of the site, a communication tower on the eastern portion of the site (leased to Rogers), and utilizes agricultural lands on the southern portion (leased to a farmer). The farm was initially purchased by the Minogue family and developed in 1951. In the 1970s, the property was severed and the residences at 1172, 1176, and 1180 Old Montreal Road were built for family members. The 1154 Old Montreal Road property was not included in original farm parcel.

The topography of the site consists of a topographic high at the northern portion of the site, with a steep slope downwards in the centre section of the site just south of 1180 Old Montreal Road, and then flat agricultural lands at the southern portion of the site. The local groundwater flow direction is anticipated to be west towards Cardinal Creek, at a distance of 300 m

Based on the results of the Phase I ESA completed at 1154, 1172, 1176, 1180, and 1208 Old Montreal Road in Ottawa, **exp** has identified the following areas of potential environmental concern (APEC).

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

Areas of Potential Environmental Concern	Media	Potential Contaminants of Concern	Comments
APEC 1 – The former aboveground fuel tank used to refuel farm vehicles	Soil and Groundwater	Petroleum Hydrocarbon (PHC) including benzene, toluene, ethylbenzene, and xylene (BTEX)	There was a former fuel tank located in the loft of a barn near the old farm house (1208 Old Montreal Road), which was used to refuel farm vehicles. The ground surface in the vicinity of the former tank is gravel. There may have been spillage associated with the tank and dispenser that could have potentially impacted the subsurface.

To reduce the degree of uncertainty regarding the issues identified during this Phase I ESA, the recommendations and the rationale for proposing such recommendations are provided in the following table.

**Table EX.2: Issues Identified, Recommendations and Rationale**

Issue Identified	Recommendation	Rationale
Potential impacts in soil and groundwater from the aboveground former fuel tank and gravel refuelling area.	Advance one borehole and install a monitoring well to collect soil and groundwater samples for PHC and BTEX analyses. This can be completed concurrently with the geotechnical investigation being conducted by <b>exp</b> .	To assess soil and groundwater conditions at the site.

As per Ontario Regulation 278/05, if there are any planned demolitions or renovations, a Designated Substance Survey (DSS) should be conducted.

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

## Table of Contents

<b>Executive Summary</b> .....	<b>i</b>
<b>1. Introduction</b> .....	<b>1</b>
1.1 Objective .....	1
1.2 Site Description .....	1
<b>2. Scope of Investigation</b> .....	<b>2</b>
<b>3. Records Review</b> .....	<b>3</b>
3.1 Phase I ESA Study Area Determination .....	3
3.2 Past and Current Land Uses .....	3
3.3 Title Search .....	3
3.4 Fire Insurance Plans .....	3
3.5 Environmental Reports .....	3
3.6 Regulatory Information Environmental Source Information .....	3
3.6.1 Ontario Ministry of the Environment Records .....	4
3.6.2 Technical Standards and Safety Authority .....	4
3.6.3 Municipal Records .....	<b>Error! Bookmark not defined.</b>
3.7 Land Use Documents .....	4
3.8 EcoLog ERIS Database Search .....	4
3.9 Enviroscan Report .....	<b>Error! Bookmark not defined.</b>
3.10 Physical Setting Review .....	5
3.10.1 Aerial Photographs .....	5
3.10.2 Geology, Hydrogeology and Topography .....	5
3.10.3 Water Bodies and Areas of Natural Scientific Importance .....	5
3.11 Summary of Records Review .....	5
<b>4. Interviews</b> .....	<b>6</b>
<b>5. Site Reconnaissance</b> .....	<b>7</b>
5.1 General Requirements .....	7
5.2 Visual Site Assessment .....	7
5.2.1 Site Description and Buildings .....	7
5.2.2 Site Use .....	8
5.2.3 Heating and Cooling Systems .....	8
5.2.4 Site Utilities and Services .....	8
5.2.5 Storage Tanks .....	8
5.2.6 Drains, Pits and Sumps .....	8

5.2.7	Chemical Storage and Handling and Floor Condition .....	8
5.2.8	Areas of Stained Soil, Pavement or Stressed Vegetation .....	9
5.2.9	Fill, Debris and Methane .....	9
5.2.10	Air Emissions .....	9
5.2.11	Odours .....	9
5.2.12	Noise .....	9
5.2.13	Special Attention Items, Hazardous Building Materials and Designated Substances .....	9
5.2.14	Processing and Manufacturing Operations.....	12
5.2.15	Hazardous Materials Use and Storage.....	12
5.2.16	Vehicle and Equipment Maintenance Areas.....	12
5.2.17	Oil/Water Separators .....	12
5.2.18	Sewage and Wastewater Disposal .....	12
5.2.19	Solid Waste Generation, Storage & Disposal .....	12
5.2.20	Liquid Waste Generation, Storage & Disposal .....	12
5.2.21	Hydraulic Lift Equipment .....	12
5.2.22	Mechanical Equipment.....	12
5.2.23	Abandoned and Existing Wells .....	12
5.2.24	Roads, Parking Facilities and Right of Ways.....	12
5.3	Adjacent and Surrounding Properties .....	13
5.4	Summary of Site Reconnaissance .....	13
<b>6.</b>	<b>Findings and Recommendations.....</b>	<b>14</b>
<b>7.</b>	<b>References .....</b>	<b>14</b>
<b>8.</b>	<b>Limitation of Liability, Scope of Report, and Third Party Reliance.....</b>	<b>16</b>

## List of Figures

Figure 1 – Site Location Plan  
Figure 2 – Site and Surrounding Land Use  
Figure 3 – Site Plan

## List of Appendices

Appendix A: Qualifications of Assessors  
Appendix B: Figures  
Appendix C: EcoLog ERIS Report  
Appendix D: Municipal & Provincial Records  
Appendix E: Photographs

## 1. Introduction

**Exp** Services Inc. (**exp**) was retained by Mike Boucher of DCR/Phoenix Group of Companies to complete a Phase I Environmental Site Assessment (ESA) of the properties located at 1154, 1172, 1176, 1180, and 1208 Old Montreal Road in Ottawa, Ontario, hereinafter referred to as the 'site'.

At the time of the investigation, the subject site was owned by the following individuals:

- 1208 Old Montreal Road – Lois Morin
- 1180 Old Montreal Road – Lois Morin, Diane Minogue, Linda Tanner, and John Minogue
- 1176 Old Montreal Road – Christiane and Shane Howe
- 1172 Old Montreal Road – Diane Minogue
- 1154 Old Montreal Road – Nadim Batikh

**Exp** understands that DCR/Phoenix is in the process of acquiring all of the above properties.

### 1.1 Objective

This Phase I ESA will be used for due diligence purposes in support of a real estate transaction. **Exp** understands this report will not be used to support a City of Ottawa permit application or to submit a Record of Site Condition (RSC) due to a change in land use.

A Phase I ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. The Phase I ESA was completed in general accordance to CSA Standard Z768-01, November 2001 (as amended). 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.

### 1.2 Site Description

The site is located on the south side of Old Montreal Road, at 1154, 1172, 1176, 1180, and 1208 Old Montreal Road, as shown on Figure 1 in Appendix B. At the time of the investigation, the site was used for residential and agricultural purposes. The surrounding properties are mostly residential and agricultural.

The site is rectangular in shape and covers a total area of 17 hectares (41.5 acres). Each of the 1154, 1172, 1176, and 1180 Old Montreal Road properties are occupied by residences with various sheds and garages, which are located in the northwest corner of the site. The remaining portion of the site described as the farm (i.e. 1208 Old Montreal Road) that consists of a residence and several barns/sheds in the northeast corner of the site, an unused farm field in the central portion of the site, a communication tower on the eastern portion of the site (leased to Rogers), and utilizes agricultural lands on the southern portion (leased to a farmer). The farm was initially purchased by the Minogue family and developed in 1951. In the 1970s, the property was severed and the residences at 1172, 1176, and 1180 Old Montreal Road were built for family members. The 1154 Old Montreal Road property was not included in original farm parcel. A site plan is provided in Figure 2 of Appendix B.

The topography of the site consists of a topographic high at the northern portion of the site, with a steep slope downwards in the centre section of the site just south of 1180 Old Montreal Road, and then flat agricultural lands at the southern portion of the site. The local groundwater flow direction is anticipated to be west towards Cardinal Creek, at a distance of 300 m.

## 2. Scope of Investigation

The scope of work the Phase I ESA consisted of the following activities:

- Reviewing the historical occupancy of the subject 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 subject 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 subject site;
- Conducting a site reconnaissance of the subject 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 subject site and site buildings;
- Reviewing the current use of the subject 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 subject 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 of materials. In addition, 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.

**Exp** personnel who conducted assessment work for this project included Taryn Glancy, P.Eng., and Mark McCalla, P. Geo.. An outline of their qualifications is provided in Appendix A.



## 3. Records Review

### 3.1 Phase I ESA Study Area Determination

**Exp** conducted a records review of available information in accordance with CSA Standard Z768/01 to establish the land use history of the subject site and the adjacent properties.

The Phase I ESA study area consisted of the neighbourhood extending a distance of 250 metres from the subject site. At the time of the site reconnaissance, land usage within 250 metres of the subject site was mostly residential and agricultural.

### 3.2 Past and Current Land Uses

Based on a review of historical aerial photographs, and other records review, it appears the subject site was first developed as a farm in 1951 under the 1208 Old Montreal Road civic address. In the 1970s, a portion of the property was severed and three residences were developed at 1172, 1176, and 1180 Old Montreal Road. The residence for the 1154 Old Montreal road property was built in the 1960s.

### 3.3 Title Search

A title search was not completed by **exp** as it was determined there was enough information available from city directories, interviews, and aerial photographs.

### 3.4 Fire Insurance Plans

The *Catalogue of Canadian Fire Insurance Plans 1875 – 1975* (Catalogue) was used to determine if fire insurance plans (FIPs) for the subject site exist. No FIPs were available.

### 3.5 Environmental Reports

No environmental reports were made available to **exp** for review.

### 3.6 Regulatory Information 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 and are discussed in the subsequent sections:

- The Ontario Ministry of the Environment and Climate Change (MOECC) Freedom of Information, Protection of Privacy Office; and,
- The Technical Standards and Safety Authority (TSSA), Fuel Safety Branch.

A written response from some of the regulatory agencies typically requires several weeks to months. Copies of the requests are included in Appendix D. If upon receipt of the response from these regulatory agencies, significant environmental issues are identified, **exp** will forward their response to the client as an addendum to this report.

### 3.6.1 Ontario Ministry of the Environment Records

Records pertaining to the site were requested from the MOECC through the *Freedom of Information and Protection of Privacy Act* (FOI). A copy of the request from the MOECC is included in Appendix D. No response has yet been received.

### 3.6.2 Technical Standards and Safety Authority

A request for information regarding the subject site was made to the Technical Standards and Safety Authority (TSSA). A copy of the documents provided by the TSSA is provided in Appendix D. The TSSA stated via email that there is no record of fuel storage tanks in their database for the subject site.

### 3.6.3 City Directory Search

Exp requested a city directories search from ERIS. No directories were available.

## 3.7 Land Use Documents

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

- Waste Disposal Site Inventory (MOE, June 1991);
- 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); and
- Mapping and Assessment of Former Industrial Sites – City of Ottawa (Intera, July 1988).

### 3.7.1 Waste Disposal Site Inventory - Active and Closed Landfills - Ontario MOE (1991)

There were no waste disposal sites identified in this document within 250 m of the subject site.

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

There were no landfills identified in this document within 250 m of the subject site.

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

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

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

No former industrial sites were identified within 250 m of the subject site.

## 3.8 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 C.

The only entries in the EcoLog Report were for local water wells and boreholes.

## 3.9 Physical Setting Review

### 3.9.1 Aerial Photographs

Aerial photographs are obtained from the geoOttawa website and from EcologERIS. Images from 1945, 1960, 1976, 1991, 1999, 2002, 2005, 2007, 2008, 2011, and 2014 were reviewed. It appears the site was developed with the residences at 1154 and 1208 Old Montreal Road in the 1960 photograph. The residences at 1172, 1176, and 1180 Old Montreal Road had been developed in the 1976 photograph. The surrounding properties appear largely residential and agricultural.

