



Phase One Environmental Site Assessment 6102 Renaud Road, Ottawa, Ontario

Client:

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4338 Innes Road, Unit M090
Ottawa, ON K4A 3W3

Project Number:

OTT-00242146-A0

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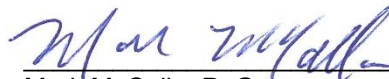
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Legal Notification

This report was prepared by **exp** Services Inc. for the account of **2597237 Ontario Limited**.

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

Executive Summary

Exp Services Inc. (**exp**) was retained by 2597237 Ontario Limited to complete a Phase One Environmental Site Assessment (ESA) of the property referred to as 6102 Renaud Road, located in Ottawa, Ontario, herein referred to as the "Site." The purpose of this Phase One ESA was to determine if past or present site activities have resulted in actual or potential contamination at the Site. **Exp** understands that Utopia Group In Trust for 2597237 Ontario Limited is planning to develop the Site. Consequently, this Phase One ESA will be used in support of the City of Ottawa Site Plan Approval permitting requirements and that a Record of Site Condition (RSC) is not required.

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

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

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

The site is located on the south side of Renaud Road and to the east of Saddleridge Drive. The Site is rectangular in shape and covers an area of approximately 0.58 hectares. The Site is currently occupied by a residential house in the north part and a commercial building on the south part. The municipal address of the site is 6102 Renaud Road and is legally described as CON 4 OF PT LOT6 RP5R3857;PARTS 1 AND 2, City of Ottawa. The City of Ottawa PIN is 043520429, and 043520430.

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the south. The closest body of water is Mer Bleue Bog located approximately 500 m south of the Site. The groundwater flow direction was estimated to be southern towards Mer Bleue Bog.

Based on the results of the Phase One ESA, the following information is provided in Table EX-1 in support of the Phase One QP's conclusion.

Table EX-1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contribution to APEC at the Site (Yes/No)	Media Potentially Impacted (Groundwater, Soil and/or Sediment)	Contaminates of Concern
APEC 1: Former AST 1 (located in the residence basement)	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	Yes	Soil and groundwater	Petroleum hydrocarbons (PHC) and benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAHs)
APEC 2: Former AST 2, 3 and 4 (two interior and one exterior of the commercial building)	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	Yes	Soil and groundwater	PHC, BTEX, PAHs
APEC 3: Former commercial printing operated from 1986 to 2000	#31 – Ink Manufacturing, Processing and Bulk Storage	On-Site	Yes	Soil and groundwater	Volatile organic compounds (VOC)

To reduce the degree of uncertainty surrounding the environmental concerns identified during this Phase One ESA, a Phase Two ESA is recommended and the rationale for proposing such recommendations are provided below in Table EX-2.

Table EX-2: Issues Identified, Recommendations and Rationale

Issue Identified	Recommendation	Rationale
Potential impacts to soil and groundwater from former on-site ASTs and commercial printers	Advance four (4) boreholes on the Site and install monitoring wells to collect representative soil and groundwater samples for analysis of PHC, BTEX, PAHs, and VOCs.	To assess soil and groundwater conditions at the Site.

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

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1. Introduction

Exp Services Inc. (**exp**) was retained by 2597237 Ontario Limited to complete a Phase One Environmental Site Assessment (ESA) of the property referred to as 6102 Renaud Road in Ottawa, Ontario, hereinafter referred to as the 'Site'. A site location plan is presented as Figure 1 in Appendix B. At the time of the investigation, the Site was owned by Raymond Perrault and Louis Perrault.

Owner Contact: Mr. Raymond Perrault and Mr. Louis Perrault
6102 Renaud Road
Ottawa, Ontario K1W 1E9

A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended by Ontario Regulation 511/09 (O.Reg. 153/04), and in accordance with generally accepted professional practices. Subject to this standard of care, **exp** makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. The scope of report and third party reliance are outlined in Section 9.

1.1 Objective

Exp understands that the Site is to be redeveloped. Consequently, the objective of this Phase One ESA was to identify potential sources of environmental concern to the subject property. **Exp** understands this Phase One ESA will be used for in support of the City of Ottawa Site Plan Approval permitting requirements and that a Record of Site Condition is not required.

1.2 Phase One Property Information

The site is located on the south side of Renaud Road and to the east of Saddleridge Drive in Ottawa. The Site is rectangular in shape and covers an area of approximately 0.58 hectares. The Site is currently occupied by a residential house in the north part and a commercial building on the south part. The municipal address of the site is 6102 Renaud Road and is legally described as CON 4 OF PT LOT6 RP5R3857;PARTS 1 AND 2, City of Ottawa. The City of Ottawa PIN is 043520429, and 043520430. A site plan is presented as Figure 3 in Appendix B.

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the south. The closest body of water is Mer Bleue Bog located approximately 500 m south of the Site. The groundwater flow direction was estimated to be southern towards Mer Bleue Bog.

The approximate Universal Transverse Mercator (UTM) coordinates for the Site centroid is NAD83, Zone 18, 459481.91 m E, 5030702.77 m N. The UTM coordinates were based on an estimate derived using Google Earth™. The accuracy of the centroid is estimated to range from 5 to 50 m.

2. Scope of Investigation

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

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

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

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

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

3. Records Review

3.1 Phase One ESA Study Area Determination

The Phase One ESA study area consisted of the neighbourhood and extending a distance of 250 metres from the Site. Surrounding properties consist of mainly residential including single-family homes. It is noted that the Mer Bleue Bog is located approximately 500 m to the south of the site. A study area and site plan is presented as Figure 2 and 3 in Appendix B.

3.2 First Developed Use Determination

Based on a review of historical aerial photographs, chain of title for the property, historical maps, site interviews and other records review, it appears that the Site was first development in the 1930's with a residential house on the north part of the property and a barn on the south part.

3.3 Fire Insurance Plans

A search of The Catalogue of Canadian Fire Insurance Plans 1875 – 1975 (Catalogue) was conducted to determine if fire insurance plans (FIPs) for the site existed. No FIPs were available for the Site.

3.4 Chain of Title

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

The last registered owner is Raymond Perrault and Louis Perrault has owned the property since 2013, the Perrault family has owned the land since 1927. It appears that the ownership / deeds of the land changed a total of ten (10) times dating back to 1831. The property was limited to changing ownerships between private residence. No notable environmental concerns were identified based on the title search.

Refer to Appendix C for the title search.

3.5 Previous Reports

No previous environmental or geotechnical reports were available for review by exp.

3.6 Regulatory Environmental Source Information

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

The following agency was contacted:

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

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

3.6.1 Ontario Ministry of the Environment and Climate Change Records

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

3.6.2 Municipal Records

3.6.2.1 Municipal Records

The City of Ottawa websites were searched for information pertaining to the site. Records pertaining to the site were also requested from the City of Ottawa for the Hazardous Land Use Index (HLUI) through the *Municipal Freedom of Information and Protection of Privacy Act* (FOI). A response has not yet been received and a copy of the request is included in Appendix C.

3.6.2.2 City Directory Search

Exp reviewed city directories dating from 1988 to 2011 from an ERIS search of Vernon's Ottawa in order to identify the occupancy history of the site and neighbouring properties for potential environmental concerns. A copy of the directory search is included in Appendix C. The following table summarizes the directory search.

Table 3.1: City Directory Search

Address	Distance/ Direction from Site	Year	Occupant	APEC (yes/no)
6102 Renaud Road	Site	2001 – 2011 1995 - 1988	Residential Not Listed	No
2824 Page Road	100 m northeast of site	2011 2005 – 1995 1988	Lumech Plumbing & Heating Residential Not Listed	No
3079 Navan Road	Adjacent to Site (South, across Terence Matthews Crescent)	2001- 2011 1995 1988	Not Listed DJ Snack Bar Not Listed	No

Based on review of the City Directories no PCAs or APECs were identified.

3.7 Land Use Documents

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

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

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

No landfills were located within the 250 m radius study area of the Site. The Navan landfill is located approximately 750 m southeast of the Site. Based in the distance and the inferred groundwater flow direction this is not considered to be an APEC.

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

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

3.7.3 Mapping and Assess Former Industrial Sites – Intera (1988)

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

3.7.4 Ontario Inventory of PCB Storage Sites - Ontario MOE (1993)

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

3.8 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 D.

Based on the EcoLog search, the following was identified:

- The subject site was listed in the Scott's Manufacturing Directory as Orleans Printers Ltd. established in 1986 with a plant size of 2000 ft², and four employees. Orleans printing was listed for quick printing, digital printing, other printing and support activities for printing. Due to the nature of the on-Site printing activities, this is considered to be APEC-3.
- Two above ground storage tanks (ASTs) were located at 3060 Navan Road (Marcel Brazeau Top Soil) approximately 120 m north of the site. The ASTs were installed in 2001 with single walls and capacities of 9,280 L and 1,345 L. This is considered to be a potentially contaminating activity, however due to the intervening distance, the short duration they were in use, and the fact they were above ground, they are not considered to be an APEC.
- A waste generator was listed from 1989-2010 at 3060 Navan Road (Marcel Brazeau Top Soil) approximately 80 m north of the Site. Wastes included waste oils and lubricants, light fuels, oil skimmings, and aliphatic solvents. Due to the small amounts of waste and the fact that it was disposed of by a licensed contractor, this is not considered to be a PCA, or an APEC.
- Numerous boreholes and water wells, waste generators, and Certificate of Approvals were identified at various distances from the Site. Due to the nature of these entries and intervening distance they do not represent APECs.

3.9 Physical Setting Review

3.9.1 Aerial Photographs

The following table summarizes the development and land use history of the subject site and adjacent properties as depicted on the reviewed aerial photographs from GeoOttawa and the National Aerial Photo Library (NAPL).

Table 3.1: Development and Land Use History Summary

Aerial Photograph (year)	Details
1945 (NAPL)	The subject site was developed with the residence in the north part and the commercial building in the southern part of the Site. The surrounding properties are agricultural.
1958 (NAPL)	The subject site and surrounding areas appear similar to the 1945 aerial photograph.
1965 (GeoOttawa)	The subject site appears similar to the 1958 aerial photograph. The surrounding properties to the north show some residential development.
1976 (GeoOttawa)	The subject site appears similar to the 1965 aerial photograph. The adjacent property to the east is now developed with a residence.
1991 (GeoOttawa)	The subject site appears similar to the 1976 aerial photograph. The commercial building on the south part of the site has underwent renovations and is now slightly larger and has a different roof. The properties to the north are developed with residences followed by commercial.
1999 (GeoOttawa)	The subject site and surrounding areas appear similar to the 1991 aerial photograph. The two ASTs located at 3060 Navan Road are visible.
2007 (GeoOttawa)	The subject site and surrounding areas appear similar to the 1999 aerial photograph. The two ASTs located at 3060 Navan Road are still present.
2008 (GeoOttawa)	The subject site appears similar to the 2007 aerial photograph. The surrounding properties to the south and west are currently being residentially developed. The two ASTs located at 3060 Navan Road are still present.
2014 (GeoOttawa)	The subject site appears similar to the 2008 aerial photograph. The surrounding properties to the south and west are undergoing more residentially development. The two ASTs located at 3060 Navan Road are no longer present.

Based on the review of the aerial photography, the two ASTs located at 3060 Navan Road, approximately 120 m north, are considered to be a PCA. Due to the intervening distance, the short duration they were in use, and the fact they were above ground, they are not considered to be APECs. No APECs were identified at the Site based on the air photo review.

3.9.2 Geology, Hydrogeology and Topography

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

1. *Bedrock Geology of Southern Ontario* – Ontario Geological Survey. Scale 1:50,000. Electronic resource Issued 2003.

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

The above maps revealed that the bedrock in the general area is a combination of shale, limestone, dolostone, and siltstone of the Billings Formation at a depth of 29-40 m. With respect to surficial geology, beneath any fill, the site is underlain by Colluvial deposits, boulders, scree, talus, undifferentiated landslide materials and bordering fine-textured Glaciomarine deposits, silt and clay, minor sand and gravel.

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the south. The closest body of water is Mer Bleue Bog located approximately 500 m south of the Site. The groundwater flow direction was estimated to be southern towards Mer Bleue Bog.

3.9.3 Fill Materials

Notable amounts of fill material are not anticipated to have been brought to the Site based on the records review.

3.9.4 Water Bodies and Areas of Natural Significance (ANSI)

There were no water bodies on the subject site. The subject site is not located within 250 m to an ANSI, according to the Ministry of Natural Resources Natural Heritage website.

The closest water body is the Mer Bleue Bog located approximately 500 m south of the Site.

3.9.5 Well Records

Local MOE water wells records show that bedrock depth in the area is approximately 29-40 m from surface. The well records are presented in the EcoLog report in Appendix D.

3.10 Site Operating Records

No site operating records were available for review.

3.11 Summary of Records Review

Based on a review of the available records, the Site has the following is a summary of the APECs identified.

- The subject site was listed in the Scott's Manufacturing Directory as Orleans Printers Ltd. established in 1986 with a plant size of 2000 ft², and four employees. Orleans printing was listed for quick printing, digital printing, other printing and support activities for printing. Due to the nature of the onsite printing activities this is considered to be APEC-3.
- Two above ground storage tanks (ASTs) were located at 3060 Navan Road (Marcel Brazeau Top Soil) approximately 120 m north of the Site. The tanks were installed in 2001, were single walled, with capacities of 9,280 L and 1,345 L. This is considered to be a PCA, however due to the intervening distance, the short duration they were in use, and the fact they were above ground, they are not considered to be an APEC.

4. Interviews

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

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

- Mr. Raymond Perrault, current owner of 6102 Renaud Road. Mr. Perrault was interviewed during the site visit on August 24, 2017.

Mr. Perrault (site owner) indicated he has lived at the property since 1989 and that his brother (Louis Perrault) and himself purchased the property from their father in 2013. To Mr. Perrault's knowledge there are no environmental concerns or significant spills or releases of chemicals at the Site. Mr. Perrault indicated that there were four ASTs located at the subject site and the commercial building was formerly occupied by Orleans Printing from 1986 to 2000. Before that time, a plumber rented the space. Mr. Perrault mentioned that the Site was originally developed as a farm in the 1930's with a residential house and a barn. The barn used to house some animals but it was converted into a commercial building and has been used commercially since the 1980's.

5. Site Reconnaissance

5.1 General Requirements

On August 24, 2017, Mr. Daniel Clarke, P.Eng. of **exp** conducted the site visit for the property located at 6102 Renaud Road, Ottawa (Site). The site visit was conducted in accordance with **exp**'s internal health and safety protocols and with the Ministry of Labour health and safety regulations. The purpose of the site visit was to assess the current conditions of the Site.

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

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

Mr. Clarke was accompanied by Raymond Perrault (property owner) during the Site visit. Photographs were taken at the Site on August 24, 2017 and are included in Appendix E.

5.2 Specific Observations at Phase One ESA Property

5.2.1 Site Description and Buildings

The Site is rectangular in shape and covers an area of approximately 0.58 hectares and is located on the south side of Renaud Road and to the east of Saddleridge Drive in Ottawa. The Site is currently occupied by a residential house in the north part (Photograph 1, Appendix E) and a commercial building on the south part (Photograph 2, Appendix E).

5.2.2 Heating and Cooling Systems

The current heating system was observed to be a natural gas fuelled forced air furnace with a centralized cooling system in the residence. The commercial building was heated by electrical and a pellet stove. Formerly, both buildings were heated with furnace oil stored in aboveground storage tanks (ASTs) discussed in section 5.2.6.2.

5.2.3 Site Utilities and Services

The Site utilizes City of Ottawa water, private septic system, Enbridge natural gas and local electricity services.

5.2.4 Site Use

At the time of the Site visit, the north part was occupied by a residence (Photograph 1, Appendix E) and the south part was occupied by a commercial building (Photograph 2, Appendix E).

5.2.5 Drains, Pits and Sumps

There was one floor drain observed in the commercial building and one floor drain observed in the residence. No sumps, or pits were observed at the Site.

5.2.6 Storage Tanks

5.2.6.1 Underground Storage Tanks

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

5.2.6.2 Aboveground Storage Tanks

Four former above ground storage tanks (ASTs) were identified at the subject site and ASTs are summarized in the table below.

Table 5.2: Summary of Aboveground Storage Tanks

AST#	Location	Type	Volume (approximately)		Contents	Year (Approximately)	
			Litres	Gallons (US)		Installed	Removed
AST-1	Residence basement	Steel	910	76	Furnace Oil	1985	2016
AST-2	Exterior commercial building	Steel	910	76	Furnace Oil	1985	2008
AST-3	Interior commercial building	Steel	910	76	Furnace Oil	1985	2009
AST-4	Interior commercial building	Steel	910	76	Furnace Oil	1985	2016

AST-1 was formerly located in the residences basement in the northeast corner, located on a concrete floor in fair condition (APEC 1). The AST-1 was a steel tank and was removed in 2016 as indicated by Mr. Perrault (Photograph 3, Appendix E).