### 3.9.2 Geology, Hydrogeology and Topography

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

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

Based on local mapping, beneath any fill, the surficial geology of the Site is characterised by silt and clay on the northern and southern portions of the site. In the central portion of the site, colluvial deposits of boulders and undifferentiated landslide materials, were identified. The bedrock geology underlying the subject site consists of limestone, dolostone, shale and sandstone of the Gull River Formation or limestone of the Bobcaygeon Formation. Local well and borehole data indicate variable composition of clay, and sand, over limestone bedrock. The depth to bedrock was 15 m below grade.

The topography of the site consists of a topographic high at the northern portion of the site, with a steep slope downwards in the centre section of the site just south of 1180 Old Montreal Road, and then flat agricultural lands at the southern portion of the site. The local groundwater flow direction is anticipated to be west towards Cardinal Creek, at a distance of 300 m.

### 3.9.3 Water Bodies and Areas of Natural Scientific Importance

Topographic Mapping identified drainage ditches in the central portion of the site, although during the site visit, the ditches appeared to be dry. The site is not located in proximity to an area of natural and scientific interest.

## 3.10 Summary of Records Review

Based on a review of the available records, no areas of potential environmental concern (APECs) were identified.

## 4. Interviews

Interviews were conducted by **exp** with the individuals identified to be the most knowledgeable about both the current and historical site uses. The interviews were conducted in order 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 subject site.

During the completion of this Phase I ESA, Lois Morin, the owner of 1180 and 1208 Old Montreal Road, and John Minogue, owner of 1208 Old Montreal Road and former owner of 1176 Old Montreal Road, were interviewed during the site visit and all the information has been incorporated into the report.

The site history was described as follows:

- The Minogue family purchased the vacant farms lands in 1951 and built the house and barns (1208 Old Montreal Road);
- In the 1970s, each of the Minogue children were given small portions of the land and built a residence (1172, 1176, and 1180 Old Montreal Road);
- The farming activities were described as light in nature and being used for horses for the last 30 years;
- The southern portion of the site is still used for agriculture and is leased to another farmer;
- The communications tower on the farm, which is leased to Rogers Communications, was built in 1984. There is a contract in place so that when the lease is terminated, Rogers is required to remove everything associated with the tower;
- They were not aware of any pesticide application at the site;
- The tractor was refuelled using a diesel fuel tank located in the loft of the aluminum barn;
- There are heating oil tanks in the basements of 1180 and 1208 Old Montreal Road, with no reported issues;
- There was a former heating oil tank in the basement of 1176 Old Montreal, which was converted to propane in the last few years;
- There was never a heating oil tank in the basement of 1172 Old Montreal Road, as this has always been heated with a wood stove and electrical heat; and
- There was no knowledge of any spills on the property.

## 5. Site Reconnaissance

### 5.1 General Requirements

On August 2, 2016, Taryn Glancy of **exp** conducted the site visit 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 subject site.

The general environmental management and housekeeping practices at the subject 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.

Exterior observations of the subject property and surrounding properties were conducted. The exterior observations were recorded by walking over the grounds of the subject site. Adjoining properties were observed from within the grounds of the subject site.

Photographs were taken from the exterior and interior of the buildings. Photographs are included in Appendix E. Ms. Glancy was accompanied by Marc Poirier (owner's realtor representative) during the site visit.

### 5.2 Visual Site Assessment

#### 5.2.1 Site Description and Buildings

The site is located on the south side of Old Montreal Road, at 1154, 1172, 1176, 1180, and 1208 Old Montreal Road, as shown on Figure 1 in Appendix B. The site is rectangular in shape, covers a total area of 17 hectares (41.5 acres). Below is a description of each property:

- 1154 Old Montreal Road – A single storey residence with basement walkout and is located directly along Old Montreal Road. Topography of the property slopes downwards at the north end. Behind the residence is a densely wooded area. The house is heated with electrical heating.
- 1172 Old Montreal Road – A single storey house with basement which is accessed from a road connected to Old Montreal Road. The house is heated with electrical heating. The house is also serviced with a well and septic system.
- 1176 Old Montreal Road – A single storey house with basement which is accessed from a road connected to Old Montreal Road. There is a detached garage and shed. The heated is supplied by propane, although at one time did have a heating oil tank in the basement. The house is also serviced with a well and septic system.
- 1180 Old Montreal Road – A single storey house with basement which is accessed from a road connected to Old Montreal Road. There is a detached garage and shed. The heated is supplied by a heating oil tank in the basement. The house is also serviced with a well and septic system.
- 1208 Old Montreal Road – The farm house is described as a single storey with basement walkout and is located directly along Old Montreal Road. The farm and house have been vacant for several years. There are also several barns near the farm house that were in poor shape and partially falling down. Several abandoned vehicles were also observed. South of the farm house is a communications tower which is leased to Rogers. The equipment is contained within a locked compound and could only be observed through the fence. At the southern portion of the property

is agricultural lands which are leased to another farmer. The farm house was previously heated with an existing oil tank in the basement. The house is also serviced with a well and septic system.

## 5.2.2 Site Use

At the time of the investigation, the site was used for residential and agricultural purposes. In addition, a small portion of the site is leased to Rogers for a communication tower.

## 5.2.3 Heating and Cooling Systems

The heating systems for each property are described in Section 5.2.1.

## 5.2.4 Site Utilities and Services

The site is serviced with wells and septic systems, and overhead electrical and bell lines.

## 5.2.5 Storage Tanks

### 5.2.5.1 Underground Storage Tanks

The site representative indicated they had no knowledge of underground storage tanks (UST) at the site. **Exp** did not observe any evidence of USTs, such as vent and fill pipes, during the site reconnaissance. Furthermore, the historical review did not identify any former USTs at the site.

### 5.2.5.2 Aboveground Storage Tanks

The following existing and former aboveground storage tanks (ASTs) were documented:

- A heating oil tank in the basement of 1180 Old Montreal Road. The tank was installed above a concrete floor in good condition, and there was no staining in the vicinity of the tank. This does not represent an APEC.
- A heating oil tank in the basement of 1208 Old Montreal Road. The tank was installed above a concrete floor in good condition. There was some staining observed on the concrete floor below the tank, although the staining appeared to be contained within the building footprint. This does not represent an APEC.
- A former heating oil tank was located in the basement of 1176 Old Montreal Road, which was replaced with propane a few years ago. No staining was observed on the concrete floor in the former tank location. This does not represent an APEC.
- A former diesel tank, which was used to refuel farm vehicles, was located on the loft of the aluminum barn. It dispensed fuel via gravity feed to the tractor parking over a gravel area. There is the potential for spillage in this area to have impacted the subsurface. This represents an APEC.

## 5.2.6 Drains, Pits and Sumps

Floor drains were observed in basement areas. No staining was observed in the areas around the floor drains.

## 5.2.7 Chemical Storage and Handling and Floor Condition

No chemical storage of concern was observed at the site.

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

An area of staining was observed on some gravel in the shed at 1180 Old Montreal Road. A small shovel hole was advanced through the staining and the staining was found to be surficial. During land development, the small area of impacted gravel and soils will need to be disposed of in a landfill. Gross contamination is not anticipated, and this does not represent an APEC.

A small area of staining was observed on the concrete floor below the heating oil tank in the basement of 1208 Old Montreal Road. The staining appeared to be contained within the footprint of the building and there was no obvious cracking below the staining, and this does not represent an APEC.

### 5.2.9 Fill, Debris and Methane

Substantial quantities of fill are not anticipated to be present at the subject site. Methane or radon gas-producing materials were not observed on the subject site.

### 5.2.10 Air Emissions

Regulatory control of air emissions in Ontario is the responsibility of the MOE. 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 issues with respect to air emissions were noted.

### 5.2.11 Odours

No strong odours were detected during the site visit.

### 5.2.12 Noise

No excessive noise was detected at the subject site 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 date of construction (constructed 1950s to 1970s), there is a potential for ACM to have been used during the construction of the site buildings (i.e. in the form of insulation, roofing tars, cement, drywall filler compound, floor tiles, and ceiling tiles, etc.).

As per Ontario Regulation 278/05, if there are any planned demolitions or renovations, a Designated Substance Survey (DSS) should be conducted.

#### **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 tinsplate 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 site building (constructed 1950s to 1970s), it is **exp's** opinion that there is a potential for LBPs to be contained within the site buildings.

#### **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.

Based on the age of the site building (constructed 1950s to 1970s), it is **exp's** opinion that the presence of mercury-based paints within the site buildings is possible. If fluorescent light tubes are in use, they may contain mercury vapour.

#### **5.2.13.4 Polychlorinated Biphenyls**

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 subject 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.

If fluorescent light ballasts are in use, they may contain PCBs.

#### **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 Becquerels 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.

Given the geological formation underlying the site, **exp** concludes that radon is unlikely to pose a direct health 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, carpets, wallpaper, wood, etc.) and moist conditions. Mould can have an impact on human health depending on the species and concentration of the mould. 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 visible mould was observed by **exp** in the site buildings during the site visit, although a detailed inspection was not carried out.

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

No processing or manufacturing operations exist at the subject site.

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

No hazardous materials were observed at the site.

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

No vehicle or equipment maintenance areas are present on the subject site.

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

No oil/water separators were observed or reported by the site representative.

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

The site is serviced with septic systems.

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

General garbage is routinely picked up by the city on a regular basis.

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

No liquid waste is generated or stored at the site.

#### **5.2.21 Hydraulic Lift Equipment**

Mechanical equipment such as piston type elevators, vehicle in-ground hoists, loading docks and compactors are typically hydraulically operated. As such, these types of equipment contain hydraulic oils which are operated under high pressures and can be released into the environment from leaks or equipment failures.

No hydraulic equipment was observed at the site.

#### **5.2.22 Mechanical Equipment**

No mechanical equipment of concern was observed at the site.

#### **5.2.23 Abandoned and Existing Wells**

The residences are serviced with water wells.

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

The 1154 and 1208 Montreal Road properties are accessed via Old Montreal Road. The 1172, 1176, and 1180 Old Montreal Road properties are accessed via a road that enters onto the site from Old Montreal Road.

### 5.3 Adjacent and Surrounding Properties

A visual inspection of the adjacent properties and properties within 250 m of the subject site was conducted from publically accessible areas to identify the occupants and document the uses and sources of potential environmental concerns that may impact the subject site. The results of the visual inspection are documented in Figure 2 Appendix B. No environmental issues were noted with respect to the adjacent and surrounding properties.

- East:** Residential, Agricultural  
**West:** Residential, Agricultural  
**North:** Residential, Church, Agricultural  
**South:** Agricultural, Agricultural

### 5.4 Summary of Site Reconnaissance

An area of staining was observed on gravel in the shed at 1180 Old Montreal Road. A small shovel hole was advanced through the staining and the staining was found to be surficial. During land development, the small area of impacted gravel and soils will need to be disposed on in a landfill. Gross contamination is not anticipated, and this does not represent an APEC.

Based on the age of the buildings, various designated substances such as asbestos, lead, mercury, PCBs, and mould may be present. Prior to demolition, a designated substance survey (DSS) should be completed.

Based on the site reconnaissance the following APECs were identified:

- A former diesel tank, which was used to refuel farm vehicles, was located on the loft of the aluminum barn. It dispensed fuel via gravity feed to the tractor parking over a gravel area. There is the potential for spillage in this area to have impacted the subsurface. Contaminants of concern are petroleum hydrocarbon (PHC) including benzene, toluene, ethylbenzene, and xylene (BTEX).

## 6. Findings and Recommendations

Based on the results of the Phase I ESA completed at 1154, 1172, 1176, 1180, and 1280 Old Montreal Road in Ottawa, **exp** has identified the following areas of potential environmental concern:

**Table 6.1: Potential Areas of Environmental Concern**

Areas of Potential Environmental Concern	Media	Potential Contaminants of Concern	Comments
APEC 1 – The former aboveground fuel tank used to refuel farm vehicles	Soil and Groundwater	Petroleum Hydrocarbon (PHC) including benzene, toluene, ethylbenzene, and xylene (BTEX)	There was a former fuel tank located in the loft of a barn near the old farm house (1208 Old Montreal Road), which was used to refuel farm vehicles. The ground surface in the vicinity of the former tank is gravel. There may have been spillage associated with the tank and dispenser that could have potentially impacted the subsurface.

To reduce the degree of uncertainty regarding the issues identified during this Phase I ESA, the recommendations and the rationale for proposing such recommendations are provided in the following table.

**Table 6.2: Issues Identified, Recommendations and Rationale**

Issue Identified	Recommendation	Rationale
Potential impacts in soil and groundwater from the aboveground former fuel tank and gravel refuelling area.	Advance one borehole and install a monitoring well to collect soil and groundwater samples for PHC and BTEX analyses. This can be completed concurrently with the geotechnical investigation being conducted by <b>exp</b> .	To assess soil and groundwater conditions at the Site.

As per Ontario Regulation 278/05, if there are any planned demolitions or renovations, a Designated Substance Survey (DSS) should be conducted.

## 7. References

1. Canadian Standards Association; November 2001; *Z768-0 Phase I Environmental Site Assessment*.
2. Department of Energy Mines and Resources, Surveys and Mapping Branch; 1976; *Ottawa Map 31 G/5, Scale 1:50,000*.
3. Dubreuil, L. and C. Woods; 2002; *Catalogue of Canadian Fire Insurance Plans, 1875 – 1975*.
4. Geological Survey of Canada; 1982; *Generalized Bedrock Geology – Ottawa-Hull, Ontario-Quebec: Map 1508A. Scale 1:125,000*.
5. Geological Survey of Canada; 1976; *Surficial Geology – Ottawa, Ontario: Map 1507A. Scale 1:50,000*.
6. Golder Associates Inc.; October 2004; *Old Landfill Management Strategy, City of Ottawa*.
7. Intera Technologies Ltd.; July 1998; *Mapping and Assessment of Former Industrial Sites, City of Ottawa*.
8. Ministry of Labour (MOL); *Occupational Health and Safety Act*.
9. 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))
10. Ontario Ministry of the Environment; 1993 - 2003-2004; *Ontario Inventory of PCB Storage Sites*.
11. 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))
12. Ontario Ministry of the Environment; *Hazardous Waste Information Network website* ([www.hwin.ca](http://www.hwin.ca)).
13. Ontario Ministry of the Environment; November 1988; *Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario*.
14. Ontario Ministry of the Environment, Waste Management Branch; June 1991; *Waste Disposal Site Inventory*.
15. Ontario Ministry of the Environment and Intera Technologies Ltd.; June 1991; *Inventory of Coal Gasification Plant Waste Sites in Ontario*.
16. 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))
17. Technical Standards and Safety Authority; May 2007; *Environmental Management Protocol for Fuel Handling Sites in Ontario*.

## 8. Limitation of Liability, 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. Where special concerns exist, or DCR/Phoenix Group of Companies (“the Client”) has special considerations or requirements, these should be disclosed to **exp** to allow for additional or special investigations to be undertaken not otherwise within the scope of investigation conducted for the purpose of the Report.

Where applicable, recommended field services are the minimum necessary to ascertain that construction is being carried out in general conformity with building code guidelines, generally accepted practices and **exp**'s recommendations. Any reduction in the level of services recommended will result in **exp** providing qualified opinions regarding the adequacy of the work. **Exp** can assist design professionals or contractors retained by the Client to review applicable plans, drawings, and specifications as they relate to the Report or to conduct field reviews during construction.

### 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 the Client and others. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by the Client. **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. 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 the Client, communications between **exp** and the Client, other reports, proposals or documents prepared by **exp** for the Client 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 the Client. 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.

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 the Client's 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**.

**exp** Services Inc.

*DCR/Phoenix Group of Companies  
Phase I Environmental Site Assessment  
1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, ON  
OTT-00234493-A0  
August 19, 2016*

# Appendices





**exp** Services Inc.

*DCR/Phoenix Group of Companies  
Phase I Environmental Site Assessment  
1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, ON  
OTT-00234493-A0  
August 19, 2016*

# **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.

**Taryn Glancy**, P.Eng., has 7 years of experience in the environmental consulting field. Technical undertakings have included: project coordination; Phase I, II and III Environmental Site Assessments; contaminated site investigations including drilling supervision, environmental sampling and data evaluation; and technical report preparation.

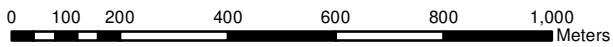
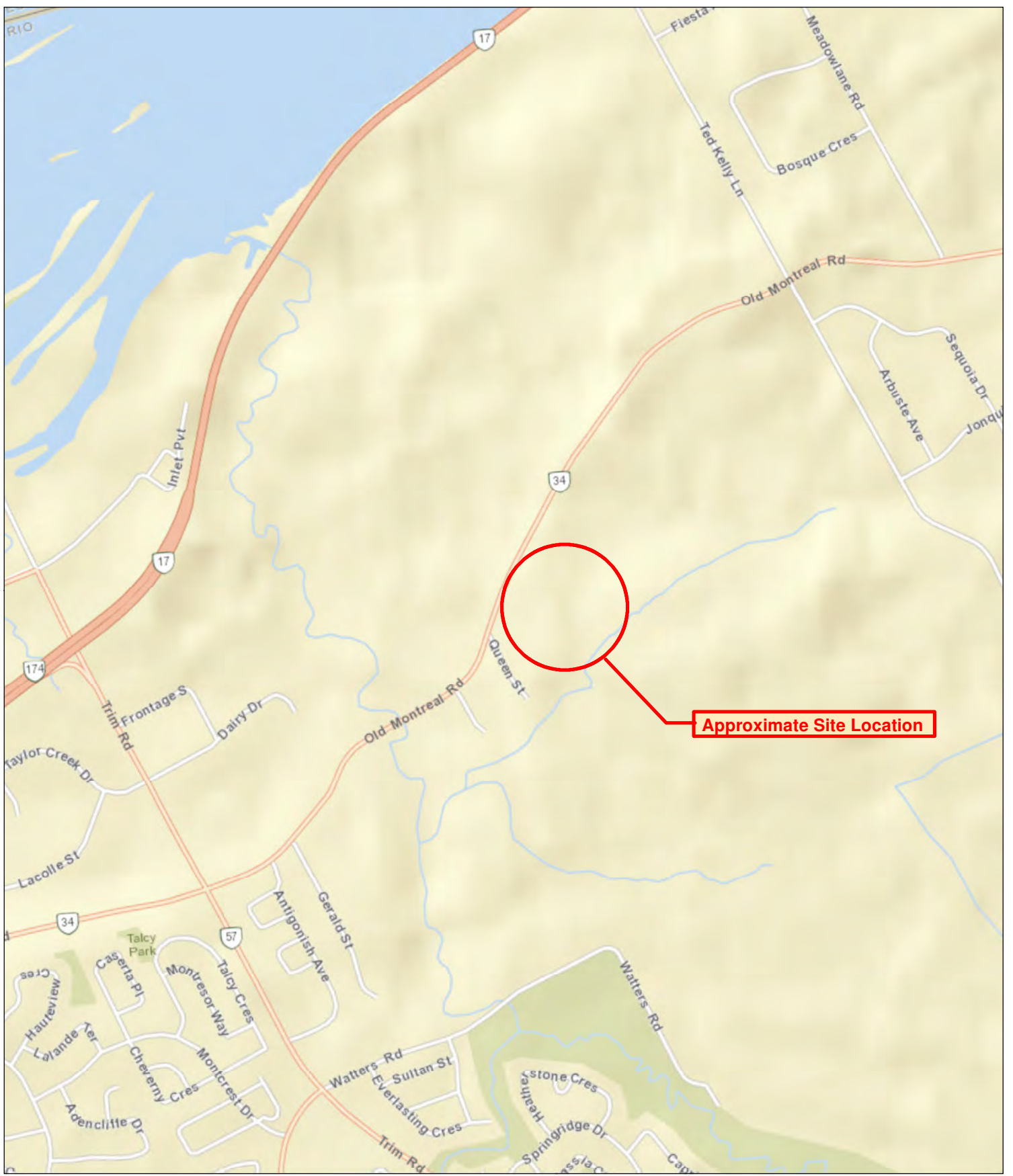
**Mark McCalla**, P.Geo, is a Senior Environmental Scientist with **exp** who has 27 years of experience in the environmental consulting field. His technical undertakings have included work in the following fields: Phase I and II Environmental Site Assessments; Site Specific Risk Assessments; Petroleum 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 Ont. Reg. 153/04.


**exp** Services Inc.

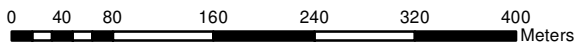
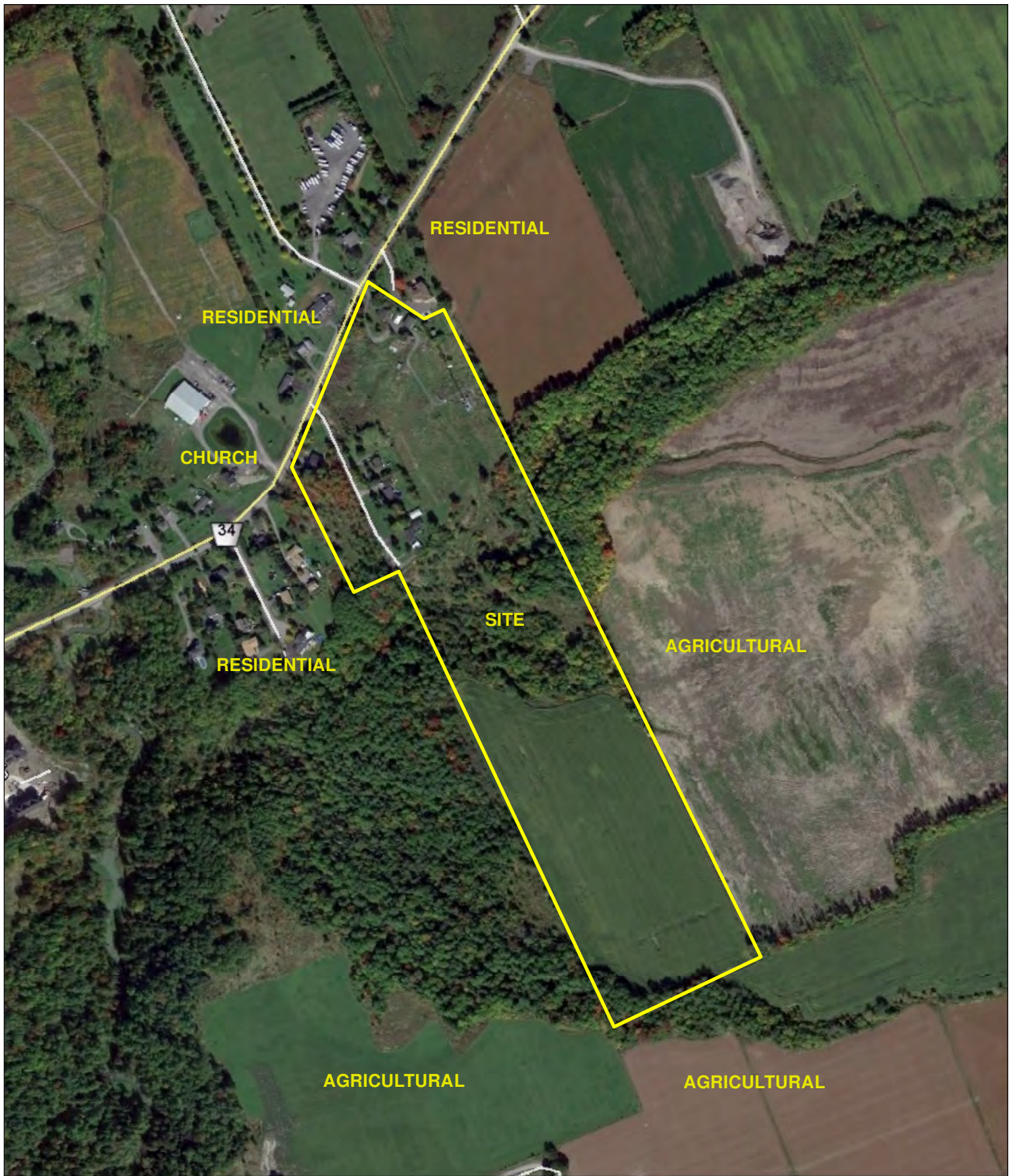
*DCR/Phoenix Group of Companies  
Phase I Environmental Site Assessment  
1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, ON  
OTT-00234493-A0  
August 19, 2016*

## **Appendix B: Figures**





 <b>exp Services Inc.</b> 100-2650 Queensview Drive Ottawa, Ontario K2B 8H6 T - (613) - 688-1899 F - (613) - 225-7337	PROJECT TITLE: <b>PHASE I ENVIRONMENTAL          SITE ASSESSMENT</b> 1154,1172,1176,1180,1208 Old Montreal Road Ottawa, Ontario	DRAWING TITLE: <b>SITE LOCATION PLAN</b>	PROJECT No.: OTT-00234493-C0	DWN: TG
			SCALE: AS SHOWN	CHKD: MM
			DATE: August 2016	FIG. No.: 1