AST-2 was formerly located exterior of the commercial building on the west side located on a stone footing (APEC 2). The AST-2 was steel and removed in 2008 (Photograph 4, Appendix E) as indicated by Mr. Perrault.

AST-3 was formerly located interior of the commercial building located along the west wall on a concrete floor in fair condition (APEC 2). The AST-2 was steel and removed in 2009 (Photograph 5, Appendix E) as indicated by Mr. Perrault.

AST-4 was formerly located interior of the commercial building located in the southern part of the building on a patio stones in poor condition with some staining (APEC 2). The AST-2 was steel and removed in 2016 (Photograph 6 and 7, Appendix E) as indicated by Mr. Perrault.

All four former ASTs are considered to be APECs.

5.2.7 Chemical Storage and Handling and Floor Condition

There were general cleaning supplies, some paints, and some plastic containers of gasoline stored on the subject site (Photograph 8, Appendix E). They were all properly stored and were not considered to be APECs.

The floor conditions varied throughout the commercial building, some areas were in good conditions others were in poor condition. The worst floor condition was at the former location of AST-4 (Photograph 7, Appendix E).

5.2.8 Areas of Stained Soil, Pavement or Stressed Vegetation

There was some minor staining around the former AST-4 location on a soil surface (Photograph 7, Appendix E). This represent an APEC.

No areas of stained soil or stressed vegetation was observed at the Site, during the Site visit.

5.2.9 Fill, Debris and Methane

The Site is similar in elevation to the surrounding properties, which are residential or mixed residential/commercial in nature with small parking areas and some manicured landscaping. The Site slopes slightly downwards towards the south. Significant amounts of fill materials are not anticipated at the site.

Based on preliminary site walkthroughs, there are no sources of methane at the surface of the property.

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 air emissions concerns were identified at the time of the site visit.

5.2.11 Odours

No strong odours were detected during the site visit.

5.2.12 Noise

No excessive noise was detected during the site visit.

5.2.13 Special Attention Items, Hazardous Building Materials and Designated Substances

5.2.13.1 Asbestos

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

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

Based on the date of construction of the Site buildings (constructed 1930s), it is possible for ACMs to have been used during the construction of the Site buildings or during subsequent renovations (i.e. in the form of insulation, roofing tars, mortars, plaster, stipple ceiling, drywall joint compound, acoustic ceiling tiles, etc.).

5.2.13.2 Lead

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

Based on the age of the Site buildings (constructed 1930s), it is **exp's** opinion that there is potential for LBPs to be contained within the buildings. All painted surfaces noted during **exp's** site visit were observed to be in good condition with the exception of the exterior green paint located on window frames and the exterior white paint found on the porch railing which were found to be in poor condition.

5.2.13.3 Mercury

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

Based on the age of the Site buildings (constructed 1930s), it is **exp's** opinion that the presence of mercury-based paints within the Site buildings is possible. All painted surfaces noted during **exp's** site visit were observed to be in good condition with the exception of the exterior green paint located on window frames and the exterior white paint found on the porch railing which were found to be in poor condition.

5.2.13.4 Polychlorinated Biphenyls (PCBs)

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

Based on the age of the Site buildings (constructed 1930s), the potential for PCB-containing equipment to be present is possible. However, potential PCB containing equipment was not observed during the site visit.

5.2.13.5 Urea Formaldehyde Foam Insulation

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

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

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

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

No evidence of UFFI was observed during the site visit. Based on the age of the Site buildings (constructed 1930s), it is considered possible that UFFI was added during renovation activities and may still be present.

5.2.13.6 Radon

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

Due to the potential health concerns associated with radon, Health Canada released a guideline in June 2007 for a maximum acceptable level of radon gas of 200 Becquerel's per cubic metre (Bq/m³). Where radon gas is present and the annual radon concentration exceeds 200 Bq/m³ in the normal occupancy area, Health Canada recommends taking the necessary actions to reduce radon levels.

Based on local well records, the bedrock underlying the Site is a mix of shale, limestone, dolostone, and siltstone of the Billings Formation. Black shale is known to have an increased potential to release radon gas. Since the bedrock at the site is not predominantly shale, the accumulation of radon gas is not considered likely.

5.2.13.7 Mould

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

Currently there are no regulations governing mould; however, there are several guidelines addressing mould assessments and abatement. At the moment, the industry standards include the Canadian

Construction Association (CCA) document 82-2004 titled “mould guidelines for the Canadian construction industry” and the Environmental Abatement Council of Ontario (EACO) guidelines titled “EACO Mould Abatement Guidelines, Edition 2 (2010).”

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

No mould contamination other than naturally occurring moulds were observed.

5.2.13.8 Other Substances

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

5.2.14 Processing and Manufacturing Operations

No processing or manufacturing operations are conducted at the Site.

5.2.15 Hazardous Materials Use and Storage

No hazardous materials are used or stored at the Site.

5.2.16 Vehicle and Equipment Maintenance Areas

There was a garage that appears to be used for personal vehicle and equipment maintenance, the garage had a concrete floor in good conditions with no drains (Photograph 9, Appendix E). The site representative mentioned no commercial maintenance has taken place at that Site. This is not considered to be an APEC.

5.2.17 Oil/Water Separators

No oil water separators are present and/or anticipated at the Site.

5.2.18 Sewage and Wastewater Disposal

Wastewater is treated via septic system.

5.2.19 Solid Waste Generation, Storage & Disposal

Currently, no solid waste is generated on the Site apart from general household solid waste. Household waste would be collected via weekly garbage pick-up.

5.2.20 Liquid Waste Generation, Storage & Disposal

No liquid wastes are generated or stored on the Site.

5.2.21 Unidentified Substances

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

5.2.22 Hydraulic Lift Equipment

No hydraulic equipment was observed the Site.

5.2.23 Mechanical Equipment

No mechanical equipment of concern was present on the Site.

5.2.24 Abandoned and Existing Wells

A private domestic drinking water well was identified at the Site on the MOE well records. The domestic well was installed in 1965 located on the west side of the residence, the subsurface consisted of blue clay to a depth of 28 m, followed by brown shale bedrock to a total depth below grade of 32.5 m. this does not represent an APEC.

5.2.25 Roads, Parking Facilities and Right of Ways

Access to the Site is via Renaud Road.

5.3 Adjacent and Surrounding Properties

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

The following land uses border the subject property:

- North: Renaud Road followed by residential and commercial;
- West: Saddleridge Drive followed by residential;
- South: Rolling Meadow Crescent followed by residential; and,
- East: Residential and new construction development

Based on the above, none of the above neighbouring properties are considered to cause any environmental concern to the Site.

5.4 Summary of Site Reconnaissance

Based on the site reconnaissance of the Phase One ESA, there were four former ASTs identified at the subject site, all the ASTs are considered to be APECs.

- AST-1 was formerly located in the residences basement in the northeast corner, located on a concrete floor in fair condition (APEC 1). The AST-1 was a steel tank, and removed in 2016.
- AST-2 was formerly located exterior of the commercial building on the west side located on a stone footing (APEC 2). The AST-2 was steel and removed in 2008.
- AST-3 was formerly located interior of the commercial building located along the west wall on a concrete floor in fair condition (APEC 2). The AST-2 was steel and removed in 2009.
- AST-4 was formerly located interior of the commercial building located in the southern part of the building on a patio stones in poor condition with some staining (APEC 2). The AST-2 was steel and removed in 2016.

6. Review and Evaluation of Information

6.1 Current and Past Uses

Based on a review chain of title information, historical maps, fire insurance maps, site interviews and other records, the Site was first developed in the 1930s with a residential house on the north part of the property and a barn on south part. The site was used originally used as a farm, with the barn housing some animals. The barn was then converted into a commercial building and has been used commercially since the 1980's. It is understood that the civic address of the Site is 6102 Renaud Road, Ottawa.

6.2 Summary of Potentially Contaminating Activities

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

- PCA1 – Former AST-1 located in the basement of the residence on the north part of the Site (PCA# 28 – Gasoline and Associated Products Storage in Fixed Tanks)
- PCA2 – Former AST-2 located on the exterior west side of the commercial building at the subject Site (PCA# 28 – Gasoline and Associated Products Storage in Fixed Tanks).
- PCA3 – Former AST-3 located on the interior west side of the commercial building at the subject Site (PCA# 28 – Gasoline and Associated Products Storage in Fixed Tanks).
- PCA4 – Former AST-4 located on the interior south part of the commercial building at the subject Site (PCA# 28 – Gasoline and Associated Products Storage in Fixed Tanks).
- PCA5 – Former commercial printers located in the commercial building at the subject Site, listed in the Scott's Manufacturing Directory as Orleans Printers Ltd. established in 1986 with a plant size of 2000 ft², and four employees. Orleans printing was listed for quick printing, digital printing, other printing and support activities for printing. (PCA# 31 – Ink Manufacturing, Processing and Bulk Storage).
- PCA6 – Former AST-5 and AST-6 located at 3060 Navan Road (Marcel Brazeau Top Soil) approximately 80 m north of the Site. The two ASTs were located approximately 120 m north of the site. The tanks were installed in 2001, single wall, with a capacity of 9,280 L and 1,345 L. Due to the intervening distance, the short duration they were in use for, and the fact they were above ground they are not consider dot be an APEC. (PCA# 28 – Gasoline and Associated Products Storage in Fixed Tanks).

6.3 Areas of Potential Environmental Concern

As per O.Reg 153/04, an APEC is defined as an area on a subject site where one or more contaminants are potentially present. Based on this Phase One ESA, the following APECs were identified:

- APEC 1 – The residence was formally heated with furnace oil and had an AST-1 located in the north-east corner of the basement (northeast part of Site).
- APEC 2 – The commercial building was formally heated with furnace oil and had three ASTs. Two were located interior (AST-3, and AST-4), and one was located on the exterior and AST-4 (south central part of Site).

- APEC 3 – The commercial building was formally used as a commercial printer, which operated from 1986 to 2000 (south central part of Site).

6.4 Phase One ESA Conceptual Site Model

In order to develop a conceptual model for the subject site and surrounding study area, the following physical characteristics and pathways were considered. A conceptual site model showing the topography of the site, groundwater flow and general site is shown in Figure 2.

6.4.1 Subsurface Stratigraphy

The bedrock in the general area is a combination of shale, limestone, dolostone, and siltstone of the Billings Formation at a depth of 29-40 m. With respect to surficial geology, beneath any fill, the site is underlain by Colluvial deposits, boulders, scree, talus, undifferentiated landslide materials and bordering fine-textured Glaciomarine deposits, silt and clay, minor sand and gravel.

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the south. The closest body of water is Mer Bleue Bog located approximately 500 m south of the Site.

6.4.2 Estimated Groundwater Flow Direction

Topographically, the Site is relatively flat. The surrounding area has a slight downwards slope towards the south. The closest body of water is Mer Bleue Bog located approximately 500 m south of the Site. The groundwater flow direction was estimated to be southern towards Mer Bleue Bog.

6.4.3 Underground Utilities

The site serviced with hydro, natural gas, and private services.

7. Findings and Recommendations

The following information is provided in Table 7.1 in support of the Phase One ESA QP's conclusions:

Table 7.1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contribution to APEC at the Site (Yes/No)	Media Potentially Impacted (Groundwater, Soil and/or Sediment)	Contaminates of Concern
APEC 1: Former AST 1 (located in the residence basement)	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	Yes	Soil and groundwater	Petroleum hydrocarbons (PHC) and benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAHs)
APEC 2: Former AST 2, 3 and 4 (two interior and one exterior of the commercial building)	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	Yes	Soil and groundwater	PHC, BTEX, PAHs
APEC 3: Former commercial printing operated from 1986 to 2000	#31 – Ink Manufacturing, Processing and Bulk Storage	On-Site	Yes	Soil and groundwater	Volatile organic compounds (VOC)

To reduce the degree of uncertainty surrounding the environmental concerns identified during this Phase One ESA, a Phase Two ESA is recommended and the rationale for proposing such recommendations are provided below in Table 7-2.

Table 7-2: Issues Identified, Recommendations and Rationale

Issue Identified	Recommendation	Rationale
Potential impacts to soil and groundwater from former on-site ASTs and commercial printers	Advance four (4) boreholes on the Site and install monitoring wells to collect representative soil and groundwater samples for analysis of PHC, BTEX, PAHs, and VOCs.	To assess soil and groundwater conditions at the Site.

8. References

1. Canadian Standards Association; November 2001; *Z768-0 Phase I Environmental Site Assessment*.
2. Dubreuil, L. and C. Woods; 2002; *Catalogue of Canadian Fire Insurance Plans, 1875 – 1975*.
3. Department of Energy Mines and Resources, Surveys and Mapping Branch; 1976; *Ottawa Map 31 G/5, Scale 1:50,000*.
4. Geological Survey of Canada; 1982; *Generalized Bedrock Geology – Ottawa-Hull, Ontario-Quebec: Map 1508A. Scale 1:50,000*.
5. Geological Survey of Canada; 1976; *Surficial Geology – Ottawa, Ontario: Map 1507A. Scale 1:50,000*.
6. Geoseismic Engineering; April 19, 2017; *Subsurface Investigation Report, 303 Bell Street South, Ottawa, ON K1S 4J9*.
7. Golder Associates Inc.; October 2004; *Old Landfill Management Strategy, City of Ottawa*.
8. Intera Technologies Ltd.; July 1998; *Mapping and Assessment of Former Industrial Sites, City of Ottawa*.
9. Ministry of Labour (MOL); *Occupational Health and Safety Act*.
10. Ontario Ministry of the Environment, *Environmental Registry website* (www.ene.gov.on.ca/envision/env_reg/ebr/english/index.htm)
11. Ontario Ministry of the Environment; 1993- 2003-2004; *Ontario Inventory of PCB Storage Sites*.
12. Ontario Ministry of the Environment; *Brownfields Registry website* (www.ene.gov.on.ca/environet/BESR/index.htm)
13. Ontario Ministry of the Environment; *Hazardous Waste Information Network website* (www.hwin.ca).
14. Ontario Ministry of the Environment; November 1988; *Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario*.
15. Ontario Ministry of the Environment, Waste Management Branch; June 1991; *Waste Disposal Site Inventory*.
16. Ontario Ministry of the Environment and Intera Technologies Ltd.; June 1991; *Inventory of Coal Gasification Plant Waste Sites in Ontario*;
17. Ontario Ministry of Natural Resources, Natural Heritage website (www.mnr.gov.on.ca/MNR/nhic/areas.cfm).
18. Technical Standards and Safety Authority; May 2007; *Environmental Management Protocol for Fuel Handling Sites in Ontario*.

9. Scope of Report, and Third Party Reliance

Basis of Report

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

Reliance on Information Provided

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to **exp** by 2597237 Ontario Limited. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by 2597237 Ontario Limited. **Exp** has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to **exp**. If new information about the environmental conditions at the Site is found, the information should be provided to **exp** so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

Standard of Care

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

Complete Report

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to **exp** by 2597237 Ontario Limited, communications between **exp** and 2597237 Ontario Limited, other reports, proposals or documents prepared by **exp** for 2597237 Ontario Limited 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 2597237 Ontario Limited. No other party may use or rely upon the Report in whole or in part without the written consent of **exp**. Any use of the Report, or any portion of the Report, by a third party are the sole responsibility of such third party. **Exp** is not responsible for damages suffered by any third party resulting from unauthorised use of the Report.

Report Format

Where **exp** has submitted both electronic file and a hard copy of the Report, or any document forming part of the Report, only the signed and sealed hard copy shall be the original documents for record and working purposes. In the event of a dispute or discrepancy, the hard copy shall govern. Electronic files transmitted by **exp** utilize specific software and hardware systems. **Exp** makes no representation about the compatibility of these files with 2597237 Ontario Limited current or future software and hardware systems. Regardless of format, the documents described herein are **exp's** instruments of professional service and shall not be altered without the written consent of **exp**.

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

exp Services Inc.