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

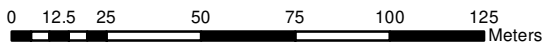
PROJECT TITLE:  
**PHASE I ENVIRONMENTAL  
 SITE ASSESSMENT**  
 1154, 1176, 1180, 1208 Old Montreal Road  
 Ottawa, Ontario


DRAWING TITLE:  
**SURROUNDING  
 LAND USE PLAN**

PROJECT No.:	DWN:
OTT-00234493-C0	TG
SCALE:	CHKD:
AS SHOWN	MM
DATE:	FIG. No.:
August 2016	2



**APEC - Area of Potential Environmental Concern**  
**AST - Aboveground Storage Tank**



 <b>exp Services Inc.</b> 100-2650 Queensview Drive Ottawa, Ontario K2B 8H6 T - (613) - 688-1899 F - (613) - 225-7337	PROJECT TITLE: <b>PHASE I ENVIRONMENTAL          SITE ASSESSMENT</b> 1154,1172,1176,1180,1208 Old Montreal Road Ottawa, Ontario	DRAWING TITLE:  <b>SITE PLAN</b>	PROJECT No.: OTT-00234493-C0	DWN: TG
			SCALE: AS SHOWN	CHKD: MM
			DATE: August 2016	FIG. No.: 3

**exp** Services Inc.

*DCR/Phoenix Group of Companies  
Phase I Environmental Site Assessment  
1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, ON  
OTT-00234493-A0  
August 19, 2016*

# **Appendix C: EcoLog ERIS Report**



**ERIS**  
ENVIRONMENTAL RISK INFORMATION SERVICE



# DATABASE REPORT

**Project Property:** *Phase I ESA  
1154-1208 Old Montreal Rd  
Ottawa ON  
OTT-00234493-A0*

**Project No:** *OTT-00234493-A0*

**Report Type:** *Quote - Custom-Build Your Own Report*

**Order No:** *20160711137*

**Requested by:** *exp Services Inc.*

**Date Completed:** *July 18, 2016*

**Ecolog ERIS Ltd.**  
Environmental Risk Information  
Service Ltd. (ERIS)  
A division of Glacier Media Inc.  
P: 1.866.517.5204  
E: info@erisinfo.com  
[www.erisinfo.com](http://www.erisinfo.com)



# Table of Contents

Table of Contents.....	1
Executive Summary.....	2
Executive Summary: Report Summary.....	4
Executive Summary: Site Report Summary - Project Property.....	6
Executive Summary: Site Report Summary - Surrounding Properties.....	7
Executive Summary: Summary By Data Source.....	9
Map.....	11
Aerial.....	12
Detail Report.....	13
Unplottable Summary.....	30
Unplottable Report.....	31
Appendix: Database Descriptions.....	34
Definitions.....	44

**Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY**

**Reliance on information in Report:** This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

**License for use of information in Report:** No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

**Your Liability for misuse:** Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

**No warranty of Accuracy or Liability for ERIS:** The information contained in this report has been produced by EcoLog Environmental Risk Information Services Ltd ("ERIS") using various sources of information, including information provided by Federal and Provincial government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, EcoLog ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of EcoLog ERIS is limited to the monetary value paid for this report.

**Trademark and Copyright:** You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report(s) are protected by copyright owned by EcoLog ERIS Ltd. Copyright in data used in the Service or Report(s) (the "Data") is owned by EcoLog ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of EcoLog ERIS.

# Executive Summary

## Property Information:

**Project Property:** *Phase I ESA  
1154-1208 Old Montreal Rd Ottawa ON*

**Project No:** *OTT-00234493-A0*

## Order Information:

**Order No:** *20160711137*  
**Date Requested:** *July 11, 2016*  
**Requested by:** *exp Services Inc.*  
**Report Type:** *Quote - Custom-Build Your Own Report*

## Additional Products:

# Executive Summary: Report Summary

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Boundary to 0.25km</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	3	3
CA	<i>Certificates of Approval</i>	Y	0	1	1
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Register</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	0	0	0
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	0	0
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
HINC	<i>TSSA Historic Incidents</i>	Y	0	0	0
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
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0

<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Boundary to 0.25km</b>	<b>Total</b>
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
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	4	20	24
<b>Total:</b>			4	24	28

## 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>	WWIS		lot 28 con 1 CUMBERLAND ON	-/0.0	-3.60	<a href="#">13</a>
<a href="#">2</a>	WWIS		lot 27 con 1 ON	-/0.0	-3.95	<a href="#">13</a>
<a href="#">3</a>	WWIS		lot 28 con 1 CUMBERLAND ON	-/0.0	-10.44	<a href="#">14</a>
<a href="#">7</a>	WWIS		lot 27 con 1 ON	-/0.0	-0.45	<a href="#">14</a>

# Executive Summary: Site Report Summary - Surrounding Properties

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">4</a>	WWIS		lot 28 con 1 ON	W/9.0	-13.64	<a href="#">15</a>
<a href="#">5</a>	WWIS		lot 28 con 1 ON	WSW/6.8	-14.31	<a href="#">15</a>
<a href="#">6</a>	BORE		ON	WSW/27.7	-15.48	<a href="#">16</a>
<a href="#">6</a>	WWIS		lot 28 con 1 ON	WSW/27.7	-15.47	<a href="#">17</a>
<a href="#">8</a>	BORE		ON	NNW/46.0	-13.47	<a href="#">17</a>
<a href="#">8</a>	WWIS		lot 27 con 1 ON	NNW/46.0	-13.47	<a href="#">18</a>
<a href="#">9</a>	WWIS		lot 25 con 1 CUMBERLAND ON	WNW/99.2	-17.24	<a href="#">18</a>
<a href="#">10</a>	WWIS		lot 28 con 1 ON	W/105.5	-18.64	<a href="#">19</a>
<a href="#">11</a>	CA	Word of Life Church (Ottawa/Hull)	1123 Queen Street (Old Montreal Road) Ottawa ON	WNW/135.5	-18.73	<a href="#">20</a>
<a href="#">11</a>	WWIS		lot 28 con 1 ON	WNW/135.5	-18.73	<a href="#">20</a>
<a href="#">12</a>	WWIS		lot 27 con 1 ON	N/60.8	-10.79	<a href="#">21</a>
<a href="#">13</a>	WWIS		lot 28 con 1 ON	WSW/144.1	-16.87	<a href="#">21</a>
<a href="#">13</a>	WWIS		lot 28 con 1 ON	WSW/144.1	-16.87	<a href="#">22</a>
<a href="#">13</a>	WWIS		lot 28 con 1 ON	WSW/144.1	-16.87	<a href="#">23</a>
<a href="#">14</a>	WWIS		lot 28 con 1 ON	W/145.0	-20.00	<a href="#">23</a>
<a href="#">15</a>	BORE		ON	SW/166.9	-17.50	<a href="#">24</a>
<a href="#">15</a>	WWIS		lot 28 con 1 ON	SW/166.9	-17.50	<a href="#">24</a>
<a href="#">16</a>	WWIS		lot 28 con 1 ON	WSW/166.6	-20.12	<a href="#">25</a>
<a href="#">17</a>	WWIS		lot 28 con 1 ON	WSW/194.0	-22.28	<a href="#">25</a>
<a href="#">18</a>	WWIS		lot 28 con 1 ON	SW/196.1	-15.10	<a href="#">26</a>
<a href="#">19</a>	WWIS		lot 28 con 1 ON	W/226.7	-21.13	<a href="#">26</a>

<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="#">20</a>	WWIS		lot 28 con 1 ON	WSW/220.7	-24.24	<a href="#">27</a>
<a href="#">21</a>	WWIS		lot 28 con 1 ON	SW/223.8	-21.92	<a href="#">28</a>
<a href="#">22</a>	WWIS		lot 27 con 1 ON	N/232.7	-13.00	<a href="#">28</a>

# Executive Summary: Summary By Data Source

## **BORE - Borehole**

A search of the BORE database, dated 1875-Jul 2014 has found that there are 3 BORE site(s) within approximately 0.25 kilometers of the project property.

<b><u>Site</u></b>	<b><u>Address</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	ON	27.7	<a href="#"><u>6</u></a>
	ON	46.0	<a href="#"><u>8</u></a>
	ON	166.9	<a href="#"><u>15</u></a>

## **CA - Certificates of Approval**

A search of the CA database, dated 1985-Oct 30, 2011\* has found that there are 1 CA site(s) within approximately 0.25 kilometers of the project property.

<b><u>Site</u></b>	<b><u>Address</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
Word of Life Church (Ottawa/Hull)	1123 Queen Street (Old Montreal Road) Ottawa ON	135.5	<a href="#"><u>11</u></a>

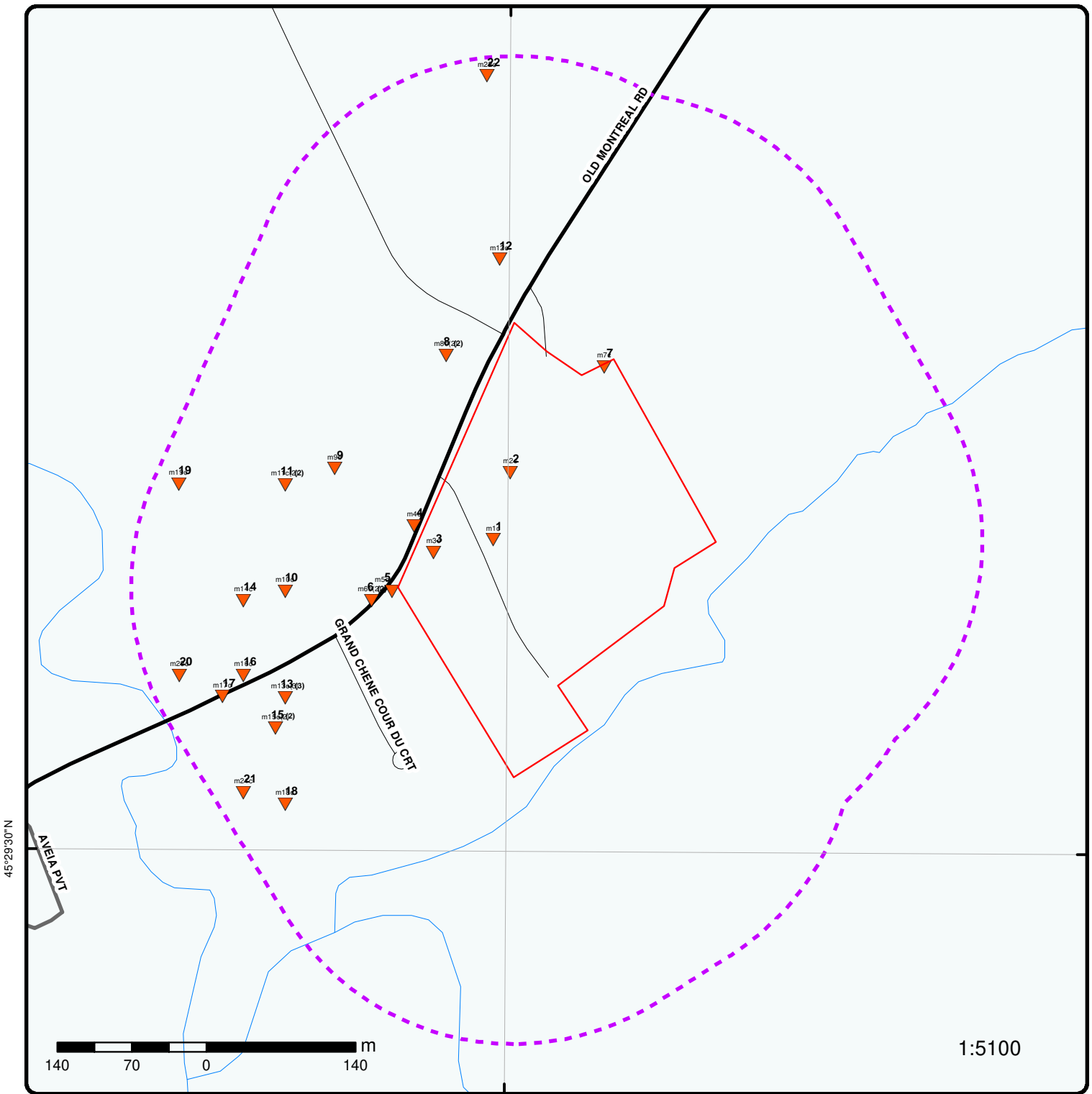
## **WWIS - Water Well Information System**

A search of the WWIS database, dated 1955-Mar 2014 has found that there are 24 WWIS site(s) within approximately 0.25 kilometers of the project property.