2597237 Ontario Limited
Phase One Environmental Site Assessment
6102 Renaud Road, Ottawa, Ontario
OTT-00242146-A0
September 18, 2017

Appendices



Appendix A: Qualifications of Assessors

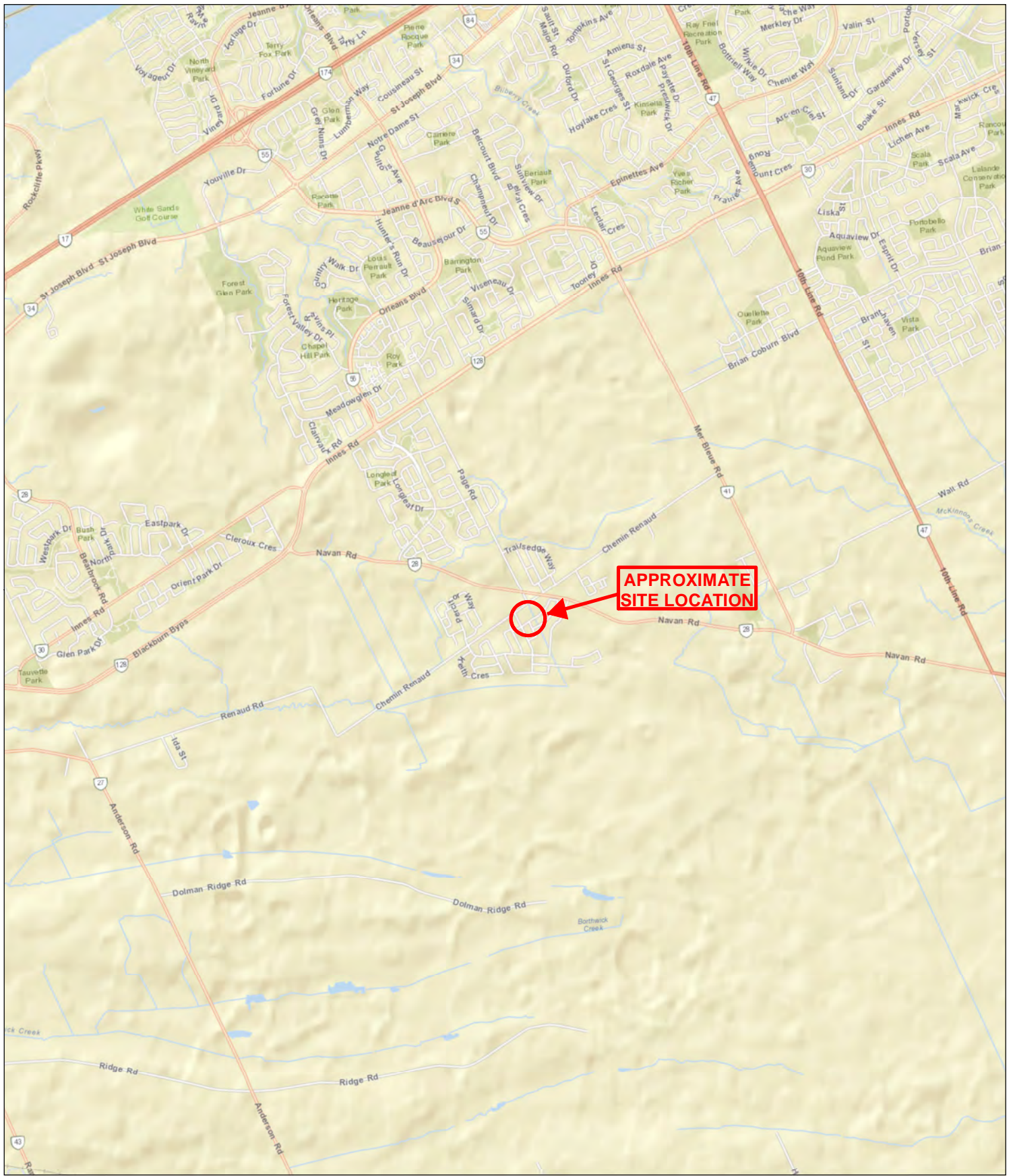
Qualifications of Assessors

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.

Daniel Clarke, 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. (ON), is a Senior Project Manager with the Environmental Science and Engineering Services division of **exp**, with more than 27 years' experience (15 years with **exp**) in environmental investigations, including borehole drilling, monitoring well installation and environmental soil and groundwater sampling, reporting and project management. Mr. McCalla has been involved with many hydrogeological assessments, where pumping tests and analytical testing of wells were carried out. His project experience includes: coordinating, conducting and managing environmental site assessments, remediation programs and landfill monitoring and management programs; technical report preparation and senior review; proposal preparation and client liaison. Mr. McCalla is a Qualified Person for completing Phase One and Two Environmental Site Assessments as per Ont. Reg. 153/04.

Appendix B: Figures



0 325 650 1,300 1,950 2,600 3,250 Metres



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

PROJECT TITLE:

PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
6102 Renaud Road
Ottawa, Ontario

DRAWING TITLE:

SITE LOCATION PLAN

PROJECT No.: OTT-00242146-A0

DWN: DC

SCALE: AS SHOWN

CHKD: MM

DATE: SEPTEMBER 2017

FIG. No.: 1



Legend

0 20 40 80 120 160 200 Metres



ESTIMATED GROUNDWATER FLOW DIRECTION



exp Services Inc.

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

PROJECT TITLE:

PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
6102 Renaud Road
Ottawa, Ontario

DRAWING TITLE:

PHASE ONE STUDY AREA

PROJECT No.:

OTT-00242146-A0

DWN:

DC

SCALE:

AS SHOWN

CHKD:

MM

DATE:

SEPTEMBER 2017

FIG. No.:

2



LEGEND



APEC 1



APEC 2 and APEC 3



Aboveground storage tank (AST)



Former domestic water well



exp Services Inc.

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

PROJECT TITLE:

PHASE ONE ENVIRONMENTAL
SITE ASSESSMENT
6102 Renaud Road
Ottawa, Ontario

DRAWING TITLE:

SITE PLAN

PROJECT No.:

OTT-00242146-A0

DWN:

DC

SCALE:

AS SHOWN

CHKD:

MM

DATE:

SEPTEMBER 2017

FIG. No.:

3

Appendix C: Title Search, Municipal & Provincial Records

City Directory Information Source	
Vernon's Ottawa, ON City Directory	
PROJECT NUMBER: 20170821065	
Site Address:	6102 Renaud Road, Ottawa (Orleans), Ontario
Year: 2011	
Site Listing:	-Res (1 tenant)
Adjacent Properties:	
Renaud Road 6060	-Res (1 tenant)
Renaud Road 6081	-Res (1 tenant)
Renaud Road 6099	-Address Not Listed
Renaud Road 6101	-Address Not Listed
Renaud Road 6110	-Address Not Listed
Renaud Road 6142	-Address Not Listed
Page Road 2824	-Lumech Plumbing & Heating -Res
Navan Road 3000	-Res (2 tenant)
Navan Road 3079	-Address Not Listed
Navan Road 3096	-Address Not Listed
Year: 2005-06	
Site Listing:	-Res (1 tenant)
Adjacent Properties:	
Renaud Road 6060	-Res (1 tenant)
Renaud Road 6081	-Res (1 tenant)
Renaud Road 6099	-Res (1 tenant)
Renaud Road 6101	-Address Not Listed

Renaud Road 6110	-Res (1 tenant)
Renaud Road 6142	-Address Not Listed
Page Road 2824	-Res (1 tenant)
Navan Road 3000	-Res (2 tenant)
Navan Road 3079	-Address Not Listed
Navan Road 3096	-Address Not Listed
Year: 2001-02	
Site Listing:	-Res (1 tenant)
Adjacent Properties:	
Renaud Road 6060	-Res (1 tenant)
Renaud Road 6081	-Res (1 tenant)
Renaud Road 6099	-Res (1 tenant)
Renaud Road 6101	-Address Not Listed
Renaud Road 6110	-Res (1 tenant)
Renaud Road 6142	-Address Not Listed
Page Road 2824	-Res (1 tenant)
Navan Road 3000	-Res (2 tenant)
Navan Road 3079	-Address Not Listed
Navan Road 3096	-Address Not Listed
Year: 1995-96	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Renaud Road 6060	-Address Not Listed
Renaud Road 6081	-Address Not Listed
Renaud Road 6099	-Address Not Listed
Renaud Road 6101	-Address Not Listed
Renaud Road 6110	-Address Not Listed
Renaud Road 6142	-Address Not Listed
Page Road 2824	-Res (1 tenant)
Navan Road 3000	-Res (2 tenant)
Navan Road 3079	-DJ Snack Bar
Navan Road 3096	-Address Not Listed

Year: 1988-89	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Renaud Road 6060	-Address Not Listed
Renaud Road 6081	-Address Not Listed
Renaud Road 6099	-Address Not Listed
Renaud Road 6101	-Address Not Listed
Renaud Road 6110	-Address Not Listed
Renaud Road 6142	-Address Not Listed
Page Road 2824	-Address Not Listed
Navan Road 3000	-Address Not Listed
Navan Road 3079	-Address Not Listed
Navan Road 3096	-Address Not Listed

-All listings for businesses were listed as they are in the city directory.

-Listings that are residential are listed as “residential” with the number of tenants. The name of the residential tenant is not listed in the above city directory

*****Orleans, ON Is listed from 1988 to 2011 within the city directory archives*****



August 22, 2017

Via email:
hlui@ottawa.ca

Planning Division
City of Ottawa
110 Laurier Avenue West
Ottawa, Ontario

Re: OTT-00242146-A0 **Municipal Information Search Request**
 6102 Renaud Road, Ottawa, Ontario

To whom it may concern,

Our firm has been retained to conduct a Phase I Environmental Site Assessment for 6102 Renaud Road, Ottawa, Ontario. We require information pertaining to the property.

We request that the City of Ottawa search their files and provide any information pertaining to the environmental condition of these properties and surrounding areas, including any past environmental reports, orders, certificates or approvals as well as any available site plans, records of tanks and any available ownership history.

Please find attached the consent letter from the property owner to release this information for the property in question. A request for information form has been completed to initiate a search on the property.

If you should have any questions, please do not hesitate to contact me.

Yours truly,


exp Services Inc.
Kathy Radisch
Administrative Assistant
Earth & Environment

Attachments: Disclaimer
 RFI Form
 Consent from Owner



August 23, 2017

VIA FACSIMILE:
416-314-4285

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-00242146-A0 **File Review Request**
 6102 Renaud Road, Ottawa, Ontario

Dear Sir or Madam:

I am sending a Freedom of Information Request to you for 6102 Renaud Road, Ottawa, Ontario. We are conducting an environmental site assessment and require any environmental concerns.

If possible, we would appreciate receiving the documentation by email (kathy.radisch@exp.com) 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". The signature is fluid and cursive, with the first name "Kathy" and last name "Radisch" clearly distinguishable.

Kathy Radisch
Administrative Assistant
Earth & Environment

Enclosures: FOI Form
 Credit Card Payment Form

exp Services Inc.

2597237 Ontario Limited
Phase One Environmental Site Assessment
6102 Renaud Road, Ottawa, Ontario
OTT-00242146-A0
September 18, 2017

Appendix D: EcoLog Reports





DATABASE REPORT

Project Property: *Phase I ESA
6102 Renaud Rd
Ottawa ON K1W1E9
OTT-00242146-A0*

Project No: *OTT-00242146-A0*

Report Type: *Standard Report*

Order No: *20170821065*

Requested by: *exp Services Inc.*

Date Completed: *August 29, 2017*

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

www.erisinfo.com

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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.

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Executive Summary

Property Information:

Project Property: *Phase I ESA
6102 Renaud Rd Ottawa ON K1W1E9*

Project No: *OTT-00242146-A0*

Coordinates:

Latitude: *45.428868*
Longitude: *-75.518108*
UTM Northing: *5,030,724.53*
UTM Easting: *459,470.95*
UTM Zone: *UTM Zone 18T*

Elevation: *258 FT
78.57 M*

Order Information:

Order No: *20170821065*
Date Requested: *August 21, 2017*
Requested by: *exp Services Inc.*
Report Type: *Standard Report*

Historical/Products:

City Directory Search *Subject Site plus 10 Adjacent Properties*
ERIS Xplorer [*Data and Historical Layer Viewer*](#)
Physical Setting Report (PSR) *PSR*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	Total
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 & Supplies</i>	Y	0	0	0
BORE	<i>Borehole</i>	Y	0	5	5
CA	<i>Certificates of Approval</i>	Y	0	2	2
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
COAL	<i>Inventory of Coal Gasification Plants and Coal Tar Sites</i>	Y	0	0	0
CONV	<i>Compliance and Convictions</i>	Y	0	0	0
CPU	<i>Certificates of Property Use</i>	Y	0	0	0
DRL	<i>Drill Hole Database</i>	Y	0	0	0
EASR	<i>Environmental Activity and Sector Registry</i>	Y	0	0	0
EBR	<i>Environmental Registry</i>	Y	0	0	0
ECA	<i>Environmental Compliance Approval</i>	Y	0	2	2
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	0	1	1
EIIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
EMHE	<i>Emergency Management Historical Event</i>	Y	0	0	0
EXP	<i>List of TSSA Expired Facilities</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FOFT	<i>Fisheries & 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	2	2
GEN	<i>Ontario Regulation 347 Waste Generators Summary</i>	Y	0	5	5
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
HINC	<i>TSSA Historic Incidents</i>	Y	0	2	2
IAFT	<i>Indian & Northern Affairs Fuel Tanks</i>	Y	0	0	0
INC	<i>TSSA Incidents</i>	Y	0	1	1
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

Database	Name	Searched	Project Property	Within 0.25 km	Total
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0
NDFT	<i>National Defense & Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense & Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence & Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBW	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGW	<i>Oil and Gas Wells</i>	Y	0	0	0
OOGW	<i>Ontario Oil and Gas Wells</i>	Y	0	0	0
OPCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
ORD	<i>Orders</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PES	<i>Pesticide Register</i>	Y	0	0	0
PINC	<i>TSSA Pipeline Incidents</i>	Y	0	2	2
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	1	0	1
SPL	<i>Ontario Spills</i>	Y	0	4	4
SRDS	<i>Wastewater Discharger Registration Database</i>	Y	0	0	0
TANK	<i>Anderson's Storage Tanks</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
VAR	<i>TSSA Variances for Abandonment of Underground Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Sites - MOE CA Inventory</i>	Y	0	0	0
WDSH	<i>Waste Disposal Sites - MOE 1991 Historical Approval Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Information System</i>	Y	0	8	8
		Total:	1	34	35

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>
2	SCT	Orleans Printers Ltd.	6102 Renaud Rd Unit 1 Orleans ON K1W 1E9	NNE/19.8	0.83	16

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
1	WWIS		lot 6 con 4 ON	NW/12.6	0.56	16
3	WWIS		lot 6 con 4 ON	NE/66.4	0.91	18
4	BORE		ON	WSW/70.8	-0.86	20
4	WWIS		lot 6 con 4 ON	WSW/70.8	-0.84	21
5	WWIS		lot 6 con 3 ON	N/73.1	2.08	23
6	WWIS		lot 6 con 3 ON	NNE/99.5	2.80	25
7	INC		6071 Renaud Road, Orleans ON K1C 7G4	W/130.7	0.15	27
7	SPL	Enbridge Gas Distribution Inc.	6071 renaud Road, Orleans<UNOFFICIAL> Ottawa ON K1C 7G4	W/130.7	0.15	28
7	SPL	Enbridge Gas Distribution Inc.	6071 renaud Road, Orleans<UNOFFICIAL> Ottawa ON K1C 7G4	W/130.7	0.15	28
8	PINC		362 Saddleridge Drive, Ottawa ON	SSE/131.7	-2.03	29
9	WWIS		lot 6 con 3 ON	NNE/134.2	2.00	29
10	HINC		6126 RENAUD ROAD GLOUCESTER ON K1W 1E9	NE/135.0	2.98	31
10	HINC		6126 RENAUD ROAD GLOUCESTER ON K1W 1E9	NE/135.0	2.98	31
11	BORE		ON	NE/157.7	2.75	32
12	BORE		ON	NE/158.8	2.72	32
13	FSTH	MARCEL BRAZEAU TOP SOIL	3060 NAVAN RD NAVAN ON	WNW/168.0	0.20	33
13	FSTH	MARCEL BRAZEAU TOP SOIL	3060 NAVAN RD NAVAN ON	WNW/168.0	0.20	33
13	GEN	MARCEL BRAZEAU LTD.	LOT 6, CONC. 3 OFF NAVAN ROAD C/O BOX 231 R.R.#9 GLOUCESTER ON K1G 3N5	WNW/168.0	0.20	33
13	GEN	MARCEL BRAZEAU LTD. 26-391	3060 NAVAN ROAD GLOUCESTER ON K1G 3N5	WNW/168.0	0.20	34
13	GEN	MARCEL BRAZEAU LTD.	3060 NAVAN ROAD GLOUCESTER ON K1G 3N5	WNW/168.0	0.20	34
13	GEN	MARCEL BRAZEAU LTD.	3060 NAVAN ROAD GLOUCESTER ON K1W 1E9	WNW/168.0	0.20	35
13	GEN	MARCEL BRAZEAU LTD.	3060 NAVAN ROAD GLOUCESTER ON K1W 1E9	WNW/168.0	0.20	35
14	BORE		ON	N/168.8	2.73	35

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
15	SPL	BUS	NAVAN VILLAGE, NAVAN RD & PAGE RD. MOTOR VEHICLE (OPERATING FLUID)	N/196.4	2.76	36
16	PINC		CUMBERLAND TOWNSHIP ON 349 Saddleridge Drive, Ottawa ON	S/200.1	-2.79	36
17	BORE		ON	WSW/211.8	-0.61	37
17	WWIS		lot 6 con 3 ON	WSW/211.8	-0.61	37
18	WWIS		lot 5 con 3 ON	NNE/225.6	3.96	39
19	EHS		3097 and 3107 Navan Road Ottawa ON K1W1E9	NNE/238.9	4.85	41
20	CA	Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 & 6, Concession 4 (Gloucester) Ottawa ON	NE/244.7	5.64	41
20	CA	Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 and 6, Concession 4 Ottawa ON	NE/244.7	5.64	42
20	ECA	Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 & 6, Concession 4 (Gloucester) Ottawa ON K2P 0Y6	NE/244.7	5.64	42
20	ECA	Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 and 6, Concession 4 Ottawa ON K2P 0Y6	NE/244.7	5.64	42
21	SPL		Renaud Rd and Navan Rd Ottawa ON	NE/246.7	5.03	42

Executive Summary: Summary By Data Source

BORE - Borehole

A search of the BORE database, dated 1875-Jul 2014 has found that there are 5 BORE site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	ON	NE	157.71	<u>11</u>
	ON	NE	158.79	<u>12</u>
	ON	N	168.81	<u>14</u>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	ON	WSW	70.83	<u>4</u>
	ON	WSW	211.78	<u>17</u>

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 2 CA site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 and 6, Concession 4 Ottawa ON	NE	244.73	<u>20</u>
Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 & 6, Concession 4 (Gloucester) Ottawa ON	NE	244.73	<u>20</u>

ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011-Mar 2017 has found that there are 2 ECA site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 and 6, Concession 4 Ottawa ON K2P 0Y6	NE	244.73	<u>20</u>
Claridge Homes (Carson) Inc.	3138 Navan Rd Lot 5 & 6, Concession 4 (Gloucester) Ottawa ON K2P 0Y6	NE	244.73	<u>20</u>

EHS - ERIS Historical Searches

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

project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	3097 and 3107 Navan Road Ottawa ON K1W1E9	NNE	238.94	19

FSTH - Fuel Storage Tank - Historic

A search of the FSTH database, dated Pre-Jan 2010* has found that there are 2 FSTH site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
MARCEL BRAZEAU TOP SOIL	3060 NAVAN RD NAVAN ON	WNW	168.00	13
MARCEL BRAZEAU TOP SOIL	3060 NAVAN RD NAVAN ON	WNW	168.00	13

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Jun 2017 has found that there are 5 GEN site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
MARCEL BRAZEAU LTD. 26-391	3060 NAVAN ROAD GLOUCESTER ON K1G 3N5	WNW	168.00	13
MARCEL BRAZEAU LTD.	3060 NAVAN ROAD GLOUCESTER ON K1G 3N5	WNW	168.00	13
MARCEL BRAZEAU LTD.	LOT 6, CONC. 3 OFF NAVAN ROAD C/O BOX 231 R.R.#9 GLOUCESTER ON K1G 3N5	WNW	168.00	13
MARCEL BRAZEAU LTD.	3060 NAVAN ROAD GLOUCESTER ON K1W 1E9	WNW	168.00	13
MARCEL BRAZEAU LTD.	3060 NAVAN ROAD GLOUCESTER ON K1W 1E9	WNW	168.00	13

HINC - TSSA Historic Incidents

A search of the HINC database, dated 2006-June 2009* has found that there are 2 HINC site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	6126 RENAUD ROAD GLOUCESTER ON K1W 1E9	NE	134.97	10
	6126 RENAUD ROAD GLOUCESTER ON K1W 1E9	NE	134.97	10

INC - TSSA Incidents

A search of the INC database, dated Feb 28, 2017 has found that there are 1 INC site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	6071 Renaud Road, Orleans ON K1C 7G4	W	130.66	7

PINC - TSSA Pipeline Incidents

A search of the PINC database, dated Feb 28, 2017 has found that there are 2 PINC site(s) within approximately 0.25 kilometers of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	362 Saddleridge Drive, Ottawa ON	SSE	131.65	8
	349 Saddleridge Drive, Ottawa ON	S	200.14	16

SCT - Scott's Manufacturing Directory

A search of the SCT database, dated 1992-Mar 2011* has found that there are 1 SCT site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Orleans Printers Ltd.	6102 Renaud Rd Unit 1 Orleans ON K1W 1E9	NNE	19.84	2

SPL - Ontario Spills

A search of the SPL database, dated 1988-Feb 2017 has found that there are 4 SPL site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Enbridge Gas Distribution Inc.	6071 renaud Road, Orleans<UNOFFICIAL> Ottawa ON K1C 7G4	W	130.66	7
Enbridge Gas Distribution Inc.	6071 renaud Road, Orleans<UNOFFICIAL> Ottawa ON K1C 7G4	W	130.66	7
BUS	NAVAN VILLAGE, NAVAN RD & PAGE RD. MOTOR VEHICLE (OPERATING FLUID) CUMBERLAND TOWNSHIP ON	N	196.45	15
	Renaud Rd and Navan Rd Ottawa ON	NE	246.72	21

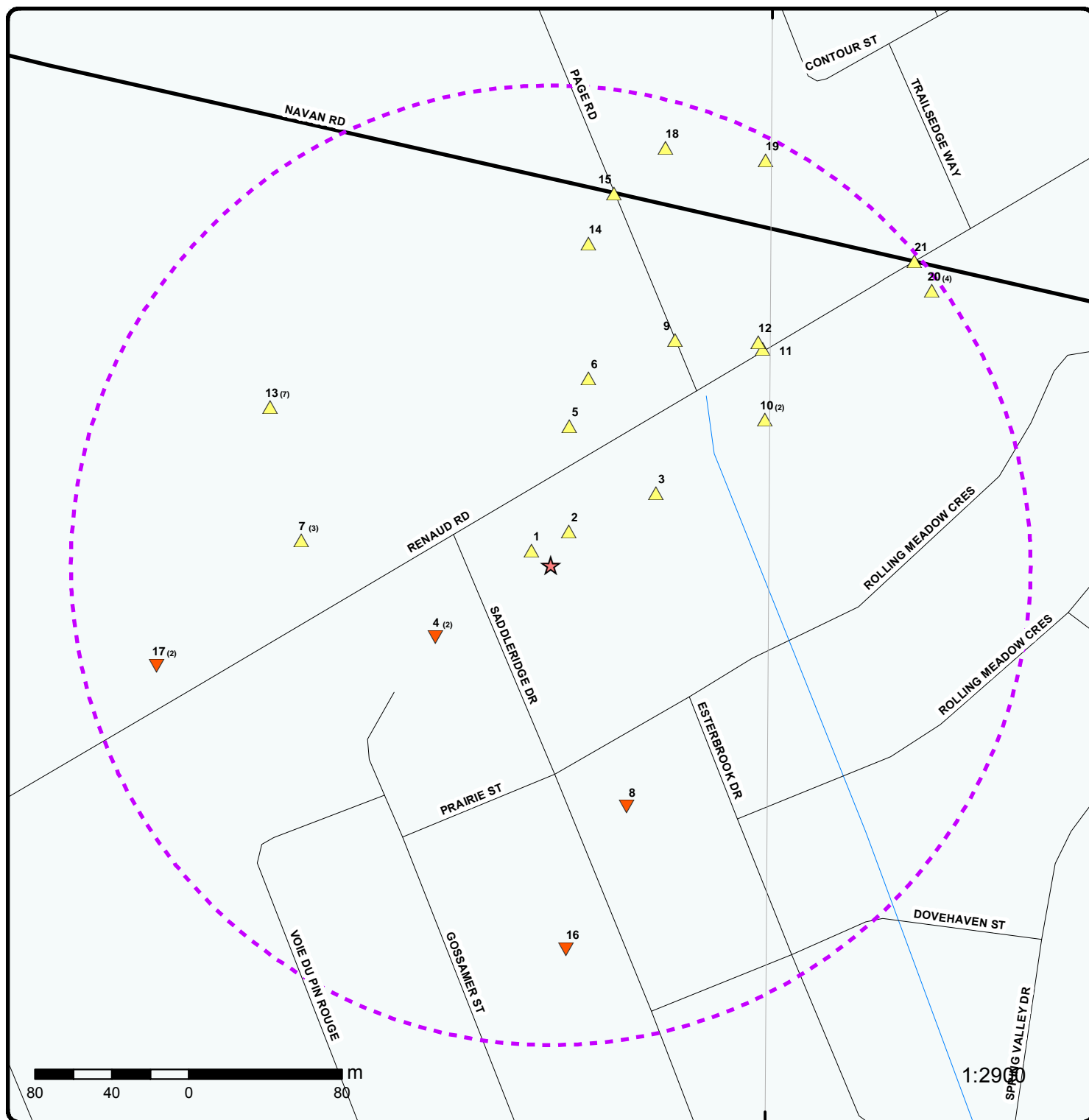
WWIS - Water Well Information System

A search of the WWIS database, dated Jun 30, 2016 has found that there are 8 WWIS site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 6 con 4 ON	NW	12.60	1
	lot 6 con 4 ON	NE	66.43	3

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 6 con 3 ON	N	73.14	<u>5</u>
	lot 6 con 3 ON	NNE	99.47	<u>6</u>
	lot 6 con 3 ON	NNE	134.19	<u>9</u>
	lot 5 con 3 ON	NNE	225.56	<u>18</u>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 6 con 4 ON	WSW	70.83	<u>4</u>
	lot 6 con 3 ON	WSW	211.78	<u>17</u>



Map : 0.25 Kilometer Radius

Order No: 20170821065

Address: 6102 Renaud Rd, Ottawa, ON, K1W1E9

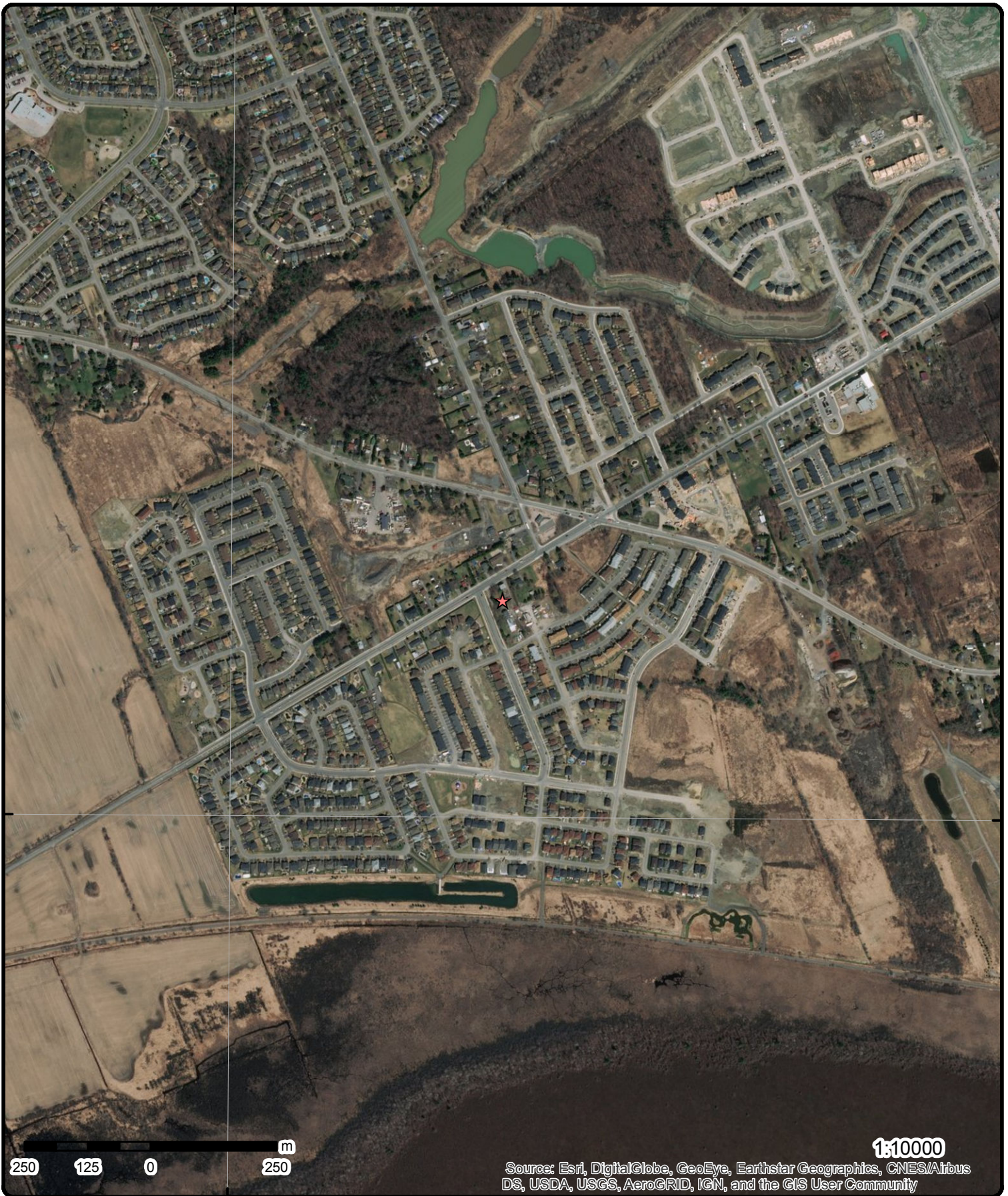


Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range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

75°31'30"W

45°25'30"N

45°25'30"N



Aerial

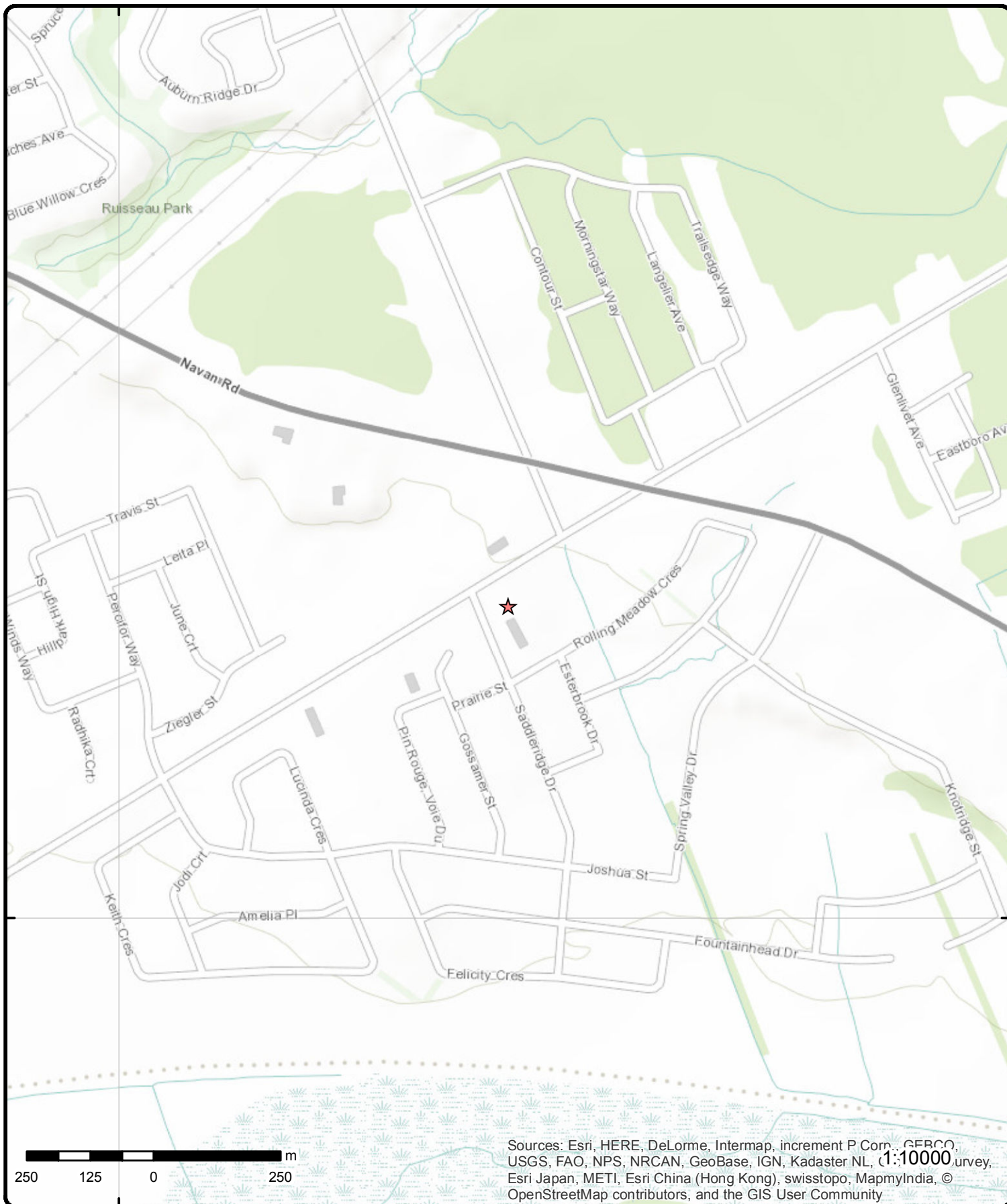
Address: 6102 Renaud Rd, Ottawa, ON, K1W1E9