<b><u>Site</u></b>	<b><u>Address</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	lot 28 con 1 CUMBERLAND ON	0.0	<a href="#"><u>1</u></a>
	lot 27 con 1 ON	0.0	<a href="#"><u>2</u></a>
	lot 28 con 1 CUMBERLAND ON	0.0	<a href="#"><u>3</u></a>
	lot 28 con 1 ON	9.0	<a href="#"><u>4</u></a>
	lot 28 con 1 ON	6.8	<a href="#"><u>5</u></a>
	lot 28 con 1 ON	27.7	<a href="#"><u>6</u></a>



<u>Site</u>	<u>Address</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 27 con 1 ON	0.0	<u><a href="#">7</a></u>
	lot 27 con 1 ON	46.0	<u><a href="#">8</a></u>
	lot 25 con 1 CUMBERLAND ON	99.2	<u><a href="#">9</a></u>
	lot 28 con 1 ON	105.5	<u><a href="#">10</a></u>
	lot 28 con 1 ON	135.5	<u><a href="#">11</a></u>
	lot 27 con 1 ON	60.8	<u><a href="#">12</a></u>
	lot 28 con 1 ON	144.1	<u><a href="#">13</a></u>
	lot 28 con 1 ON	144.1	<u><a href="#">13</a></u>
	lot 28 con 1 ON	144.1	<u><a href="#">13</a></u>
	lot 28 con 1 ON	145.0	<u><a href="#">14</a></u>
	lot 28 con 1 ON	166.9	<u><a href="#">15</a></u>
	lot 28 con 1 ON	166.6	<u><a href="#">16</a></u>
	lot 28 con 1 ON	194.0	<u><a href="#">17</a></u>
	lot 28 con 1 ON	196.1	<u><a href="#">18</a></u>
	lot 28 con 1 ON	226.7	<u><a href="#">19</a></u>
	lot 28 con 1 ON	220.7	<u><a href="#">20</a></u>
	lot 28 con 1 ON	223.8	<u><a href="#">21</a></u>
	lot 27 con 1 ON	232.7	<u><a href="#">22</a></u>



# Map

Order No: 20160711137

Address: 1154-1208 Old Montreal Rd, Ottawa, ON

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		

45°30'N

45°30'N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, **1:10000** us DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

# Aerial

Order No: 20160711137

Address: 1154-1208 Old Montreal Rd, Ottawa, ON

Source: ESRI World Imagery, Updated October 2014

© Ecolog ERIS Ltd

# Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB		
<u>1</u>	1 of 1	-/0.0	82.4	lot 28 con 1 CUMBERLAND ON	WWIS		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Well ID:</b> 1534641  <b>Concession:</b> 01  <b>County:</b> OTTAWA-CARLETON  <b>Easting Nad83:</b> 463525  <b>Zone:</b> 18  <b>Primary Water Use:</b> Domestic  <b>Sec. Water Use:</b>  <b>Pump Rate:</b> 15.1 LPM  <b>Flow Rate:</b>  <b>Specific Capacity:</b>  <b>Construction Method:</b> Air Percussion  <b>Elevation (m):</b> 82.11  <b>Depth to Bedrock:</b> 55  <b>Water Type:</b> Not stated    <b>--- Details ---</b>  <b>Thickness:</b> 16.8 m  <b>Material Colour:</b> BROWN  <b>+</b>  <b>Thickness:</b> 68.5 m  <b>Material Colour:</b> GREY                 </td> <td style="width: 50%; vertical-align: top;"> <b>Lot:</b> 028  <b>Concession Name:</b> CON  <b>Municipality:</b> CUMBERLAND TOWNSHIP  <b>Northing Nad83:</b> 5037969  <b>Utm Reliability:</b> margin of error : 100 m - 300 m  <b>Construction Date:</b> 02-APR-04  <b>Well Depth:</b> 85.3 m  <b>Static Water Level:</b> 30.57 m  <b>Clear/Cloudy:</b> CLEAR  <b>Final Well Status:</b> Water Supply  <b>Flowing (y/n):</b>    <b>Elevation Reliability:</b>  <b>Overburden/Bedrock:</b> Bedrock  <b>Casing Material:</b> FRESH, MINERIAL    <b>Original Depth:</b> 16.8 m  <b>Material:</b> CLAY    <b>Original Depth:</b> 85.3 m  <b>Material:</b> LIMESTONE                 </td> </tr> </table>						<b>Well ID:</b> 1534641 <b>Concession:</b> 01 <b>County:</b> OTTAWA-CARLETON <b>Easting Nad83:</b> 463525 <b>Zone:</b> 18 <b>Primary Water Use:</b> Domestic <b>Sec. Water Use:</b> <b>Pump Rate:</b> 15.1 LPM <b>Flow Rate:</b> <b>Specific Capacity:</b> <b>Construction Method:</b> Air Percussion <b>Elevation (m):</b> 82.11 <b>Depth to Bedrock:</b> 55 <b>Water Type:</b> Not stated  <b>--- Details ---</b> <b>Thickness:</b> 16.8 m <b>Material Colour:</b> BROWN <b>+</b> <b>Thickness:</b> 68.5 m <b>Material Colour:</b> GREY	<b>Lot:</b> 028 <b>Concession Name:</b> CON <b>Municipality:</b> CUMBERLAND TOWNSHIP <b>Northing Nad83:</b> 5037969 <b>Utm Reliability:</b> margin of error : 100 m - 300 m <b>Construction Date:</b> 02-APR-04 <b>Well Depth:</b> 85.3 m <b>Static Water Level:</b> 30.57 m <b>Clear/Cloudy:</b> CLEAR <b>Final Well Status:</b> Water Supply <b>Flowing (y/n):</b>  <b>Elevation Reliability:</b> <b>Overburden/Bedrock:</b> Bedrock <b>Casing Material:</b> FRESH, MINERIAL  <b>Original Depth:</b> 16.8 m <b>Material:</b> CLAY  <b>Original Depth:</b> 85.3 m <b>Material:</b> LIMESTONE
<b>Well ID:</b> 1534641 <b>Concession:</b> 01 <b>County:</b> OTTAWA-CARLETON <b>Easting Nad83:</b> 463525 <b>Zone:</b> 18 <b>Primary Water Use:</b> Domestic <b>Sec. Water Use:</b> <b>Pump Rate:</b> 15.1 LPM <b>Flow Rate:</b> <b>Specific Capacity:</b> <b>Construction Method:</b> Air Percussion <b>Elevation (m):</b> 82.11 <b>Depth to Bedrock:</b> 55 <b>Water Type:</b> Not stated  <b>--- Details ---</b> <b>Thickness:</b> 16.8 m <b>Material Colour:</b> BROWN <b>+</b> <b>Thickness:</b> 68.5 m <b>Material Colour:</b> GREY	<b>Lot:</b> 028 <b>Concession Name:</b> CON <b>Municipality:</b> CUMBERLAND TOWNSHIP <b>Northing Nad83:</b> 5037969 <b>Utm Reliability:</b> margin of error : 100 m - 300 m <b>Construction Date:</b> 02-APR-04 <b>Well Depth:</b> 85.3 m <b>Static Water Level:</b> 30.57 m <b>Clear/Cloudy:</b> CLEAR <b>Final Well Status:</b> Water Supply <b>Flowing (y/n):</b>  <b>Elevation Reliability:</b> <b>Overburden/Bedrock:</b> Bedrock <b>Casing Material:</b> FRESH, MINERIAL  <b>Original Depth:</b> 16.8 m <b>Material:</b> CLAY  <b>Original Depth:</b> 85.3 m <b>Material:</b> LIMESTONE						
<u>2</u>	1 of 1	-/0.0	82.0	lot 27 con 1 ON	WWIS		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>Well ID:</b> 1512408  <b>Concession:</b> 01  <b>County:</b> OTTAWA-CARLETON  <b>Easting Nad83:</b> 463540.8  <b>Zone:</b> 18  <b>Primary Water Use:</b> Domestic  <b>Sec. Water Use:</b>  <b>Pump Rate:</b> 7 GPM  <b>Flow Rate:</b>  <b>Specific Capacity:</b>  <b>Construction Method:</b> Cable Tool  <b>Elevation (m):</b> 80.67  <b>Depth to Bedrock:</b> 70  <b>Water Type:</b> FRESH                 </td> <td style="width: 50%; vertical-align: top;"> <b>Lot:</b> 027  <b>Concession Name:</b> OF  <b>Municipality:</b> CUMBERLAND TOWNSHIP  <b>Northing Nad83:</b> 5038032  <b>Utm Reliability:</b> margin of error : 30 m - 100 m  <b>Construction Date:</b> 18-JUL-72  <b>Well Depth:</b> 85 ft  <b>Static Water Level:</b> 50 ft  <b>Clear/Cloudy:</b> CLOUDY  <b>Final Well Status:</b> Water Supply  <b>Flowing (y/n):</b> N    <b>Elevation Reliability:</b>  <b>Overburden/Bedrock:</b> Bedrock  <b>Casing Material:</b> FRESH, MINERIAL                 </td> </tr> </table>						<b>Well ID:</b> 1512408 <b>Concession:</b> 01 <b>County:</b> OTTAWA-CARLETON <b>Easting Nad83:</b> 463540.8 <b>Zone:</b> 18 <b>Primary Water Use:</b> Domestic <b>Sec. Water Use:</b> <b>Pump Rate:</b> 7 GPM <b>Flow Rate:</b> <b>Specific Capacity:</b> <b>Construction Method:</b> Cable Tool <b>Elevation (m):</b> 80.67 <b>Depth to Bedrock:</b> 70 <b>Water Type:</b> FRESH	<b>Lot:</b> 027 <b>Concession Name:</b> OF <b>Municipality:</b> CUMBERLAND TOWNSHIP <b>Northing Nad83:</b> 5038032 <b>Utm Reliability:</b> margin of error : 30 m - 100 m <b>Construction Date:</b> 18-JUL-72 <b>Well Depth:</b> 85 ft <b>Static Water Level:</b> 50 ft <b>Clear/Cloudy:</b> CLOUDY <b>Final Well Status:</b> Water Supply <b>Flowing (y/n):</b> N  <b>Elevation Reliability:</b> <b>Overburden/Bedrock:</b> Bedrock <b>Casing Material:</b> FRESH, MINERIAL
<b>Well ID:</b> 1512408 <b>Concession:</b> 01 <b>County:</b> OTTAWA-CARLETON <b>Easting Nad83:</b> 463540.8 <b>Zone:</b> 18 <b>Primary Water Use:</b> Domestic <b>Sec. Water Use:</b> <b>Pump Rate:</b> 7 GPM <b>Flow Rate:</b> <b>Specific Capacity:</b> <b>Construction Method:</b> Cable Tool <b>Elevation (m):</b> 80.67 <b>Depth to Bedrock:</b> 70 <b>Water Type:</b> FRESH	<b>Lot:</b> 027 <b>Concession Name:</b> OF <b>Municipality:</b> CUMBERLAND TOWNSHIP <b>Northing Nad83:</b> 5038032 <b>Utm Reliability:</b> margin of error : 30 m - 100 m <b>Construction Date:</b> 18-JUL-72 <b>Well Depth:</b> 85 ft <b>Static Water Level:</b> 50 ft <b>Clear/Cloudy:</b> CLOUDY <b>Final Well Status:</b> Water Supply <b>Flowing (y/n):</b> N  <b>Elevation Reliability:</b> <b>Overburden/Bedrock:</b> Bedrock <b>Casing Material:</b> FRESH, MINERIAL						