Source: ESRI World Imagery

Order No: 20170821065



© ERIS Information Limited Partnership



Topographic Map

Address: 6102 Renaud Rd, Ottawa, ON, K1W1E9

Source: ESRI World Topographic Map

Order No: 20170821065



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Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
2	1 of 1	NNE/19.8	78.4	Orleans Printers Ltd. 6102 Renaud Rd Unit 1 Orleans ON K1W 1E9	SCT
Established:		1986			
Plant Size (ft²):		2000			
Employment:		4			
--Details--					
Description:		Quick Printing			
SIC/NAICS Code:		323114			
Description:		Digital Printing			
SIC/NAICS Code:		323115			
Description:		Other Printing			
SIC/NAICS Code:		323119			
Description:		Support Activities for Printing			
SIC/NAICS Code:		323120			

1	1 of 1	NW/12.6	78.1	lot 6 con 4 ON	WWIS
Well ID:		1501529	Lot:		006
Construction Date:			Concession:		04
Primary Water Use:		Domestic	Concession Name:		OF
Sec. Water Use:			Easting NAD83:		
Final Well Status:		Water Supply	Northing NAD83:		
Specific Capacity:			Zone:		
Municipality:		GLOUCESTER TOWNSHIP	UTM Reliability:		
County:		OTTAWA-CARLETON			
Bore Hole Information					
--		--			
Bore Hole ID:		10023572			
DP2BR:		92			
Code OB:		r			
Code OB Description:		Bedrock			
Open Hole:					
Date Completed:		01-OCT-65			
Remarks:					
Zone:		18			
East 83:		459460.8			
North 83:		5030732			
UTMRC:		5			
UTMRC Description:		margin of error : 100 m - 300 m			
Location Method:		p5			
Org CS:					
Elevation:		77.35			
Elevrc:					
Elevrc Description:					
Location Source Date:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--	--	--	--	--	--
Overburden and Bedrock Materials Interval					
--	--	--	--	--	--
Formation ID:		930992080			
Layer:		1			
General Color:		BLUE			
Most Common Material:		CLAY			
Other Materials:					
Other Materials:					
Formation Top Depth:		0			
Formation End Depth:		92			
Formation End Depth UOM:		ft			
--	--	--	--	--	--
Formation ID:		930992081			
Layer:		2			
General Color:		BROWN			
Most Common Material:		SHALE			
Other Materials:					
Other Materials:					
Formation Top Depth:		92			
Formation End Depth:		107			
Formation End Depth UOM:		ft			
--	--	--	--	--	--
Method of Construction & Well Use					
--	--	--	--	--	--
Method Construction ID:		961501529			
Method Construction Code:		7			
Method Construction:		Diamond			
Other Method Construction:					
--	--	--	--	--	--
Pipe Information					
--	--	--	--	--	--
Pipe ID:		10572142			
Casing Number:		1			
Comment:					
Alt Name:					
--	--	--	--	--	--
Construction Record - Casing					
--	--	--	--	--	--
Casing ID:		930040003			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		95			
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--	--	--	--	--	--
Casing ID:		930040004			
Layer:		2			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		107			
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--	--	--	--	--	--
Well Yield Testing					
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Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Pump Test ID:		991501529			
Pump Set At:					
Static Level:	20				
Final Level After Pumping:	25				
Recommended Pump Depth:	30				
Pumping Rate:	8				
Flowing Rate:					
Recommended Pump Rate:	6				
Levels UOM:	ft				
Rate UOM:	GPM				
Water State After Test Code:	2				
Water State After Test:	CLOUDY				
Pumping Test Method:	1				
Pumping Duration HR:	1				
Pumping Duration MIN:	30				
Flowing:	N				
--	--				
Water Details					
--	--				
Water ID:	933454239				
Layer:	1				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	107				
Water Found Depth UOM:	ft				
--	--				
--	--				

3	1 of 1	NE/66.4	78.4	lot 6 con 4 ON	WWIS
Well ID:	1501528			Lot:	006
Construction Date:				Concession:	04
Primary Water Use:	Domestic			Concession Name:	OF
Sec. Water Use:				Easting NAD83:	
Final Well Status:	Water Supply			Northing NAD83:	
Specific Capacity:				Zone:	
Municipality:	GLOUCESTER TOWNSHIP			UTM Reliability:	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--				
Bore Hole ID:	10023571				
DP2BR:	84				
Code OB:	r				
Code OB Description:	Bedrock				
Open Hole:					
Date Completed:	04-JUN-64				
Remarks:					
Zone:	18				
East 83:	459525.8				
North 83:	5030762				
UTMRC:	5				
UTMRC Description:	margin of error : 100 m - 300 m				
Location Method:	p5				
Org CS:					
Elevation:	77.5				
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
--	--	--	--	--	--
Overburden and Bedrock Materials Interval					
--	--	--	--	--	--
Formation ID:	930992077				
Layer:	1				
General Color:					
Most Common Material:	CLAY				
Other Materials:					
Other Materials:					
Formation Top Depth:	0				
Formation End Depth:	80				
Formation End Depth UOM:	ft				
--	--	--	--	--	--
Formation ID:	930992078				
Layer:	2				
General Color:					
Most Common Material:	GRAVEL				
Other Materials:					
Other Materials:					
Formation Top Depth:	80				
Formation End Depth:	84				
Formation End Depth UOM:	ft				
--	--	--	--	--	--
Formation ID:	930992079				
Layer:	3				
General Color:	GREY				
Most Common Material:	LIMESTONE				
Other Materials:					
Other Materials:					
Formation Top Depth:	84				
Formation End Depth:	106				
Formation End Depth UOM:	ft				
--	--	--	--	--	--
Method of Construction & Well Use					
--	--	--	--	--	--
Method Construction ID:	961501528				
Method Construction Code:	7				
Method Construction:	Diamond				
Other Method Construction:					
--	--	--	--	--	--
Pipe Information					
--	--	--	--	--	--
Pipe ID:	10572141				
Casing Number:	1				
Comment:					
Alt Name:					
--	--	--	--	--	--
Construction Record - Casing					
--	--	--	--	--	--
Casing ID:	930040001				
Layer:	1				
Open Hole or Material:	STEEL				
Depth From:					
Depth To:	89				
Casing Diameter:	2				
Casing Diameter UOM:	inch				
Casing Depth UOM:	ft				
--	--	--	--	--	--
Casing ID:	930040002				
Layer:	2				
Open Hole or Material:	OPEN HOLE				
Depth From:					
Depth To:	106				
Casing Diameter:	2				

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Well Yield Testing					
--		--			
Pump Test ID:		991501528			
Pump Set At:					
Static Level:		12			
Final Level After Pumping:		40			
Recommended Pump Depth:		40			
Pumping Rate:		10			
Flowing Rate:					
Recommended Pump Rate:		6			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		2			
Pumping Duration MIN:		0			
Flowing:		N			
--		--			
Water Details					
--		--			
Water ID:		933454238			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		106			
Water Found Depth UOM:		ft			
--		--			
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4	1 of 2	WSW/70.8	76.7	ON	BORE
Borehole ID:	615082			Type:	Borehole
Use:				Status::	
Drill Method::				UTM Zone::	18
Easting::	459411			Northing::	5030687
Location Accuracy::				Orig. Ground Elev m::	76.2
Elev. Reliability Note::				DEM Ground Elev m::	76.4
Total Depth m::	43			Primary Name::	
Township::				Concession::	
Lot::				Municipality:	
Completion Date::	MAY-1966			Static Water Level::	-999.9
Primary Water Use::				Sec. Water Use::	
--Details--					
Stratum ID:	218400354			Top Depth(m):	0.0
Bottom Depth(m):	0.6			Stratum Desc:	SAND. YELLOW.
Stratum ID:	218400355			Top Depth(m):	0.6
Bottom Depth(m):	38.1			Stratum Desc:	CLAY. BLUE.
Stratum ID:	218400356			Top Depth(m):	38.1
Bottom Depth(m):	41.1			Stratum Desc:	SAND.
Stratum ID:	218400357			Top Depth(m):	41.1
Bottom Depth(m):	43.0			Stratum Desc:	SHALE. BROWN. 00014WEATHERED. 000100140008910030RED. 00005004000300540190100 020

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
4	2 of 2	WSW/70.8	76.7	lot 6 con 4 ON	WWIS
<div> <div>Well ID: 1501530</div> <div>Construction Date:</div> <div>Primary Water Use: Livestock</div> <div>Sec. Water Use: Domestic</div> <div>Final Well Status: Water Supply</div> <div>Specific Capacity:</div> <div>Municipality: GLOUCESTER TOWNSHIP</div> <div>County: OTTAWA-CARLETON</div> </div> <div> <div>Lot: 006</div> <div>Concession: 04</div> <div>Concession Name: OF</div> <div>Easting NAD83:</div> <div>Northing NAD83:</div> <div>Zone:</div> <div>UTM Reliability:</div> </div>					
Bore Hole Information					
--					
Bore Hole ID: 10023573					
DP2BR: 135					
Code OB: r					
Code OB Description: Bedrock					
Open Hole:					
Date Completed: 04-MAY-66					
Remarks:					
Zone: 18					
East 83: 459410.8					
North 83: 5030687					
UTMRC: 5					
UTMRC Description: margin of error : 100 m - 300 m					
Location Method: p5					
Org CS:					
Elevation: 76.42					
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--					
Overburden and Bedrock					
Materials Interval					
--					
Formation ID: 930992082					
Layer: 1					
General Color: YELLOW					
Most Common Material: MEDIUM SAND					
Other Materials:					
Other Materials:					
Formation Top Depth: 0					
Formation End Depth: 2					
Formation End Depth UOM: ft					
--					
Formation ID: 930992083					
Layer: 2					
General Color: BLUE					
Most Common Material: CLAY					
Other Materials:					
Other Materials:					
Formation Top Depth: 2					
Formation End Depth: 125					
Formation End Depth UOM: ft					
--					
Formation ID: 930992084					
Layer: 3					
General Color:					
Most Common Material: QUICKSAND					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Other Materials:					
Other Materials:					
Formation Top Depth:		125			
Formation End Depth:		135			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		930992085			
Layer:		4			
General Color:		BROWN			
Most Common Material:		SHALE			
Other Materials:					
Other Materials:					
Formation Top Depth:		135			
Formation End Depth:		141			
Formation End Depth UOM:		ft			
--		--			
Method of Construction & Well Use					
--		--			
Method Construction ID:		961501530			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
--		--			
Pipe Information					
--		--			
Pipe ID:		10572143			
Casing Number:		1			
Comment:					
Alt Name:					
--		--			
Construction Record - Casing					
--		--			
Casing ID:		930040005			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		102			
Casing Diameter:		5			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Casing ID:		930040006			
Layer:		2			
Open Hole or Material:					
Depth From:					
Depth To:		135			
Casing Diameter:		5			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Casing ID:		930040007			
Layer:		3			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		141			
Casing Diameter:		5			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Well Yield Testing					
--		--			
Pump Test ID:		991501530			
Pump Set At:					
Static Level:		10			
Final Level After Pumping:		25			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<hr/>					
Recommended Pump Depth:	25				
Pumping Rate:	6				
Flowing Rate:					
Recommended Pump Rate:	6				
Levels UOM:	ft				
Rate UOM:	GPM				
Water State After Test Code:	1				
Water State After Test:	CLEAR				
Pumping Test Method:	1				
Pumping Duration HR:	4				
Pumping Duration MIN:	0				
Flowing:	N				
--	--				
Water Details					
--	--				
Water ID:	933454240				
Layer:	1				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	14				
Water Found Depth UOM:	ft				
--	--				
--	--				
<hr/>					

5	1 of 1	N/73.1	79.6	lot 6 con 3 ON	WWIS
Well ID:	1501420			Lot:	006
Construction Date:				Concession:	03
Primary Water Use:	Domestic			Concession Name:	OF
Sec. Water Use:				Easting NAD83:	
Final Well Status:	Water Supply			Northing NAD83:	
Specific Capacity:				Zone:	
Municipality:	GLOUCESTER TOWNSHIP			UTM Reliability:	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--				
Bore Hole ID:	10023463				
DP2BR:	95				
Code OB:	r				
Code OB Description:	Bedrock				
Open Hole:					
Date Completed:	09-NOV-60				
Remarks:					
Zone:	18				
East 83:	459480.8				
North 83:	5030797				
UTMRC:	5				
UTMRC Description:	margin of error : 100 m - 300 m				
Location Method:	p5				
Org CS:					
Elevation:	78.55				
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--	--				
Overburden and Bedrock					
Materials Interval					
--	--				

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Formation ID:		930991787			
Layer:		1			
General Color:		BLUE			
Most Common Material:		CLAY			
Other Materials:					
Other Materials:					
Formation Top Depth:		0			
Formation End Depth:		52			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		930991788			
Layer:		2			
General Color:					
Most Common Material:		GRAVEL			
Other Materials:		MEDIUM SAND			
Other Materials:		BOULDERS			
Formation Top Depth:		52			
Formation End Depth:		95			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		930991789			
Layer:		3			
General Color:		BLACK			
Most Common Material:		SHALE			
Other Materials:					
Other Materials:					
Formation Top Depth:		95			
Formation End Depth:		125			
Formation End Depth UOM:		ft			
--		--			
Method of Construction & Well Use					
--		--			
Method Construction ID:		961501420			
Method Construction Code:		7			
Method Construction:		Diamond			
Other Method Construction:					
--		--			
Pipe Information					
--		--			
Pipe ID:		10572033			
Casing Number:		1			
Comment:					
Alt Name:					
--		--			
Construction Record - Casing					
--		--			
Casing ID:		930039807			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		100			
Casing Diameter:		3			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Casing ID:		930039808			
Layer:		2			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		125			
Casing Diameter:		3			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
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Well Yield Testing					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
--	--	--	--	--	--
Pump Test ID:		991501420			
Pump Set At:					
Static Level:	9				
Final Level After Pumping:	40				
Recommended Pump Depth:	60				
Pumping Rate:	5				
Flowing Rate:					
Recommended Pump Rate:	5				
Levels UOM:	ft				
Rate UOM:	GPM				
Water State After Test Code:	1				
Water State After Test:	CLEAR				
Pumping Test Method:	1				
Pumping Duration HR:	2				
Pumping Duration MIN:	0				
Flowing:	N				
--	--	--	--	--	--
Water Details					
--	--	--	--	--	--
Water ID:		933454127			
Layer:	1				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	120				
Water Found Depth UOM:	ft				
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<u>6</u>	1 of 1	NNE/99.5	80.3	lot 6 con 3 ON	WWIS
Well ID:	1510706			Lot:	006
Construction Date:				Concession:	03
Primary Water Use:	Domestic			Concession Name:	OF
Sec. Water Use:				Easting NAD83:	
Final Well Status:	Water Supply			Northing NAD83:	
Specific Capacity:				Zone:	
Municipality:	GLOUCESTER TOWNSHIP			UTM Reliability:	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--	--	--	--	--
Bore Hole ID:	10032726				
DP2BR:	100				
Code OB:	r				
Code OB Description:	Bedrock				
Open Hole:					
Date Completed:	14-MAR-69				
Remarks:					
Zone:	18				
East 83:	459490.8				
North 83:	5030822				
UTMRC:	5				
UTMRC Description:	margin of error : 100 m - 300 m				
Location Method:	p5				
Org CS:					
Elevation:	79.26				
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Spatial Status:					
--		--			
Overburden and Bedrock Materials Interval					
--		--			
Formation ID:		931015624			
Layer:		1			
General Color:		YELLOW			
Most Common Material:		SAND			
Other Materials:					
Other Materials:					
Formation Top Depth:		0			
Formation End Depth:		3			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		931015625			
Layer:		2			
General Color:		BLUE			
Most Common Material:		CLAY			
Other Materials:					
Other Materials:					
Formation Top Depth:		3			
Formation End Depth:		100			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		931015626			
Layer:		3			
General Color:		GREY			
Most Common Material:		LIMESTONE			
Other Materials:					
Other Materials:					
Formation Top Depth:		100			
Formation End Depth:		103			
Formation End Depth UOM:		ft			
--		--			
Method of Construction & Well Use					
--		--			
Method Construction ID:		961510706			
Method Construction Code:		7			
Method Construction:		Diamond			
Other Method Construction:					
--		--			
Pipe Information					
--		--			
Pipe ID:		10581296			
Casing Number:		1			
Comment:					
Alt Name:					
--		--			
Construction Record - Casing					
--		--			
Casing ID:		930058020			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		103			
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Well Yield Testing					
--		--			
Pump Test ID:		991510706			
Pump Set At:					
Static Level:		18			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Final Level After Pumping:		40			
Recommended Pump Depth:		50			
Pumping Rate:		10			
Flowing Rate:					
Recommended Pump Rate:		6			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		2			
Pumping Duration MIN:		0			
Flowing:		N			
--		--			
Water Details					
--		--			
Water ID:		933465742			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		103			
Water Found Depth UOM:		ft			
--		--			
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7	1 of 3	W/130.7	77.7	6071 Renaud Road, Orleans ON K1C 7G4	INC
Incident No:		416666			
Incident ID:		2568366			
Attribute Category:		FS-Incident			
Status Code:		Causal Analysis Complete			
Incident Location:		6071 Renaud Road, Orleans - 4" Pipeline Hit			
Drainage System:					
Sub Surface Contam.:					
Aff. Prop. Use Water:					
Contam. Migrated:					
Contact Natural Env.:					
Near Body of Water:					
Approx. Quant. Rel.:					
Equipment Model:					
Serial No:					
Residential App. Type:					
Commercial App. Type:					
Industrial App. Type:					
Institutional App. Type:					
Venting Type:					
Vent Connector Mater:					
Vent Chimney Mater:					
Pipeline Type:		Main Distribution Pipeline			
Pipeline Involved:					
Pipe Material:		Plastic			
Depth Ground Cover:		.7m			
Regulator Location:					
Regulator Type:					
Operation Pressure:		IP			
Liquid Prop Make:					
Liquid Prop Model:					
Liquid Prop Serial No:					
Equipment Type:					
Cylinder Capacity:					
Cylinder Capac. Units:					
Cylinder Material Type:					
Tank Capacity:					
Fuels Occurrence Type:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Fuel Type Involved: Date of Occurrence: Time of Occurrence: Occur Insp Start Date: Any Health Impact: Any Environmental Impact: Was Service Interrupted: Was Property Damaged: Operation Type Involved: Enforcement Policy: Prc Escalation Required: Task No: Notes: Occurrence Narrative: 4" line not identified on middle locate, excavation companies failed to call to clarify locate upon finding in active 2" line and dug without markings Tank Material Type: Tank Storage Type: Tank Location Type: Pump Flow Rate Capac: Liquid Prop Notes:					
7	2 of 3	W/130.7	77.7	Enbridge Gas Distribution Inc. 6071 renaud Road, Orleans<UNOFFICIAL> Ottawa ON K1C 7G4	SPL
Ref No: 3767-86WMPR Contaminant Code: Contaminant Name: Contaminant Quantity: Incident Cause: Incident Dt: Incident Reason: Incident Summary: Pipeline stke, 4 inch plstic main, EG to make safe MOE Reported Dt: 6/30/2010 Environmental Impact: Possible Nature of Impact: Receiving Medium: SAC Action Class: TSSA - Fuel Safety Branch Sector Source Type: Receiving Environment: Incident Event: Site Municipality:					
7	3 of 3	W/130.7	77.7	Enbridge Gas Distribution Inc. 6071 renaud Road, Orleans<UNOFFICIAL> Ottawa ON K1C 7G4	SPL
Ref No: 3767-86WMPR Contaminant Code: Contaminant Name: Contaminant Quantity: Incident Cause: Incident Dt: Incident Reason: Incident Summary: Pipeline stke, 4 inch plstic main, EG to make safe MOE Reported Dt: 6/30/2010 Environmental Impact: Possible Nature of Impact: Receiving Medium: SAC Action Class: TSSA - Fuel Safety Branch Sector Source Type: Receiving Environment:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Incident Event: Site Municipality:					
8	1 of 1	SSE/131.7	75.5	362 Saddleridge Drive, Ottawa ON	PINC
Incident ID:				Health Impact:	
Incident No:		931956		Environment Impact:	
Type:		FS-Pipeline Incident		Property Damage:	Yes
Status Code:		Pipeline Damage Reason Est		Service Interrupt:	
Fuel Occurrence Tp:				Enforce Policy:	Yes
Fuel Type:				Public Relation:	
Tank Status:		RC Established		Pipeline System:	
Task No:		4157980		Depth:	
Spills Action Centre:				Pipe Material:	
Method Details:		E-mail		PSIG:	
Fuel Category:		Natural Gas		Attribute Category:	FS-Perform P-line Inc Invest
Date of Occurrence:				Regualtor Location:	
Occurrence Start Date:		2012/10/30			
Operation Type:					
Pipeline Type:					
Regulator Type:					
Summary:		362 Saddleridge Drive, Ottawa - 1/2" Pipeline Hit			
Reported By:		ryan.noble@enbridge.com			
Affiliation:					
Occurrence Desc:					
Damage Reason:		Excavation practices not sufficient			
Notes:					
9	1 of 1	NNE/134.2	79.5	lot 6 con 3 ON	WWIS
Well ID:		1501427		Lot:	006
Construction Date:				Concession:	03
Primary Water Use:		Domestic		Concession Name:	OF
Sec. Water Use:				Easting NAD83:	
Final Well Status:		Water Supply		Northing NAD83:	
Specific Capacity:				Zone:	
Municipality:		GLOUCESTER TOWNSHIP		UTM Reliability:	
County:		OTTAWA-CARLETON			
Bore Hole Information					
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Bore Hole ID:		10023470			
DP2BR:		90			
Code OB:		r			
Code OB Description:		Bedrock			
Open Hole:					
Date Completed:		18-AUG-62			
Remarks:					
Zone:		18			
East 83:		459535.8			
North 83:		5030842			
UTMRC:		5			
UTMRC Description:		margin of error : 100 m - 300 m			
Location Method:		p5			
Org CS:					
Elevation:		80.36			
Elevrc:					
Elevrc Description:					
Location Source Date:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					
Spatial Status:					
--	--	--	--	--	--
Overburden and Bedrock Materials Interval					
--	--	--	--	--	--
Formation ID:		930991802			
Layer:		1			
General Color:		BLUE			
Most Common Material:		CLAY			
Other Materials:					
Other Materials:					
Formation Top Depth:		0			
Formation End Depth:		90			
Formation End Depth UOM:		ft			
--	--	--	--	--	--
Formation ID:		930991803			
Layer:		2			
General Color:		BROWN			
Most Common Material:		SLATE			
Other Materials:					
Other Materials:					
Formation Top Depth:		90			
Formation End Depth:		97			
Formation End Depth UOM:		ft			
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Method of Construction & Well Use					
--	--	--	--	--	--
Method Construction ID:		961501427			
Method Construction Code:		7			
Method Construction:		Diamond			
Other Method Construction:					
--	--	--	--	--	--
Pipe Information					
--	--	--	--	--	--
Pipe ID:		10572040			
Casing Number:		1			
Comment:					
Alt Name:					
--	--	--	--	--	--
Construction Record - Casing					
--	--	--	--	--	--
Casing ID:		930039821			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		95			
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
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Casing ID:		930039822			
Layer:		2			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		97			
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
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Well Yield Testing					
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Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Pump Test ID:		991501427			
Pump Set At:					
Static Level:		15			
Final Level After Pumping:		40			
Recommended Pump Depth:		40			
Pumping Rate:		8			
Flowing Rate:					
Recommended Pump Rate:		8			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		2			
Pumping Duration MIN:		0			
Flowing:		N			
--		--			
Water Details					
--		--			
Water ID:		933454134			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		97			
Water Found Depth UOM:		ft			
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10	1 of 2	NE/135.0	80.5	6126 RENAUD ROAD GLOUCESTER ON K1W 1E9	HINC
External File Num:		FS INC 0701-00262			
Date of Occurrence:		1/11/2007			
Fuel Occurrence Type:		Pipeline Strike			
Fuel Type Involved:		Natural Gas			
Status Desc::		Complete			
Job Type Desc::		Incident/Near-Miss Occurrence (FS)			
Oper. Type Involved::		Construction Site (pipeline strike)			
Service Interruptions::		No			
Property Damage::		No			
Fuel Life Cycle Stage::		Transmission, Distribution and Transportation			
Root Cause::					
Reported Details::					
Fuel Category::		Gaseous Fuel			
Occurrence Type::		Incident			
Affiliation::		Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)			
County Name::		Ottawa			
Approx. Quant. Rel::					
Nearby body of water::					
Enter Drainage Syst::					
Approx. Quant. Unit::					
Environmental Impact::					

10	2 of 2	NE/135.0	80.5	6126 RENAUD ROAD GLOUCESTER ON K1W 1E9	HINC
External File Num:		FS INC 0701-00410			
Date of Occurrence:		1/11/2007			
Fuel Occurrence Type:		Pipeline Strike			
Fuel Type Involved:		Natural Gas			
Status Desc::		Completed - Causal Analysis(End)			
Job Type Desc::		Incident/Near-Miss Occurrence (FS)			
Oper. Type Involved::		Construction Site (pipeline strike)			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Service Interruptions::		Yes			
Property Damage::		Yes			
Fuel Life Cycle Stage::		Transmission, Distribution and Transportation			
Root Cause::		Root Cause: Equipment/Material/Component:No Procedures:No Maintenance:No Design:Yes Training:Yes Management:No Human Factors:Yes			
Reported Details::					
Fuel Category::		Gaseous Fuel			
Occurrence Type::		Incident			
Affiliation::		Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)			
County Name::		Ottawa			
Approx. Quant. Rel::					
Nearby body of water::					
Enter Drainage Syst.::					
Approx. Quant. Unit::					
Environmental Impact::					

11	1 of 1	NE/157.7	80.3	ON	BORE
Borehole ID:	809420			Type:	Borehole
Use:	Geotechnical/Geological Investigation			Status::	
Drill Method::	Not known			UTM Zone::	18
Easting::	459581.38			Northing::	5030837.16
Location Accuracy::				Orig. Ground Elev m::	-999.9
Elev. Reliability Note::				DEM Ground Elev m::	79.4
Total Depth m::	1			Primary Name::	AH.1
Township::				Concession::	
Lot::				Municipality:	
Completion Date::	29-JUL-1992			Static Water Level::	-999.9
Primary Water Use::				Sec. Water Use::	
--Details--					
Stratum ID:	218599953			Top Depth(m):	0.0
Bottom Depth(m):	0.1			Stratum Desc:	Asphalt
Stratum ID:	218599954			Top Depth(m):	0.1
Bottom Depth(m):	0.6			Stratum Desc:	Grey Crushed Stone
Stratum ID:	218599955			Top Depth(m):	0.6
Bottom Depth(m):	1.0			Stratum Desc:	Brown Sand With: Si

12	1 of 1	NE/158.8	80.3	ON	BORE
Borehole ID:	809422			Type:	Borehole
Use:	Geotechnical/Geological Investigation			Status::	
Drill Method::	Not known			UTM Zone::	18
Easting::	459579.2			Northing::	5030840.7
Location Accuracy::				Orig. Ground Elev m::	-999.9
Elev. Reliability Note::				DEM Ground Elev m::	79.5
Total Depth m::	1.6			Primary Name::	AH.2
Township::				Concession::	
Lot::				Municipality:	
Completion Date::	29-JUL-1992			Static Water Level::	-999.9
Primary Water Use::				Sec. Water Use::	
--Details--					
Stratum ID:	218599960			Top Depth(m):	0.0
Bottom Depth(m):	0.1			Stratum Desc:	Asphalt
Stratum ID:	218599961			Top Depth(m):	0.1

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Bottom Depth(m):	0.7			Stratum Desc:	Brown Sand - Gravel With: Cob
Stratum ID:	218599962			Top Depth(m):	0.7
Bottom Depth(m):	1.0			Stratum Desc:	Dark Grey Topsoil Silt
Stratum ID:	218599963			Top Depth(m):	1.0
Bottom Depth(m):	1.6			Stratum Desc:	Grey-Brown Silty Clay
13	1 of 7	WNW/168.0	77.7	MARCEL BRAZEAU TOP SOIL 3060 NAVAN RD NAVAN ON	FSTH
License Issue Date:	10/1/2001				
Tank Status:	Licensed				
Tank Status As Of:	August 2007				
Operation Type:	Private Fuel Outlet				
Facility Type:	Gasoline Station - Self Serve				
--Details--					
Status:	Active				
Year of Installation:	2001				
Corrosion Protection:					
Capacity:	9280				
Tank Fuel Type:	Liquid Fuel Single Wall AST - Gasoline				
Status:	Active				
Year of Installation:	2001				
Corrosion Protection:					
Capacity:	1345				
Tank Fuel Type:	Liquid Fuel Single Wall AST - Gasoline				
13	2 of 7	WNW/168.0	77.7	MARCEL BRAZEAU TOP SOIL 3060 NAVAN RD NAVAN ON	FSTH
License Issue Date:	10/1/2001				
Tank Status:	Licensed				
Tank Status As Of:	December 2008				
Operation Type:	Private Fuel Outlet				
Facility Type:	Gasoline Station - Self Serve				
--Details--					
Status:	Active				
Year of Installation:	2001				
Corrosion Protection:					
Capacity:	9280				
Tank Fuel Type:	Liquid Fuel Single Wall AST - Gasoline				
Status:	Active				
Year of Installation:	2001				
Corrosion Protection:					
Capacity:	1345				
Tank Fuel Type:	Liquid Fuel Single Wall AST - Gasoline				
13	3 of 7	WNW/168.0	77.7	MARCEL BRAZEAU LTD. LOT 6, CONC. 3 OFF NAVAN ROAD C/O BOX 231 R.R.#9 GLOUCESTER ON K1G 3N5	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Generator No.: Status: Approval Years: Contam. Facility: MHSW Facility: SIC Code: SIC Description:	ON1212200 89 4564	BULK DRY TRUCKING		PO Box No.: Country: Choice of Contact: Co Admin: Phone No. Admin:	
--Details--					
Waste Code: Waste Description:	221 LIGHT FUELS				
Waste Code: Waste Description:	252 WASTE OILS & LUBRICANTS				
13	4 of 7	WNW/168.0	77.7	MARCEL BRAZEAU LTD. 3060 NAVAN ROAD GLOUCESTER ON K1G 3N5	26-391 GEN
Generator No.: Status: Approval Years: Contam. Facility: MHSW Facility: SIC Code: SIC Description:	ON1212200 92,93,94,95,96,97,98 4564	BULK DRY TRUCKING		PO Box No.: Country: Choice of Contact: Co Admin: Phone No. Admin:	
--Details--					
Waste Code: Waste Description:	221 LIGHT FUELS				
Waste Code: Waste Description:	252 WASTE OILS & LUBRICANTS				
13	5 of 7	WNW/168.0	77.7	MARCEL BRAZEAU LTD. 3060 NAVAN ROAD GLOUCESTER ON K1G 3N5	GEN
Generator No.: Status: Approval Years: Contam. Facility: MHSW Facility: SIC Code: SIC Description:	ON1212200 99,00,01,02,03,04,05,06,07,08 4564	BULK DRY TRUCKING		PO Box No.: Country: Choice of Contact: Co Admin: Phone No. Admin:	
--Details--					
Waste Code: Waste Description:	252 WASTE OILS & LUBRICANTS				
Waste Code: Waste Description:	212 ALIPHATIC SOLVENTS				
Waste Code: Waste Description:	221 LIGHT FUELS				
Waste Code: Waste Description:	251 OIL SKIMMINGS & SLUDGES				

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
13	6 of 7	WNW/168.0	77.7	MARCEL BRAZEAU LTD. 3060 NAVAN ROAD GLOUCESTER ON K1W 1E9	GEN
Generator No.:	ON1212200			PO Box No.:	
Status:				Country:	
Approval Years:	2009			Choice of Contact:	
Contam. Facility:				Co Admin:	
MHSW Facility:				Phone No. Admin:	
SIC Code:	561730				
SIC Description:	Landscaping Services				
--Details--					
Waste Code:	212				
Waste Description:	ALIPHATIC SOLVENTS				
Waste Code:	221				
Waste Description:	LIGHT FUELS				
Waste Code:	251				
Waste Description:	OIL SKIMMINGS & SLUDGES				
Waste Code:	252				
Waste Description:	WASTE OILS & LUBRICANTS				
13	7 of 7	WNW/168.0	77.7	MARCEL BRAZEAU LTD. 3060 NAVAN ROAD GLOUCESTER ON K1W 1E9	GEN
Generator No.:	ON1212200			PO Box No.:	
Status:				Country:	
Approval Years:	2010			Choice of Contact:	
Contam. Facility:				Co Admin:	
MHSW Facility:				Phone No. Admin:	
SIC Code:	561730				
SIC Description:	Landscaping Services				
--Details--					
Waste Code:	212				
Waste Description:	ALIPHATIC SOLVENTS				
Waste Code:	251				
Waste Description:	OIL SKIMMINGS & SLUDGES				
Waste Code:	252				
Waste Description:	WASTE OILS & LUBRICANTS				
Waste Code:	221				
Waste Description:	LIGHT FUELS				
14	1 of 1	N/168.8	80.3	ON	BORE
Borehole ID:	615087			Type:	Borehole
Use:				Status::	
Drill Method::				UTM Zone::	18
Easting::	459491			Northing::	5030892
Location Accuracy::				Orig. Ground Elev m::	79.2
Elev. Reliability Note::				DEM Ground Elev m::	79.8
Total Depth m::	-999			Primary Name::	