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>--- Details ---</b>					
<b>Thickness:</b>	20 ft			<b>Original Depth:</b>	20 ft
<b>Material Colour:</b>	RED			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	40 ft			<b>Original Depth:</b>	60 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	70 ft
<b>Material Colour:</b>	BLACK			<b>Material:</b>	GRAVEL
<b>+</b>					
<b>Thickness:</b>	15 ft			<b>Original Depth:</b>	85 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<b>3</b>	1 of 1	-/0.0	75.6	<b>lot 28 con 1 CUMBERLAND ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1534642			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	CON
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463469			<b>Northing Nad83:</b>	5037957
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Not Used			<b>Construction Date:</b>	06-APR-04
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	
<b>Pump Rate:</b>				<b>Static Water Level:</b>	
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Abandoned-Quality
<b>Construction Method:</b>	Not Known			<b>Flowing (y/n):</b>	
<b>Elevation (m):</b>	74.44			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>				<b>Overburden/Bedrock:</b>	No formation data
<b>Water Type:</b>				<b>k:</b>	
				<b>Casing Material:</b>	
<b>7</b>	1 of 1	-/0.0	85.6	<b>lot 27 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1514989			<b>Lot:</b>	027
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463628.8			<b>Northing Nad83:</b>	5038131
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	26-SEP-75
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	298 ft
<b>Pump Rate:</b>	3 GPM			<b>Static Water Level:</b>	75 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Air Percussion			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	85.23			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	76			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>k:</b>	
				<b>Casing Material:</b>	FRESH, MINERIAL

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>--- Details ---</b>					
<b>Thickness:</b>	17 ft			<b>Original Depth:</b>	17 ft
<b>Material Colour:</b>	BROWN			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	51 ft			<b>Original Depth:</b>	68 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	8 ft			<b>Original Depth:</b>	76 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	HARDPAN, BOULDERS, PACKED
<b>+</b>					
<b>Thickness:</b>	222 ft			<b>Original Depth:</b>	298 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE, SOFT
<b>4</b>	<b>1 of 1</b>	<b>W/9.0</b>	<b>72.4</b>	<b>lot 28 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1513134			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463450.8			<b>Northing Nad83:</b>	5037982
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	13-AUG-63
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	66 ft
<b>Pump Rate:</b>	8 GPM			<b>Static Water Level:</b>	32 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	71.38			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	53			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERIAL
<b>--- Details ---</b>					
<b>Thickness:</b>	53 ft			<b>Original Depth:</b>	53 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	13 ft			<b>Original Depth:</b>	66 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<b>5</b>	<b>1 of 1</b>	<b>WSW/6.8</b>	<b>71.7</b>	<b>lot 28 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1517246			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463429.8			<b>Northing Nad83:</b>	5037921
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	13-DEC-79
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	144 ft
<b>Pump Rate:</b>	8 GPM			<b>Static Water Level:</b>	75 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)			<b>Flowing (y/n):</b>	N

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Method:</b>					
<b>Elevation (m):</b>	68.58			<b>Elevation</b>	
<b>Depth to Bedrock:</b>	95			<b>Reliability:</b>	
<b>Water Type:</b>	FRESH			<b>Overburden/Bedrock:</b>	Unknown type (bedrock encountered)
<b>--- Details ---</b>					
<b>Thickness:</b>	13 ft			<b>Original Depth:</b>	13 ft
<b>Material Colour:</b>	YELLOW			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	47 ft			<b>Original Depth:</b>	60 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	70 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	GRAVEL
+					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	80 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	SAND, GRAVEL
+					
<b>Thickness:</b>	15 ft			<b>Original Depth:</b>	95 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	BOULDERS, GRAVEL
+					
<b>Thickness:</b>	0 ft			<b>Original Depth:</b>	144 ft
<b>Material Colour:</b>				<b>Material:</b>	UNKNOWN TYPE
+					
<b>Thickness:</b>	49 ft			<b>Original Depth:</b>	144 ft
<b>Material Colour:</b>	BROWN			<b>Material:</b>	SLATE

<u>6</u>	1 of 2	WSW/27.7	70.5	ON	BORE
<b>Borehole ID:</b> 616398					
<b>Use:</b>					
<b>Drill Method:</b>					
<b>Easting:</b> 463411					
<b>Location Accuracy:</b>					
<b>Elev. Reliability Note:</b>					
<b>Total Depth m:</b> 25.3					
<b>Township:</b>					
<b>Lot:</b>					
<b>Completion Date:</b> NOV-1953					
<b>Primary Water Use:</b>					
<b>Type:</b> Borehole					
<b>Status:</b>					
<b>UTM Zone:</b> 18					
<b>Northing:</b> 5037912					
<b>Orig. Ground Elevation:</b> 73.2					
<b>DEM Ground Elevation:</b> 67.6					
<b>Primary Name:</b>					
<b>Concession:</b>					
<b>Municipality:</b>					
<b>Static Water Level:</b> -999.9					
<b>Sec. Water Use:</b>					
<b>--- Details ---</b>					
<b>Stratum ID:</b> 218403834					
<b>Bottom Depth(m):</b> 14.3					
+					
<b>Stratum ID:</b> 218403835					
<b>Bottom Depth(m):</b> 25.3					
<b>Top Depth(m):</b> 0.0					
<b>Stratum Desc:</b> CLAY. BLUE.					
<b>Top Depth(m):</b> 14.3					
<b>Stratum Desc:</b> BEDROCK. TY = 900.					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
					UNSPECIFIED. SEISMIC VELOCITY = 6600. BEDROCK. SEISMIC VELOCITY = 19000.
<u>6</u>	2 of 2	WSW/27.7	70.5	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1513131			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463410.8			<b>Northing Nad83:</b>	5037912
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	19-NOV-53
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	83 ft
<b>Pump Rate:</b>	6 GPM			<b>Static Water Level:</b>	43 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Cable Tool			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	67.59			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	47			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	MINERIAL			<b>Casing Material:</b>	FRESH, MINERIAL
--- Details ---					
<b>Thickness:</b>	47 ft			<b>Original Depth:</b>	47 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	36 ft			<b>Original Depth:</b>	83 ft
<b>Material Colour:</b>				<b>Material:</b>	ROCK, LIMESTONE
<u>8</u>	1 of 2	NNW/46.0	72.5	ON	BORE
<b>Borehole ID:</b>	616403			<b>Type:</b>	Borehole
<b>Use:</b>				<b>Status:</b>	
<b>Drill Method:</b>				<b>UTM Zone:</b>	18
<b>Easting:</b>	463481			<b>Northing:</b>	5038142
<b>Location Accuracy:</b>				<b>Orig. Ground Elevation:</b>	74.7
<b>Elev. Reliability Note:</b>				<b>DEM Ground Elevation:</b>	71.4
<b>Total Depth m:</b>	44.8			<b>Primary Name:</b>	
<b>Township:</b>				<b>Concession:</b>	
<b>Lot:</b>				<b>Municipality:</b>	
<b>Completion Date:</b>	SEP-1959			<b>Static Water Level:</b>	-999.9
<b>Primary Water Use:</b>				<b>Sec. Water Use:</b>	
--- Details ---					
<b>Stratum ID:</b>	218403845			<b>Top Depth(m):</b>	14.0
<b>Bottom Depth(m):</b>	14.6			<b>Stratum Desc:</b>	GRAVEL.
+					
<b>Stratum ID:</b>	218403846			<b>Top Depth(m):</b>	14.6



Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
	<b>Bottom Depth(m):</b> 44.8			<b>Stratum Desc:</b>	LIMESTONE. 00147IED. SEISMIC VELOCITY = 6600. BEDROCK. SEISMIC VELOCITY = 19000. K. DA
	<b>+</b>				
	<b>Stratum ID:</b> 218403843			<b>Top Depth(m):</b>	0.0
	<b>Bottom Depth(m):</b> 13.1			<b>Stratum Desc:</b>	CLAY.
	<b>+</b>				
	<b>Stratum ID:</b> 218403844			<b>Top Depth(m):</b>	13.1
	<b>Bottom Depth(m):</b> 14.0			<b>Stratum Desc:</b>	SAND.

<u>8</u>	2 of 2	NNW/46.0	72.5	lot 27 con 1 ON	WWIS
<b>Well ID:</b>	1513130			<b>Lot:</b>	027
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463480.8			<b>Northing Nad83:</b>	5038142
<b>Zone:</b>	18			<b>Utm Reliability:</b>	unknown UTM
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	15-SEP-59
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	147 ft
<b>Pump Rate:</b>	9 GPM			<b>Static Water Level:</b>	71 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	71.38			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	48			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERIAL
<b>--- Details ---</b>					
<b>Thickness:</b>	43 ft			<b>Original Depth:</b>	43 ft
<b>Material Colour:</b>				<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	3 ft			<b>Original Depth:</b>	46 ft
<b>Material Colour:</b>				<b>Material:</b>	MEDIUM SAND
<b>+</b>					
<b>Thickness:</b>	2 ft			<b>Original Depth:</b>	48 ft
<b>Material Colour:</b>				<b>Material:</b>	GRAVEL
<b>+</b>					
<b>Thickness:</b>	99 ft			<b>Original Depth:</b>	147 ft
<b>Material Colour:</b>				<b>Material:</b>	LIMESTONE

<u>9</u>	1 of 1	WNW/99.2	68.8	lot 25 con 1 CUMBERLAND ON	WWIS
<b>Well ID:</b>	1534786			<b>Lot:</b>	025
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463376			<b>Northing Nad83:</b>	5038036
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 10 - 30 m
<b>Primary Water Use:</b>				<b>Construction Date:</b>	13-MAY-04

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	89.9 m
<b>Pump Rate:</b>	18.9 LPM			<b>Static Water Level:</b>	21.48 m
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Air Percussion			<b>Flowing (y/n):</b>	
<b>Elevation (m):</b>	68.6			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	45			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERAL
--- Details ---					
<b>Thickness:</b>	10.4 m			<b>Original Depth:</b>	10.4 m
<b>Material Colour:</b>				<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	3.3 m			<b>Original Depth:</b>	13.7 m
<b>Material Colour:</b>				<b>Material:</b>	SAND, GRAVEL, BOULDERS
+					
<b>Thickness:</b>	76.2 m			<b>Original Depth:</b>	89.9 m
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE, SHALE
<a href="#">10</a>	1 of 1	W/105.5	67.4	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1516407			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463329.8			<b>Northing Nad83:</b>	5037921
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	29-AUG-77
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	50 ft
<b>Pump Rate:</b>	7 GPM			<b>Static Water Level:</b>	3 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	67.1			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	42			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH
--- Details ---					
<b>Thickness:</b>	11 ft			<b>Original Depth:</b>	11 ft
<b>Material Colour:</b>	YELLOW			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	29 ft			<b>Original Depth:</b>	40 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	2 ft			<b>Original Depth:</b>	42 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	GRAVEL
+					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<i>Thickness:</i>	4 ft			<i>Original Depth:</i>	46 ft
<i>Material Colour:</i>	GREY			<i>Material:</i>	SLATE
+					
<i>Thickness:</i>	2 ft			<i>Original Depth:</i>	48 ft
<i>Material Colour:</i>	BLACK			<i>Material:</i>	SLATE
+					
<i>Thickness:</i>	2 ft			<i>Original Depth:</i>	50 ft
<i>Material Colour:</i>	GREY			<i>Material:</i>	SLATE

[11](#)      1 of 2      **WNW/135.5**      **67.3**      **Word of Life Church (Ottawa/Hull)**  
**1123 Queen Street (Old Montreal Road)**  
**Ottawa ON**      **CA**

**Certificate #:** 5012-66KQTM  
**Application Year:** 2004  
**Issue Date:** 11/26/2004  
**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:**

[11](#)      2 of 2      **WNW/135.5**      **67.3**      **lot 28 con 1**  
**ON**      **WWIS**

<b>Well ID:</b>	1516925	<b>Lot:</b>	028
<b>Concession:</b>	01	<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON	<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463329.8	<b>Northing Nad83:</b>	5038021
<b>Zone:</b>	18	<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic	<b>Construction Date:</b>	25-APR-78
<b>Sec. Water Use:</b>		<b>Well Depth:</b>	150 ft
<b>Pump Rate:</b>	20 GPM	<b>Static Water Level:</b>	60 ft
<b>Flow Rate:</b>		<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>		<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)	<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	67.76	<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	49	<b>Overburden/Bedrock:</b>	Mixed in a Layer
<b>Water Type:</b>	FRESH	<b>Casing Material:</b>	FRESH
<b>--- Details ---</b>			
<b>Thickness:</b>	10 ft	<b>Original Depth:</b>	10 ft
<b>Material Colour:</b>	YELLOW	<b>Material:</b>	CLAY
+			
<b>Thickness:</b>	39 ft	<b>Original Depth:</b>	49 ft