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Township:: Lot:: Completion Date:: Primary Water Use::				Concession:: Municipality: Static Water Level:: 9.5 Sec. Water Use::	
--Details--					
Stratum ID:	218400372			Top Depth(m):	0.0
Bottom Depth(m):	17.7			Stratum Desc:	CLAY.
Stratum ID:	218400373			Top Depth(m):	17.7
Bottom Depth(m):	29.0			Stratum Desc:	GRAVEL. WATER STABLE AT 228.9 FEET.
Stratum ID:	218400374			Top Depth(m):	29.0
Bottom Depth(m):				Stratum Desc:	BEDROCK. 00062HERED. 000100140008910030RED. 00005004000300540190100 020 00065
15	1 of 1	N/196.4	80.3	BUS NAVAN VILLAGE, NAVAN RD & PAGE RD. MOTOR VEHICLE (OPERATING FLUID) CUMBERLAND TOWNSHIP ON	SPL
Ref No:	123268				
Contaminant Code:					
Contaminant Name:					
Contaminant Quantity:					
Incident Cause:	PIPE/HOSE LEAK				
Incident Dt:	2/2/1996				
Incident Reason:	EQUIPMENT FAILURE				
Incident Summary:	OC TRANSPORTATION BUS- 5 LITRE HYDRAULIC OIL TO ROAD. WORKS CLEANING.				
MOE Reported Dt:	2/2/1996				
Environmental Impact:	NOT ANTICIPATED				
Nature of Impact:					
Receiving Medium:	LAND				
SAC Action Class:					
Sector Source Type:					
Receiving Environment:					
Incident Event:					
Site Municipality:	20601				
16	1 of 1	S/200.1	74.7	349 Saddleridge Drive, Ottawa ON	PINC
Incident ID:				Health Impact:	
Incident No:	794550			Environment Impact:	
Type:	FS-Pipeline Incident			Property Damage:	Yes
Status Code:	Pipeline Damage Reason Est			Service Interrupt:	
Fuel Occurrence Tp:				Enforce Policy:	Yes
Fuel Type:				Public Relation:	
Tank Status:	RC Established			Pipeline System:	
Task No:	3800292			Depth:	
Spills Action Centre:				Pipe Material:	
Method Details:	E-mail			PSIG:	
Fuel Category:	Natural Gas			Attribute Category:	FS-Perform P-line Inc Invest
Date of Occurrence:				Regulator Location:	
Occurrence Start Date:	2012/04/23				
Operation Type:					
Pipeline Type:					
Regulator Type:					
Summary:	349 Saddleridge Drive, Ottawa - 1/2" Pipeline Hit				

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Reported By: Alan.Armstrong@enbridge.com Affiliation: Occurrence Desc: Damage Reason: No notification made to the one call center Notes:					
17	1 of 2	WSW/211.8	76.9	ON	BORE
Borehole ID: 615081 Use: Drill Method:: Easting:: 459266 Location Accuracy:: Elev. Reliability Note:: Total Depth m:: 35.4 Township:: Lot:: Completion Date:: JAN-1961 Primary Water Use::					
Type: Borehole Status:: UTM Zone:: 18 Northing:: 5030672 Orig. Ground Elev m:: 76.2 DEM Ground Elev m:: 75.3 Primary Name:: Concession:: Municipality: Static Water Level:: -999.9 Sec. Water Use::					
--Details-- Stratum ID: 218400352 Bottom Depth(m): 30.5 Stratum ID: 218400353 Bottom Depth(m): 35.4					
Top Depth(m): 0.0 Stratum Desc: CLAY. Top Depth(m): 30.5 Stratum Desc: SLATE. BROWN. 00116. BEDROCK. 00035 010 WEATHERED. 000100140008910030RED. 00					
17	2 of 2	WSW/211.8	76.9	lot 6 con 3 ON	WWIS
Well ID: 1501421 Construction Date: Primary Water Use: Domestic Sec. Water Use: Final Well Status: Water Supply Specific Capacity: Municipality: GLOUCESTER TOWNSHIP County: OTTAWA-CARLETON					
Lot: 006 Concession: 03 Concession Name: OF Easting NAD83: Northing NAD83: Zone: UTM Reliability:					
Bore Hole Information -- Bore Hole ID: 10023464 DP2BR: 100 Code OB: r Code OB Description: Bedrock Open Hole: Date Completed: 07-JAN-61 Remarks: Zone: 18 East 83: 459265.8 North 83: 5030672 UTMRC: 5 UTMRC Description: margin of error : 100 m - 300 m Location Method: p5 Org CS: Elevation: 75.34 Elevrc: Elevrc Description:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB			
Location Source Date:								
Source Revision Comment:								
Improvement Location Source:								
Improvement Location Method:								
Supplier Comment:								
Spatial Status:								
--								
Overburden and Bedrock Materials Interval								
--								
Formation ID:								
		930991790						
Layer:								
		1						
General Color:								
Most Common Material:								
		CLAY						
Other Materials:								
Other Materials:								
Formation Top Depth:								
		0						
Formation End Depth:								
		100						
Formation End Depth UOM:								
		ft						
--								
Formation ID:								
		930991791						
Layer:								
		2						
General Color:								
Most Common Material:								
		SLATE						
Other Materials:								
Other Materials:								
Formation Top Depth:								
		100						
Formation End Depth:								
		116						
Formation End Depth UOM:								
		ft						
--								
Method of Construction & Well Use								
--								
Method Construction ID:								
		961501421						
Method Construction Code:								
		7						
Method Construction:								
		Diamond						
Other Method Construction:								
--								
Pipe Information								
--								
Pipe ID:								
		10572034						
Casing Number:								
		1						
Comment:								
Alt Name:								
--								
Construction Record - Casing								
--								
Casing ID:								
		930039809						
Layer:								
		1						
Open Hole or Material:								
		STEEL						
Depth From:								
Depth To:								
		110						
Casing Diameter:								
		2						
Casing Diameter UOM:								
		inch						
Casing Depth UOM:								
		ft						
--								
Casing ID:								
		930039810						
Layer:								
		2						
Open Hole or Material:								
		OPEN HOLE						
Depth From:								
Depth To:								
		116						
Casing Diameter:								
		2						
Casing Diameter UOM:								
		inch						
Casing Depth UOM:								
		ft						
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Well Yield Testing								

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
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Pump Test ID:		991501421			
Pump Set At:					
Static Level:	21				
Final Level After Pumping:	40				
Recommended Pump Depth:	40				
Pumping Rate:	7				
Flowing Rate:					
Recommended Pump Rate:	7				
Levels UOM:	ft				
Rate UOM:	GPM				
Water State After Test Code:	1				
Water State After Test:	CLEAR				
Pumping Test Method:	1				
Pumping Duration HR:	6				
Pumping Duration MIN:	0				
Flowing:	N				
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Water Details					
--	--	--	--	--	--
Water ID:		933454128			
Layer:	1				
Kind Code:	1				
Kind:	FRESH				
Water Found Depth:	116				
Water Found Depth UOM:	ft				
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18	1 of 1	NNE/225.6	81.5	lot 5 con 3 ON	WWIS
Well ID:	1501415			Lot:	005
Construction Date:				Concession:	03
Primary Water Use:	Domestic			Concession Name:	OF
Sec. Water Use:				Easting NAD83:	
Final Well Status:	Water Supply			Northing NAD83:	
Specific Capacity:				Zone:	
Municipality:	GLOUCESTER TOWNSHIP			UTM Reliability:	
County:	OTTAWA-CARLETON				
Bore Hole Information					
--	--	--	--	--	--
Bore Hole ID:	10023458				
DP2BR:	92				
Code OB:	r				
Code OB Description:	Bedrock				
Open Hole:					
Date Completed:	16-AUG-62				
Remarks:					
Zone:	18				
East 83:	459530.8				
North 83:	5030942				
UTMRC:	5				
UTMRC Description:	margin of error : 100 m - 300 m				
Location Method:	p5				
Org CS:					
Elevation:	80.62				
Elevrc:					
Elevrc Description:					
Location Source Date:					
Source Revision Comment:					
Improvement Location Source:					
Improvement Location Method:					
Supplier Comment:					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Spatial Status:					
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Overburden and Bedrock Materials Interval					
--		--			
Formation ID:		930991775			
Layer:		1			
General Color:					
Most Common Material:		TOPSOIL			
Other Materials:		MEDIUM SAND			
Other Materials:					
Formation Top Depth:		0			
Formation End Depth:		5			
Formation End Depth UOM:		ft			
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Formation ID:		930991776			
Layer:		2			
General Color:		BLUE			
Most Common Material:		CLAY			
Other Materials:					
Other Materials:					
Formation Top Depth:		5			
Formation End Depth:		92			
Formation End Depth UOM:		ft			
--		--			
Formation ID:		930991777			
Layer:		3			
General Color:		GREY			
Most Common Material:		LIMESTONE			
Other Materials:					
Other Materials:					
Formation Top Depth:		92			
Formation End Depth:		110			
Formation End Depth UOM:		ft			
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Method of Construction & Well Use					
--		--			
Method Construction ID:		961501415			
Method Construction Code:		7			
Method Construction:		Diamond			
Other Method Construction:					
--		--			
Pipe Information					
--		--			
Pipe ID:		10572028			
Casing Number:		1			
Comment:					
Alt Name:					
--		--			
Construction Record - Casing					
--		--			
Casing ID:		930039800			
Layer:		1			
Open Hole or Material:		STEEL			
Depth From:					
Depth To:		98			
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Casing ID:		930039801			
Layer:		2			
Open Hole or Material:		OPEN HOLE			
Depth From:					
Depth To:		110			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<hr/>					
Casing Diameter:		2			
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
--		--			
Well Yield Testing					
--		--			
Pump Test ID:		991501415			
Pump Set At:					
Static Level:		21			
Final Level After Pumping:		60			
Recommended Pump Depth:		60			
Pumping Rate:		12			
Flowing Rate:					
Recommended Pump Rate:		12			
Levels UOM:		ft			
Rate UOM:		GPM			
Water State After Test Code:		1			
Water State After Test:		CLEAR			
Pumping Test Method:		1			
Pumping Duration HR:		3			
Pumping Duration MIN:		0			
Flowing:		N			
--		--			
Water Details					
--		--			
Water ID:		933454122			
Layer:		1			
Kind Code:		1			
Kind:		FRESH			
Water Found Depth:		110			
Water Found Depth UOM:		ft			
--		--			
--		--			
<hr/>					
19	1 of 1	NNE/238.9	82.4	3097 and 3107 Navan Road Ottawa ON K1W1E9	EHS
<hr/>					
Postal Code:					
City:					
Address2:					
Address1:					
Provstate:					
Order No.:		20140717001			
Addit. Info Ordered::					
Report Date:		23-JUL-14			
Report Type:		Custom Report			
Search Radius (km):		.25			
<hr/>					
20	1 of 4	NE/244.7	83.2	Claridge Homes (Carson) Inc. 3138 Navan Rd Lot 5 & 6, Concession 4 (Gloucester) Ottawa ON	CA
<hr/>					
Certificate #:		7172-8AVK8G			
Application Year:		2010			
Issue Date:		11/19/2010			
Approval Type:		Municipal and Private Sewage Works			
Status:		Approved			
Application Type:					
Client Name::					
Client Address::					
Client City::					
Client Postal Code::					

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
Project Description:: Contaminants:: Emission Control::					
20	2 of 4	NE/244.7	83.2	Claridge Homes (Carson) Inc. 3138 Navan Rd Lot 5 and 6, Concession 4 Ottawa ON	CA
Certificate #: Application Year: Issue Date: Approval Type: Status: Application Type: Client Name:: Client Address:: Client City:: Client Postal Code:: Project Description:: Contaminants:: Emission Control::		3070-8LGQ4W 2011 9/23/2011 Municipal and Private Sewage Works Approved			
20	3 of 4	NE/244.7	83.2	Claridge Homes (Carson) Inc. 3138 Navan Rd Lot 5 & 6, Concession 4 (Gloucester) Ottawa ON K2P 0Y6	ECA
Approval No: Project Type: Date: Status: Longitude: Latitude: Record Type: PDF URL: Full Address:		7172-8AVK8G Municipal and Private Sewage Works 11/19/2010 1:37:46 PM Approved ECA https://www.accessenvironment.ene.gov.on.ca/instruments/0450-8A9MP2-14.pdf			
20	4 of 4	NE/244.7	83.2	Claridge Homes (Carson) Inc. 3138 Navan Rd Lot 5 and 6, Concession 4 Ottawa ON K2P 0Y6	ECA
Approval No: Project Type: Date: Status: Longitude: Latitude: Record Type: PDF URL: Full Address:		3070-8LGQ4W Municipal and Private Sewage Works 9/23/2011 2:19:52 PM Approved ECA https://www.accessenvironment.ene.gov.on.ca/instruments/9808-8LFQ2X-14.pdf			
21	1 of 1	NE/246.7	82.6	Renaud Rd and Navan Rd Ottawa ON	SPL
Ref No: Contaminant Code: Contaminant Name: Contaminant Quantity: Incident Cause:		7246-8UXM48 13 DIESEL FUEL			

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
<hr/>					
Incident Dt:		04-JUN-12			
Incident Reason:					
Incident Summary:		MVA: TT 265L DSL to ditch			
MOE Reported Dt:		04-JUN-12			
Environmental Impact:		Not Anticipated			
Nature of Impact:					
Receiving Medium:		Sewage - Municipal/Private and Commercial			
SAC Action Class:		Land Spills			
Sector Source Type:					
Receiving Environment:					
Incident Event:					
Site Municipality:		Ottawa			

Unplottable Summary

Total: 26 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	Page Road Pond No. 1	Pt. of Lot 5, Concession 3 O.F., Plan 4R-7806	Gloucester ON	
CA	1250353 Ontario Limited	Part of Lot 6, Concession 2 and 3, Rideau	Ottawa ON	
CA	AstenJohnson, Inc.	Part of Lot 5, Concession 4	Ottawa ON	
CA	Rideau Forest Development Ltd.	Part of Lot 5, Concession 3, Geographic Township of Osgoode	Ottawa ON	
CA		Lot 6, Concession 2 and 3	Ottawa ON	
CA		Lot 6, Concession 2 and 3	Ottawa ON	
CA		Lot 6, Concession 2 and 3	Ottawa ON	
CA	MICHEL LAMARCHE ENTERPRISES INC.	PAGE ROAD X-7-1094-89	GLOUCESTER CITY ON	
CA	Claridge Homes (Carson) Inc.		Ottawa ON	
CA	Claridge Homes (Carson) Inc.		Ottawa ON	
CA	GLOUCESTER CITY	NAVAN RD.	GLOUCESTER CITY ON	
CA		Part of Lots 5 and 6, Conc. 3 Page Rd and Hydro Corridor Pt 2, Ref Plan 5R-14021	Ottawa ON	
CA		Page Rd Allowance bwt Lots 5 and 6, Conc. III	Ottawa ON	
CA	Ashcroft Homes - Eastboro Inc.	Renaud Road	Ottawa ON	
CA	Ashcroft Homes - Eastboro Inc.	Renaud Road	Ottawa ON	
CA	Ashcroft Homes - Eastboro Inc.	Renaud Road	Ottawa ON	
CA	APEX CONST. (VAULTX CONST.)	NAVAN RD.	GLOUCESTER CITY ON	
CA	Claridge Homes (Carson) Inc.	Renaud Rd	Ottawa ON	

EBR	Corporation of the City of Ottawa	East 1/2 Lot 6, Conc. IV(4)	Ottawa ON	
ECA	City of Ottawa	Navan Road	Ottawa ON	K1S 5K2
ECA	Claridge Homes (Carson) Inc.	Renaud Rd	Ottawa ON	K2P 0M6
GEN	OTTAWA-CARLTON, REGIONAL MUN OF 29-004	REGIONAL ROAD #28 (NAVAN ROAD) C/O 175 LORETTA AVENUE NORTH	OTTAWA ON	K1Y 2Z7
GEN	OTTAWA-CARLTON, REGIONAL MUN OF	REGIONAL ROAD #28 (NAVAN ROAD) C/O 175 LORETTA AVENUE NORTH	OTTAWA ON	K1Y 2Z7
SPL	City of Ottawa	and Page Road	Ottawa ON	
SPL	PERMANENT CONCRETE	REGIONAL RD. 28, 1 MI. E. OF NAVAN NAVAN PLANT LOT 9, CONCESSION 6	OTTAWA CITY ON	
SPL	NAVRO INC	ON MR. CALLAHAN PROPERTY NAVAN ROAD GLOUCESTER PLANT NAVAN ROAD	GLOUCESTER CITY ON	

Unplottable Report

Site: *Page Road Pond No. 1*
Pt. of Lot 5, Concession 3 O.F., Plan 4R-7806 Gloucester ON

Database:
CA

Certificate #: 3330-4SUM4R
Application Year: 01
Issue Date: 3/7/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Corporation of the City of Ottawa
Client Address:: 1595, Telesat Court
Client City:: Gloucester
Client Postal Code:: K1G 3V5
Project Description:: This application is for the construction of a storm water management facility (Page Road Pond No. 1) designed for storm water quality and peak flow control serving the East Urba Community.
Contaminants::
Emission Control::