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	6 ft			<b>Original Depth:</b>	55 ft
<b>Material Colour:</b>	BROWN			<b>Material:</b>	STONES, SLATE
<b>+</b>					
<b>Thickness:</b>	85 ft			<b>Original Depth:</b>	140 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<b>+</b>					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	150 ft
<b>Material Colour:</b>	BROWN			<b>Material:</b>	SLATE

<u>12</u>	1 of 1	N/60.8	75.2	lot 27 con 1 ON	WWIS
<b>Well ID:</b>	1512335			<b>Lot:</b>	027
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463530.8			<b>Northing Nad83:</b>	5038232
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	31-MAY-72
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	65 ft
<b>Pump Rate:</b>	20 GPM			<b>Static Water Level:</b>	
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Cable Tool			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	74.75			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	10			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERIAL
<b>--- Details ---</b>					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	10 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	55 ft			<b>Original Depth:</b>	65 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	ROCK

<u>13</u>	1 of 3	WSW/144.1	69.1	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1518202			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463329.8			<b>Northing Nad83:</b>	5037821
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	03-MAR-83
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	66 ft
<b>Pump Rate:</b>	30 GPM			<b>Static Water Level:</b>	29 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)			<b>Flowing (y/n):</b>	N

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Method:</b>					
<b>Elevation (m):</b>	67.76			<b>Elevation</b>	
<b>Depth to Bedrock:</b>	61			<b>Reliability:</b>	
<b>Water Type:</b>	FRESH			<b>Overburden/Bedrock:</b>	Bedrock
<b>--- Details ---</b>					
<b>Thickness:</b>	17 ft			<b>Original Depth:</b>	17 ft
<b>Material Colour:</b>	YELLOW			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	42 ft			<b>Original Depth:</b>	59 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	2 ft			<b>Original Depth:</b>	61 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	COARSE GRAVEL
+					
<b>Thickness:</b>	5 ft			<b>Original Depth:</b>	66 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<a href="#">13</a>	2 of 3	WSW/144.1	69.1	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1516909			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463329.8			<b>Northing Nad83:</b>	5037821
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	19-MAY-78
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	63 ft
<b>Pump Rate:</b>	20 GPM			<b>Static Water Level:</b>	50 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	67.76			<b>Elevation</b>	
<b>Depth to Bedrock:</b>	59			<b>Reliability:</b>	
<b>Water Type:</b>	FRESH			<b>Overburden/Bedrock:</b>	Bedrock
<b>--- Details ---</b>					
<b>Thickness:</b>	28 ft			<b>Original Depth:</b>	28 ft
<b>Material Colour:</b>	YELLOW			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	21 ft			<b>Original Depth:</b>	49 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	59 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	GRAVEL
+					
<b>Thickness:</b>	4 ft			<b>Original Depth:</b>	63 ft

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Material Colour:</b>	GREY			<b>Material:</b>	SLATE
<a href="#">13</a>	3 of 3	WSW/144.1	69.1	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1518165			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463329.8			<b>Northing Nad83:</b>	5037821
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	12-APR-82
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	142 ft
<b>Pump Rate:</b>	16 GPM			<b>Static Water Level:</b>	65 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	67.76			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	74			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERIAL
--- Details ---					
<b>Thickness:</b>	40 ft			<b>Original Depth:</b>	40 ft
<b>Material Colour:</b>	YELLOW			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	34 ft			<b>Original Depth:</b>	74 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
+					
<b>Thickness:</b>	1 ft			<b>Original Depth:</b>	75 ft
<b>Material Colour:</b>	BROWN			<b>Material:</b>	SLATE
+					
<b>Thickness:</b>	67 ft			<b>Original Depth:</b>	142 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	LIMESTONE
<a href="#">14</a>	1 of 1	W/145.0	66.0	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1513135			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463290.8			<b>Northing Nad83:</b>	5037912
<b>Zone:</b>	18			<b>Utm Reliability:</b>	unknown UTM
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	24-MAR-65
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	183 ft
<b>Pump Rate:</b>	14 GPM			<b>Static Water Level:</b>	30 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	64.91			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	0			<b>Overburden/Bedrock:</b>	Bedrock

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Water Type:</b>	FRESH			<b>k:</b> <b>Casing Material:</b>	FRESH, MINERIAL
--- Details ---					
<b>Thickness:</b>	8 ft			<b>Original Depth:</b>	8 ft
<b>Material Colour:</b>				<b>Material:</b>	ROCK, CLAY
+					
<b>Thickness:</b>	172 ft			<b>Original Depth:</b>	180 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
+					
<b>Thickness:</b>	3 ft			<b>Original Depth:</b>	183 ft
<b>Material Colour:</b>	WHITE			<b>Material:</b>	SANDSTONE
<u>15</u>	1 of 2	SW/166.9	68.5	ON	BORE
<b>Borehole ID:</b>	616395			<b>Type:</b>	Borehole
<b>Use:</b>				<b>Status:</b>	
<b>Drill Method:</b>				<b>UTM Zone:</b>	18
<b>Easting:</b>	463321			<b>Northing:</b>	5037792
<b>Location Accuracy:</b>				<b>Orig. Ground Elev m:</b>	53.3
<b>Elev. Reliability Note:</b>				<b>DEM Ground Elev m:</b>	67
<b>Total Depth m:</b>	20.7			<b>Primary Name:</b>	
<b>Township:</b>				<b>Concession:</b>	
<b>Lot:</b>				<b>Municipality:</b>	
<b>Completion Date:</b>	AUG-1969			<b>Static Water Level:</b>	-999.9
<b>Primary Water Use:</b>				<b>Sec. Water Use:</b>	
--- Details ---					
<b>Stratum ID:</b>	218403827			<b>Top Depth(m):</b>	0.0
<b>Bottom Depth(m):</b>	18.3			<b>Stratum Desc:</b>	CLAY. BLUE.
+					
<b>Stratum ID:</b>	218403828			<b>Top Depth(m):</b>	18.3
<b>Bottom Depth(m):</b>	20.7			<b>Stratum Desc:</b>	LIMESTONE. GREY. 00068Y. 0007000075VELOCITY = 5100. BEDROCK. SEISMIC VELOCITY = 13500.
<u>15</u>	2 of 2	SW/166.9	68.5	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1513138			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463320.8			<b>Northing Nad83:</b>	5037792
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	14-AUG-69
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	68 ft
<b>Pump Rate:</b>	8 GPM			<b>Static Water Level:</b>	32 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction</b>	Diamond			<b>Flowing (y/n):</b>	N

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Method:</b>					
<b>Elevation (m):</b>	66.97			<b>Elevation</b>	
<b>Depth to Bedrock:</b>	60			<b>Reliability:</b>	
<b>Water Type:</b>	FRESH			<b>Overburden/Bedrock:</b>	Bedrock
<b>--- Details ---</b>					
<b>Thickness:</b>	60 ft			<b>Original Depth:</b>	60 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	8 ft			<b>Original Depth:</b>	68 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE

<a href="#">16</a>	1 of 1	WSW/166.6	65.9	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1513136			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463290.8			<b>Northing Nad83:</b>	5037842
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	20-SEP-64
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	59 ft
<b>Pump Rate:</b>	8 GPM			<b>Static Water Level:</b>	25 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	64.27			<b>Elevation</b>	
<b>Depth to Bedrock:</b>	45			<b>Reliability:</b>	
<b>Water Type:</b>	FRESH			<b>Overburden/Bedrock:</b>	Bedrock
<b>--- Details ---</b>					
<b>Thickness:</b>	45 ft			<b>Original Depth:</b>	45 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	14 ft			<b>Original Depth:</b>	59 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE

<a href="#">17</a>	1 of 1	WSW/194.0	63.7	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1513133			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463270.8			<b>Northing Nad83:</b>	5037822
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	28-NOV-63
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	38 ft
<b>Pump Rate:</b>	8 GPM			<b>Static Water Level:</b>	15 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR



Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	62.38			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	28			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERIAL
<b>--- Details ---</b>					
<b>Thickness:</b>	28 ft			<b>Original Depth:</b>	28 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	10 ft			<b>Original Depth:</b>	38 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<b>18</b>	<b>1 of 1</b>	<b>SW/196.1</b>	<b>70.9</b>	<b>lot 28 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1518331			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463329.8			<b>Northing Nad83:</b>	5037721
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 30 m - 100 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	03-JUN-83
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	66 ft
<b>Pump Rate:</b>	24 GPM			<b>Static Water Level:</b>	50 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Rotary (Air)			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	69.41			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	60			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH
<b>--- Details ---</b>					
<b>Thickness:</b>	23 ft			<b>Original Depth:</b>	23 ft
<b>Material Colour:</b>	YELLOW			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	37 ft			<b>Original Depth:</b>	60 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	6 ft			<b>Original Depth:</b>	66 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<b>19</b>	<b>1 of 1</b>	<b>W/226.7</b>	<b>64.9</b>	<b>lot 28 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1517346			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463229.8			<b>Northing Nad83:</b>	5038021

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	27-AUG-80
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	70 ft
<b>Pump Rate:</b>	10 GPM			<b>Static Water Level:</b>	40 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLOUDY
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Cable Tool			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	63.42			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	66			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH
<b>--- Details ---</b>					
<b>Thickness:</b>	7 ft			<b>Original Depth:</b>	7 ft
<b>Material Colour:</b>				<b>Material:</b>	PREVIOUSLY DUG
<b>+</b>					
<b>Thickness:</b>	33 ft			<b>Original Depth:</b>	40 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	18 ft			<b>Original Depth:</b>	58 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	5 ft			<b>Original Depth:</b>	63 ft
<b>Material Colour:</b>	BROWN			<b>Material:</b>	HARDPAN
<b>+</b>					
<b>Thickness:</b>	3 ft			<b>Original Depth:</b>	66 ft
<b>Material Colour:</b>	BLACK			<b>Material:</b>	GRAVEL
<b>+</b>					
<b>Thickness:</b>	4 ft			<b>Original Depth:</b>	70 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE

<u>20</u>	1 of 1	WSW/220.7	61.8	lot 28 con 1 ON	WWIS
<b>Well ID:</b>	1513137			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463230.8			<b>Northing Nad83:</b>	5037842
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	12-MAR-65
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	38 ft
<b>Pump Rate:</b>	7 GPM			<b>Static Water Level:</b>	20 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	60.4			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>				<b>Overburden/Bedrock:</b>	Overburden
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<b>--- Details ---</b>					
<b>Thickness:</b>	30 ft			<b>Original Depth:</b>	30 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	8 ft			<b>Original Depth:</b>	38 ft
<b>Material Colour:</b>				<b>Material:</b>	GRAVEL
<b>21</b>	<b>1 of 1</b>	<b>SW/223.8</b>	<b>64.1</b>	<b>lot 28 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1513132			<b>Lot:</b>	028
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463290.8			<b>Northing Nad83:</b>	5037732
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 100 m - 300 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	17-AUG-61
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	87 ft
<b>Pump Rate:</b>	12 GPM			<b>Static Water Level:</b>	40 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Diamond			<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>	63.54			<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	73			<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH			<b>Casing Material:</b>	FRESH, MINERIAL
<b>--- Details ---</b>					
<b>Thickness:</b>	70 ft			<b>Original Depth:</b>	70 ft
<b>Material Colour:</b>	BLUE			<b>Material:</b>	CLAY
<b>+</b>					
<b>Thickness:</b>	3 ft			<b>Original Depth:</b>	73 ft
<b>Material Colour:</b>				<b>Material:</b>	GRAVEL, MEDIUM SAND
<b>+</b>					
<b>Thickness:</b>	14 ft			<b>Original Depth:</b>	87 ft
<b>Material Colour:</b>	GREY			<b>Material:</b>	LIMESTONE
<b>22</b>	<b>1 of 1</b>	<b>N/232.7</b>	<b>73.0</b>	<b>lot 27 con 1 ON</b>	<b>WWIS</b>
<b>Well ID:</b>	1532616			<b>Lot:</b>	027
<b>Concession:</b>	01			<b>Concession Name:</b>	OF
<b>County:</b>	OTTAWA-CARLETON			<b>Municipality:</b>	CUMBERLAND TOWNSHIP
<b>Easting Nad83:</b>	463519			<b>Northing Nad83:</b>	5038404
<b>Zone:</b>	18			<b>Utm Reliability:</b>	margin of error : 10 - 30 m
<b>Primary Water Use:</b>	Domestic			<b>Construction Date:</b>	27-AUG-01
<b>Sec. Water Use:</b>				<b>Well Depth:</b>	126 ft
<b>Pump Rate:</b>	20 GPM			<b>Static Water Level:</b>	28 ft
<b>Flow Rate:</b>				<b>Clear/Cloudy:</b>	CLOUDY
<b>Specific Capacity:</b>				<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Cable Tool			<b>Flowing (y/n):</b>	N