Site: *1250353 Ontario Limited*
Part of Lot 6, Concession 2 and 3, Rideau Ottawa ON

Database:
CA

Certificate #: 9386-674PJH
Application Year: 2004
Issue Date: 12/16/2004
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: *AstenJohnson, Inc.*
Part of Lot 5, Concession 4 Ottawa ON

Database:
CA

Certificate #: 0841-6EXNWZ
Application Year: 2005
Issue Date: 8/12/2005
Approval Type: Industrial Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: *Rideau Forest Development Ltd.*
Part of Lot 5, Concession 3, Geographic Township of Osgoode Ottawa ON

Database:
CA

Certificate #: 9805-6HWM9

Application Year: 2005
Issue Date: 11/16/2005
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: Lot 6, Concession 2 and 3 Ottawa ON

Database:
CA

Certificate #: 6816-54HQ5P
Application Year: 01
Issue Date: 11/16/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Sanitary Sewers including appurtenances from approximately 50m west of Ironside Court to the Goulbourn Forced Road to serve the Kanata Lakes Subdivision, City of Ottawa
Contaminants::
Emission Control::

Site: Lot 6, Concession 2 and 3 Ottawa ON

Database:
CA

Certificate #: 1760-4W5ML6
Application Year: 01
Issue Date: 4/25/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Watermains to be constructed on Witherspoon Crescent
Contaminants::
Emission Control::

Site: Lot 6, Concession 2 and 3 Ottawa ON

Database:
CA

Certificate #: 5772-4W5M6D
Application Year: 01
Issue Date: 4/25/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: KNL Developments Inc.
Client Address:: 222 Somerset Street West, Suite 300
Client City:: Ottawa
Client Postal Code:: K2P 2G3
Project Description:: Storm and sanitary sewers to be constructed on Witherspoon Crescent
Contaminants::
Emission Control::

Site: MICHEL LAMARCHE ENTERPRISES INC.
PAGE ROAD X-7-1094-89 GLOUCESTER CITY ON

Database:
CA

Certificate #: 3-1323-89-
Application Year: 89
Issue Date: 7/17/1989
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: Claridge Homes (Carson) Inc.
Ottawa ON

Database:
CA

Certificate #: 9611-7PUSMB
Application Year: 2009
Issue Date: 3/9/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: Claridge Homes (Carson) Inc.
Ottawa ON

Database:
CA

Certificate #: 8697-6Z5TCD
Application Year: 2007
Issue Date: 4/17/2007
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: GLOUCESTER CITY
NAVAN RD. GLOUCESTER CITY ON

Database:
CA

Certificate #: 3-2067-87-
Application Year: 87
Issue Date: 11/17/1987
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::

Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: *Part of Lots 5 and 6, Conc. 3 Page Rd and Hydro Corridor Pt 2, Ref Plan 5R-14021 Ottawa ON* **Database:**
CA

Certificate #: 7125-4WTRKD
Application Year: 01
Issue Date: 5/18/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Corporation of the City of Ottawa
Client Address:: 110 Laurier Avenue West
Client City:: Ottawa
Client Postal Code:: K1P 1J1
Project Description:: watermains to be constructed on Page Road and Easement within Hydro Corridor
Contaminants::
Emission Control::

Site: *Page Rd Allowance bwt Lots 5 and 6, Conc. III Ottawa ON* **Database:**
CA

Certificate #: 4785-4XFRCF
Application Year: 01
Issue Date: 6/8/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: Corporation of the City of Ottawa
Client Address:: 110 Laurier Avenue West
Client City:: Ottawa
Client Postal Code:: K1P 1J1
Project Description:: The works consist of installation of about 240 m of twin forcemains (300 mm and 400 mm dia.) that will become part of the future Forest Valley P.S. forcemains. The works will be done at this time to take advantage of the road construction. The works include connection to the existing M. H. (bulkheads will be provided at stub ends) and installation of the drain chamber. The forcemains is located within Page Road from approximately 40 m south of Montpelier PL to approximately 280 m south of Montpelier PL.
Contaminants::
Emission Control::

Site: *Ashcroft Homes - Eastboro Inc.
Renaud Road Ottawa ON* **Database:**
CA

Certificate #: 1462-8E5P3N
Application Year: 2011
Issue Date: 2/23/2011
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: *Ashcroft Homes - Eastboro Inc.
Renaud Road Ottawa ON* **Database:**
CA

Certificate #: 2240-8ERLQE

Application Year: 2011
Issue Date: 3/14/2011
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: **Ashcroft Homes - Eastboro Inc.**
Renaud Road Ottawa ON

Database:
CA

Certificate #: 7226-6GLJQM
Application Year: 2011
Issue Date: 6/24/2011
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: **APEX CONST. (VAULTX CONST.)**
NAVAN RD. GLOUCESTER CITY ON

Database:
CA

Certificate #: 3-1234-86-
Application Year: 86
Issue Date: 9/11/1986
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: **Claridge Homes (Carson) Inc.**
Renaud Rd Ottawa ON

Database:
CA

Certificate #: 6667-7P8R2K
Application Year: 2009
Issue Date: 2/13/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name::
Client Address::
Client City::
Client Postal Code::
Project Description::
Contaminants::
Emission Control::

Site: Corporation of the City of Ottawa
East 1/2 Lot 6, Conc. IV(4) Ottawa ON

Database:
EBR

Company Name:
Year: 2007
Notice Type: Instrument Proposal
EBR Registry No.: 010-0975
Instrument Type: Issuance of a Class A licence to remove more than 20,000 tonnes of aggregate annually from a pit or a quarry - ARA s. 7 (2) (a)
Proposal Date:
Ministry Ref. No.: FSD KEM 07/07
Location: East 1/2 Lot 6, Conc. IV(4), Geographic Twp. of Nepean, City of Ottawa
Proponent Address: 110 Laurier Avenue West Ottawa Ontario Canada K1P 1J1
Notice Date:

Site: City of Ottawa
Navan Road Ottawa ON K1S 5K2

Database:
ECA

Approval No: 2148-5PNPTW
Project Type: Municipal Drinking Water Systems
Date: 7/25/2003 9:17:19 AM
Status: Approved
Longitude:
Latitude:
Record Type: ECA
PDF URL:
Full Address:

Site: Claridge Homes (Carson) Inc.
Renaud Rd Ottawa ON K2P 0M6

Database:
ECA

Approval No: 6667-7P8R2K
Project Type: Municipal and Private Sewage Works
Date: 2/13/2009 4:01:44 PM
Status: Approved
Longitude:
Latitude:
Record Type: ECA
PDF URL: https://www.accessenvironment.ene.gov.on.ca/instruments/0490-7NYR9F-14.pdf
Full Address:

Site: OTTAWA-CARLTON, REGIONAL MUN OF 29-004
REGIONAL ROAD #28 (NAVAN ROAD) C/O 175 LORETTA AVENUE NORTH OTTAWA ON K1Y 2Z7

Database:
GEN

Generator No.:	ON0303100	PO Box No.:
Status:		Country:
Approval Years:	94,95,96	Choice of Contact:
Contam. Facility:		Co Admin:
MHSW Facility:		Phone No. Admin:
SIC Code:	8351	
SIC Description:	EXEC./LEGIS. ADMIN.	

--Details--
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

Site: OTTAWA-CARLTON, REGIONAL MUN OF
REGIONAL ROAD #28 (NAVAN ROAD) C/O 175 LORETTA AVENUE NORTH OTTAWA ON K1Y 2Z7

Database:
GEN

Generator No.:	ON0303100	PO Box No.:
Status:		Country:
Approval Years:	88,89,90	Choice of Contact:

Contam. Facility:
MHSW Facility:
SIC Code: 8351
SIC Description: EXEC./LEGIS. ADMIN.

Co Admin:
Phone No. Admin:

--Details--

Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

Site: City of Ottawa
and Page Road Ottawa ON

Database:
SPL

Ref No: 5674-9XVE8G
Contaminant Code: 44
Contaminant Name: SEWAGE,RAW UNCHLORINATED
Contaminant Quantity: 74 m³
Incident Cause: Overflow/Surcharge
Incident Dt: 6/27/2015
Incident Reason: Blockage
Incident Summary: Ottawa manhole blockage, raw sewage to roadway/ditch
MOE Reported Dt: 6/27/2015
Environmental Impact:
Nature of Impact: Land; Surface Water
Receiving Medium:
SAC Action Class: Land Spills
Sector Source Type:
Receiving Environment:
Incident Event:
Site Municipality: Ottawa

Site: PERMANENT CONCRETE
REGIONAL RD. 28, 1 MI. E. OF NAVAN NAVAN PLANT

LOT 9, CONCESSION 6 OTTAWA CITY ON

Database:
SPL

Ref No: 619
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: OTHER CAUSE (N.O.S.)
Incident Dt: 2/24/1988
Incident Reason: ERROR
Incident Summary: PERMANENT CONCRETE - 2,000 L GASOLINE TO GROUND FROM TANK.
MOE Reported Dt: 2/24/1988
Environmental Impact: POSSIBLE
Nature of Impact: SOIL CONTAMINATION
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Receiving Environment:
Incident Event:
Site Municipality: 20101

Site: NAVRO INC
ON MR. CALLAHAN PROPERTY NAVAN ROAD GLOUCESTER PLANT
CITY ON

NAVAN ROAD GLOUCESTER

Database:
SPL

Ref No: 2118
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: OTHER CONTAINER LEAK
Incident Dt: 4/5/1988
Incident Reason: UNKNOWN
Incident Summary: NAVRO INC - UNKNOWN AMOUNT OF LATEX PAINT LEAK TO NEXT DOOR LAND
MOE Reported Dt: 4/5/1988

Environmental Impact:
Nature of Impact:
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Receiving Environment:
Incident Event:
Site Municipality: 20105

Appendix: Database Descriptions

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

Abandoned Aggregate Inventory:

Provincial

AGR

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

Government Publication Date: Sept 2002*

Aggregate Inventory:

Provincial

AGR

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

Government Publication Date: Up to Sep 2016

Abandoned Mine Information System:

Provincial

AMIS

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

Government Publication Date: 1800-Nov 2016

Anderson's Waste Disposal Sites:

Private

ANDR

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

Government Publication Date: 1860s-Present

Automobile Wrecking & Supplies:

Private

AUWR

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

Government Publication Date: 1999-May 2017

Borehole:

Provincial

BORE

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

Government Publication Date: 1875-Jul 2014

Certificates of Approval:

Provincial

CA

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

Government Publication Date: 1985-Oct 30, 2011*

Commercial Fuel Oil Tanks:

Provincial

CFOT

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

Government Publication Date: Feb 28, 2017

Chemical Register:

Private

CHEM

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

Government Publication Date: 1999-May 2017

Compressed Natural Gas Stations:

Private

CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 31, 2012

Inventory of Coal Gasification Plants and Coal Tar Sites:

Provincial

COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions:

Provincial

CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Jul 2017

Certificates of Property Use:

Provincial

CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994-Jul 2017

Drill Hole Database:

Provincial

DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886-Aug 2015

Environmental Activity and Sector Registry:

Provincial

EASR

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

Government Publication Date: Oct 2011-Mar 2017

Environmental Registry:

Provincial

EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994-Jul 2017

Environmental Compliance Approval:

Provincial

ECA

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011-Mar 2017

Environmental Effects Monitoring:

Federal

EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007*

ERIS Historical Searches:

Private

EHS

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Aug 2016

Environmental Issues Inventory System:

Federal

EIIS

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

Government Publication Date: 1992-2001*

Emergency Management Historical Event:

Provincial

EMHE

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

Government Publication Date: Dec 31, 2016

List of TSSA Expired Facilities:

Provincial

EXP

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

Government Publication Date: Feb 28, 2017

Federal Convictions:

Federal

FCON

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

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land:

Federal

FCS

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

Government Publication Date: Jun 2000-Mar 2017

Fisheries & Oceans Fuel Tanks:

Federal

FOFT

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

Government Publication Date: 1964-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: Feb 28, 2017

Fuel Storage Tank - Historic:

Provincial

FSTH

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

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary:

Provincial

GEN

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

Government Publication Date: 1986-Jun 2017

Greenhouse Gas Emissions from Large Facilities:

Federal

GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO₂ eq).

Government Publication Date: 2013-Dec 2015

TSSA Historic Incidents:

Provincial

HINC

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

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks:

Federal

IAFT

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

Government Publication Date: 1950-Aug 2003*

TSSA Incidents:

Provincial

INC

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

Government Publication Date: Feb 28, 2017

Landfill Inventory Management Ontario:

Provincial

LIMO

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

Government Publication Date: Dec 31, 2013

Canadian Mine Locations:

Private

MINE

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

Government Publication Date: 1998-2009*

Mineral Occurrences:

Provincial

MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Feb 2017

National Analysis of Trends in Emergencies System (NATES):

Federal

NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports:

Provincial

NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2014

National Defense & Canadian Forces Fuel Tanks:

Federal

NDFT

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

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills:

Federal

NDSP

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

Government Publication Date: Mar 1999-Aug 2010

National Defence & Canadian Forces Waste Disposal Sites:

Federal

NDWD

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

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents:

Federal

NEBI

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

Government Publication Date: 2008 - Dec 2016

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: 1993-2014**Oil and Gas Wells:**

Private

OGW

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

Government Publication Date: 1988-May 2017**Ontario Oil and Gas Wells:**

Provincial

OOGW

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

Government Publication Date: 1800-Oct 2016**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-Jul 2017**Canadian Pulp and Paper:**

Private

PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009**Parks Canada Fuel Storage Tanks:**

Federal

PCFT

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

Government Publication Date: 1920-Jan 2005*

Pesticide Register:

Provincial PES

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

Government Publication Date: 1988-Oct 2016

TSSA Pipeline Incidents:

Provincial PINC

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

Government Publication Date: Feb 28, 2017

Private and Retail Fuel Storage Tanks:

Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water:

Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994-Jul 2017

Ontario Regulation 347 Waste Receivers Summary:

Provincial REC

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

Government Publication Date: 1986-2016

Record of Site Condition:

Provincial RSC

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

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

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

Retail Fuel Storage Tanks:

Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-May 2017

Scott's Manufacturing Directory:

Private SCT

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

Government Publication Date: 1992-Mar 2011*

Ontario Spills:

Provincial SPL

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

Government Publication Date: 1988-Feb 2017

Wastewater Discharger Registration Database:

Provincial

SRDS

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

Government Publication Date: 1990-2014

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-Jan 2015

TSSA Variances for Abandonment of Underground Storage Tanks:

Provincial

VAR

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

Government Publication Date: Feb 28, 2017

Waste Disposal Sites - MOE CA Inventory:

Provincial

WDS

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

Government Publication Date: Mar 31, 2017

Waste Disposal Sites - MOE 1991 Historical Approval Inventory:

Provincial

WDSH

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

Government Publication Date: Up to Oct 1990*

Water Well Information System:

Provincial

WWIS

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

Government Publication Date: Jun 30, 2016

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

exp Services Inc.

2597237 Ontario Limited
Phase One Environmental Site Assessment
6102 Renaud Road, Ottawa, Ontario
OTT-00242146-A0
September 18, 2017

Appendix E: Site Photographs





Photograph No. 1

View of the Residence on the northern part of the Site



Photograph No. 2

View of the Commercial Building on the southern part of the Site



Photograph No. 3

View of the former AST-1 location, located in the Residence basement



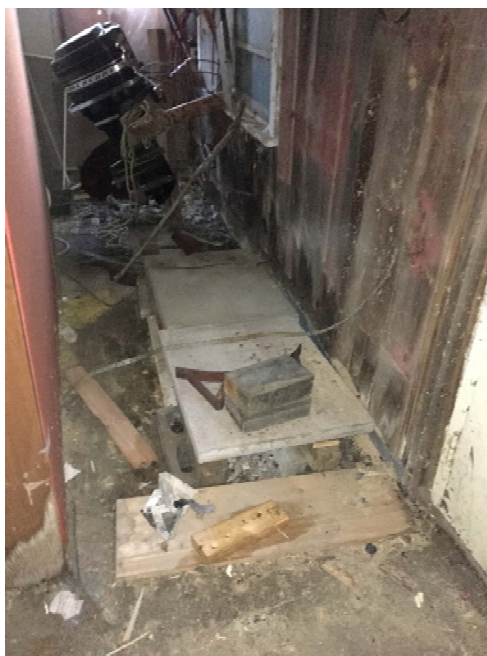
Photograph No. 4

View of the former AST-2 location, located on the exterior west side of the commercial building



Photograph No. 5

View of the former AST-3 location, located on the interior west side of the commercial building



Photograph No. 6

View of the former AST-4 location, located on the interior south part of the commercial building



Photograph No. 7

View of the poor floor condition at the former AST-4 location



Photograph No. 8

View of the chemical storage at the commercial building



Photograph No. 9

View of the garage used for personal use