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elevation (m)</i>	<i>Site</i>	<i>DB</i>
<i>Elevation (m):</i>	72.26			<i>Elevation</i>	
<i>Depth to Bedrock:</i>	0			<i>Reliability:</i>	
<i>Water Type:</i>	FRESH			<i>Overburden/Bedrock:</i>	Bedrock
				<i>Casing Material:</i>	MINERIAL
<i>--- Details ---</i>					
<i>Thickness:</i>	65 ft			<i>Original Depth:</i>	65 ft
<i>Material Colour:</i>				<i>Material:</i>	SHALE
<i>+</i>					
<i>Thickness:</i>	61 ft			<i>Original Depth:</i>	126 ft
<i>Material Colour:</i>	GREY			<i>Material:</i>	LIMESTONE

# Unplottable Summary

Total: **5** Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
ECA	City of Ottawa	Old Montreal Road from Antigonish Avenue to Dairy Drive	City of Ottawa ON	
SPL	Enbridge Gas Distribution Inc.	Queen Street	Ottawa ON	
SPL	HYDRO ONE	LOT 26, CONC. 1, (FORMERLY MARLBOROUGH TWP.) TRANSFORMER	OTTAWA CITY ON	
SPL	PAUL'S BACKHOE SERVICE	HWY 34 NORTH 5 - 5.5 MILES NORTH OF HWY 417 EAST 333 CHAMPLAIN ST., HAWKESBURY, ONT.	OTTAWA CITY ON	
WWIS		lot 27	ON	

# Unplottable Report

**Site:** City of Ottawa  
Old Montreal Road from Antigonish Avenue to Dairy Drive City of Ottawa ON

**Database:**  
ECA

**Record Type:**  
**PDF URL:**  
**CofA Number:** 3439-9LVLXS  
**Date:** 7/17/14  
**Status:** Approved  
**Project Type:** Municipal and Private Sewage

**Site:** Enbridge Gas Distribution Inc.  
Queen Street Ottawa ON

**Database:**  
SPL

**Ref NO:** 0238-62NQJF  
**Contaminant Code:** 35  
**Contaminant Name:** NATURAL GAS (METHANE)  
**Contaminant Quantity:**  
**Incident Cause:** Pipe Or Hose Leak  
**Incident Dt:** 7/7/2004  
**Incident Reason:** Error- Operator error  
**Incident Summary:** Queen St.: 4" Gas main hit, evacuations  
**MOE Reported Dt:** 7/7/2004  
**Environmental Impact:** Not Anticipated  
**Nature of Impact:** Human Health/Safety  
**Receiving Medium:** Air  
**SAC Action Class:** M.C.B.S. - Fuel Safety  
**Sector Source Type:** Pipeline  
**Site Municipality:** Ottawa

**Site:** HYDRO ONE  
LOT 26, CONC. 1, (FORMERLY MARLBOROUGH TWP.) TRANSFORMER OTTAWA CITY ON

**Database:**  
SPL

**Ref NO:** 207302  
**Contaminant Code:**  
**Contaminant Name:**  
**Contaminant Quantity:**  
**Incident Cause:** OTHER CAUSE (N.O.S.)  
**Incident Dt:** 7/30/2001  
**Incident Reason:** OTHER  
**Incident Summary:** HYDRO ONE - 10 L OF NON- PCB OIL TO GROUND FROM TRANSFORMER.  
**MOE Reported Dt:** 7/30/2001  
**Environmental Impact:** Confirmed  
**Nature of Impact:** Soil contamination  
**Receiving Medium:** Land  
**SAC Action Class:**  
**Sector Source Type:**  
**Site Municipality:** 20107

**Site:** PAUL'S BACKHOE SERVICE  
HWY 34 NORTH 5 - 5.5 MILES NORTH OF HWY 417 EAST 333 CHAMPLAIN ST., HAWKESBURY, ONT.  
OTTAWA CITY ON

**Database:**  
SPL

**Ref NO:** 224046  
**Contaminant Code:**  
**Contaminant Name:**  
**Contaminant Quantity:**  
**Incident Cause:** UNKNOWN  
**Incident Dt:** 4/15/2002  
**Incident Reason:** UNKNOWN  
**Incident Summary:** PAUL'S BACKHOE SERVICE SPILL UNKNOWN VOL OF GAS & WATER, CONTAINED  
**MOE Reported Dt:** 4/15/2002  
**Environmental Impact:** POSSIBLE  
**Nature of Impact:** Soil contamination  
**Receiving Medium:** LAND / WATER  
**SAC Action Class:**  
**Sector Source Type:**  
**Site Municipality:** 20107

**Site:** lot 27 ON

**Database:**  
WWIS

<b>Well ID:</b>	1518033	<b>Lot:</b>	027
<b>Concession:</b>		<b>Concession Name:</b>	
<b>County:</b>	OTTAWA-CARLETON	<b>Municipality:</b>	OTTAWA CITY
<b>Easting Nad83:</b>		<b>Northing Nad83:</b>	
<b>Zone:</b>	18	<b>Utm Reliability:</b>	unknown UTM
<b>Primary Water Use:</b>	Cooling And A/C	<b>Construction Date:</b>	29-JAN-82
<b>Sec. Water Use:</b>		<b>Well Depth:</b>	100 ft
<b>Pump Rate:</b>	10 GPM	<b>Static Water Level:</b>	15 ft
<b>Flow Rate:</b>		<b>Clear/Cloudy:</b>	CLEAR
<b>Specific Capacity:</b>		<b>Final Well Status:</b>	Water Supply
<b>Construction Method:</b>	Air Percussion	<b>Flowing (y/n):</b>	N
<b>Elevation (m):</b>		<b>Elevation Reliability:</b>	
<b>Depth to Bedrock:</b>	15	<b>Overburden/Bedrock:</b>	Bedrock
<b>Water Type:</b>	FRESH	<b>k:</b>	
		<b>Casing Material:</b>	FRESH, MINERIAL

--- Details ---

<b>Thickness:</b>	10 ft	<b>Original Depth:</b>	10 ft
<b>Material Colour:</b>	BROWN	<b>Material:</b>	CLAY
<b>+</b>			
<b>Thickness:</b>	5 ft	<b>Original Depth:</b>	15 ft
<b>Material Colour:</b>	GREY	<b>Material:</b>	CLAY
<b>+</b>			
<b>Thickness:</b>	12 ft	<b>Original Depth:</b>	27 ft
<b>Material Colour:</b>	BLACK	<b>Material:</b>	SHALE, SOFT
<b>+</b>			
<b>Thickness:</b>	73 ft	<b>Original Depth:</b>	100 ft
<b>Material Colour:</b>	GREY	<b>Material:</b>	LIMESTONE





# Appendix: Database Descriptions

*Ecolog Environmental Risk Information Services Ltd (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 all 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 Mar 2015*

## **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-Oct 2014*

## **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: 2001-Jul 2014*

**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: 1948-Dec 2015*

**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: 1992, 1999-Jul 2014*

**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-Feb 2014*

**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-Jan 2016*

### **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-Jun 2014*

### **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: Feb 29, 2016*

### **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-Jan 2016*

### **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: Feb 29, 2016*

### **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 2014*

**Environmental Issues Inventory System:**

Federal EIS

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 EIS 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

The Emergency Management Historical Event data class will store the locations of historical occurrences of emergency events. Events captured will include 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.

*Government Publication Date: May 31, 2014*

**List of TSSA Expired Facilities:**

Provincial EXP

This is a list of all expired facilities that fall under the TSSA (TSSA Act & Safety Regulations), including the six regulations that exist under the Fuels Safety Division. It will include facilities such as private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. These tanks have been removed and automatically fall under the expired facilities inventory held by TSSA.

*Government Publication Date: Current to Nov 2015*

**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: June 2000-Oct 2015*

**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-Sept 2003*

**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: 2010-Nov 2015*

**Fuel Storage Tank - Historic:**

Provincial [FSTH](#)

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: 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-May 2015*

**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: Dec 31, 2013*

**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: June 2009 - Nov 2015*

**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: 2012*

**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-Apr 2013*

**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: 1994-2013*

**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 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: 1993-2013*

**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: 1988-2015*

**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-Aug 2015*

**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-Jan 2016*

**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 Environment maintains a database of all manufacturers and vendors of registered pesticides.

*Government Publication Date: 1988-Jun 2013*

**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: June 2009-2014*

**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-Jan 2016*

**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: 1986-2013*

**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-Jan 2016*

**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-Jul 2014*

**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-Jun 2015*

**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: 1990-2013*

**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-Mar 2007*

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

Provincial VAR

The TSSA, under the Liquid Fuels Handling Code and the Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, you may apply to seek a variance from this code requirement. This is a list of all variances granted for abandoned tanks.

*Government Publication Date: Current to Nov 2015*

**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: Feb 29, 2016*

**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: 1955-Mar 2014*

# 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 were included as reference.

**exp** Services Inc.

*DCR/Phoenix Group of Companies  
Phase I Environmental Site Assessment  
1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, ON  
OTT-00234493-A0  
August 19, 2016*

## **Appendix D: Municipal & Provincial Records**





August 2, 2016

VIA FACSIMILE:  
416-314-4285

Ms. Heidi Ritscher  
FOI Manager  
Freedom of Information & Protection of Privacy Office  
Ministry of Environment and Climate Change  
12th Floor, 40 St. Clair Avenue West  
Toronto, Ontario M4V 1M2

Re: OTT-0234493-A0      **File Review Request**

Dear Ms. Ritscher:

I am sending a Freedom of Information Request to you for 1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, Ontario (a single property encompassing several addresses). 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

## Kathy Radisch

---

**From:** Prem Lal <plal@tssa.org> on behalf of Public Information Services <publicinformationservices@tssa.org>  
**Sent:** Tuesday, July 12, 2016 7:48 AM  
**To:** Kathy Radisch  
**Subject:** RE: File Search - Old Montreal Road, Ottawa, Ontario

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Kathy:

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail ([publicinformationservices@tssa.org](mailto:publicinformationservices@tssa.org)) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Thank you Kathy and you have a wonderful day.

Prem



**Prem Lal | Public Information Coordinator**

Facilities and Business Services

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-3570 | Fax: +1-416-734-3568 | E-Mail: [plal@tssa.org](mailto:plal@tssa.org)

[www.tssa.org](http://www.tssa.org)



---

**From:** Kathy Radisch

[mailto:kathy.radisch@exp.com]

**Sent:** Monday, July 11, 2016 3:06 PM

**To:** Public Information Services

**Subject:** File Search - Old Montreal Road, Ottawa, Ontario

Good Afternoon,

Would you kindly search your files for the following addresses in Ottawa, Ontario (formerly Cumberland, Ontario). We are looking for any environmental concerns.

- Old Montreal Road – 1138, 1154, 1171, 1172, 1176, 1180, 1183, 1199, 1201, and 1208.

Thank you,



**Kathy Radisch**

Sr. Administrative Assistant

**exp** Services Inc.

t: +1.613.688.1891 x3296 | f: +1.613.225.7337

2650 Queensview Drive, Suite 100

Ottawa, Ontario K2B 8H6

CANADA

[exp.com](http://exp.com) | [legal disclaimer](#)

*keep it green, read from the screen*

This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.

**exp** Services Inc.

*DCR/Phoenix Group of Companies  
Phase I Environmental Site Assessment  
1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, ON  
OTT-00234493-A0  
August 19, 2016*

# **Appendix E: Photographs**







**Photograph No. 1**

A view of the front of the 1180 Old Montreal Road house



**Photograph No. 2**

The basement oil tank in 1180 Old Montreal Road (not an APEC)



**Photograph No. 3**

The surficial staining in the shed of 1180 Old Montreal Road



**Photograph No. 4**

View of the propane service to 1176 Old Montreal Road



**Photograph No. 5**

The tank associated with the generator for the Rogers communication tower (not an APEC)



**Photograph No. 6**

The vacant farm house at 1208 Old Montreal Road



**Photograph No. 7**

The basement oil tank with minor staining on the concrete floor in 1208 Old Montreal Road (not an APEC)



**Photograph No. 6**

The residence at 1154 Old Montreal Road



**Photograph No. 7**

Electric heating inside 1154 Old Montreal Road