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## **Phase I Environmental Site Assessment**

1354 and 1376 Carling Avenue Ottawa, Ontario

**Prepared For** 

Holloway Lodging Corporation

#### Paterson Group Inc.

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Report: PE3896-1

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# EXECUTIVE SUMMARY

Paterson Group was retained by Holloway Lodging Corporation to conduct a Phase I Environmental Site Assessment (ESA) of the property addressed 1354 and 1376 Carling Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

The results of the historical research indicated that the subject property was first developed in the early 1900's with residential dwellings. The northwestern and northeastern portions of the site were later developed for commercial purposes circa 1956. A retail fuel outlet (addressed 1384-1386 Carling Avenue at the time) with three USTs, operated on the northwestern portion of the site until circa 1965. A retail fuel outlet and automotive service garage operated on the northeastern portion of the site (addressed 1350 Carling Avenue at the time) until circa 1963. The original portion of the existing hotel complex, was built in 1963 with the remaining phases completed by 1972. The former retail fuel outlets and automotive service garage are potentially contaminating activities (PCAs) which represent areas of potential environmental concern (APECs) on the Phase I Property.

Several off-site historical PCAs, including former retail fuel outlets and/or automotive service garages, were present to the north and northeast of the site, across Carling Avenue, and east of the site, across Archibald Street. These properties are considered to have had the potential to impact the subject land based on their proximity and the local topography and inferred groundwater flow direction, to the south, in the immediate vicinity of the Phase I Property.

At the time of the site visit, no PCAs were identified on the Phase I Property with the exception of diesel fuel storage associated with a small back-up generator in the mechanical room of the Beachcomber (former nightclub). No other on-site PCAs were present at the time of the site visit. No existing off-site PCAs were observed within the Phase I ESA study area at the time of the site visit.

## Recommendations

Based on the results of this Phase I ESA, it is our opinion that a Phase II Environmental Site Assessment is required for the property.

It is our understanding that the Phase I Property is to be redeveloped. As part of the redevelopment, the existing structures will be demolished in stages, beginning with the parking garage structure and tower on the northeastern portion of the Phase I Property.

An asbestos survey for the subject buildings, has been completed by Pinchin (November, 2012). The survey confirmed the present of asbestos throughout each phase of the hotel. Prior to the demolition, an asbestos abatement program must be conducted, in accordance with Ontario Regulation 278/05 under the Health and Safety Act. A designated substance survey (DSS) must also be conducted in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act, in order to address other designated substances, including but not limited to, lead-based paint.

# **1.0 INTRODUCTION**

At the request of Holloway Lodging Corporation, Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of the property addressed 1354 and 1376 Carling Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Gavin MacDonald of Holloway Lodging Corporation. The offices of Holloway Lodging Corporation are located at 6009 Quinpool Road, Halifax, Nova Scotia. Mr. MacDonald can be reached by telephone at (514) 516-2359.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all of our findings and results of the environmental conditions at this site.

This Phase I-ESA report has been prepared in general accordance with the requirements of Ontario Regulation 153/04 as amended by O.Reg. 269/11, and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

# 2.0 PHASE I PROPERTY INFORMATION

Address:	1354 and 1376 Carling Avenue, Ottawa, Ontario.
Legal Description:	Part Blocks 6 and 7 Registered Plan 221 and Part of Road Allowance between Concession 1 (Ottawa Front) and Concession A (Rideau Front) closed by by- law 231-66, Instrument 511589, Geographic Township of Nepean, City of Ottawa.
Property Identification	
Number:	04002-0019 (LT) and 04002-0020 (LT)
Location:	The subject site is located on the south side of Carling Avenue between Meath Street and Archibald Street in the City of Ottawa, Ontario. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	45° 23' 04" N, 75° 44' 12" W.
Site Description:	45° 23' 04" N, 75° 44' 12" W.
<u> </u>	45° 23' 04" N, 75° 44' 12" W. Rectangular (approximately)
Site Description:	
Site Description: Configuration:	Rectangular (approximately)
Site Description: Configuration: Site Area:	Rectangular (approximately) 0.93 hectares (approximate) AM10 – Arterial Mainstreet Zone and R4N – Residential 4 <sup>th</sup> Density Zone (southeast corner of

# 3.0 SCOPE OF INVESTIGATION

The scope of work for this Phase I – Environmental Site Assessment was as follows:

- Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases and regulatory agencies;
- □ Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
- □ Conduct interviews with persons knowledgeable of current and historic operations on the subject property, and if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- D Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

# 4.0 RECORDS REVIEW

#### 4.1 General

#### Phase I-ESA Study Area Determination

A radius of approximately 250 m was determined to be appropriate as a Phase I ESA study area for this assignment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

#### First Developed Use Determination

Based on the city directories, air photo research, fire insurance plans and a chain of title, it is our interpretation that the subject property was first developed in 1909 for residential purposes. The northwestern and northeastern portions of the property were developed in the 1950's for commercial purposes with retail fuel outlets and an automotive service garage. The existing hotel was later developed in stages during the interim of 1963 through 1972.

#### Fire Insurance Plans

Fire Insurance Plans (FIPs), dated 1956, were reviewed for the Phase I Property and Phase I study area. Earlier FIPs were not available for the area of the Phase I Property. Based on the 1956 FIPs, the Phase I Property was previously occupied by the following:

- a retail fuel outlet, previously addressed 1386 Carling Avenue and located on the northwest corner of the Phase I Property;
- □ a retail fuel outlet and automotive service garage, previously addressed 1350 Carling Avenue and located on the northeast corner of the Phase I Property; and
- residential dwellings addressed 1364, 1354 and 1346 Carling Avenue, 816, 822 and 826 Archibald Street and 825 Meath Street.

The aforementioned retail fuel outlets and automotive service garage are potentially contaminating activities (PCAs), resulting in areas of potential environmental concern (APECs) on the northwest and northeast corners of the Phase I Property.

The FIPs also identified several PCAs within the Phase I study area, as presented below in Table 1.

Table 1: Fire Insurance Plans           Potentially Contaminating Activities in Phase I Study Area					
Civic Address	Activity		Potential Environmental Concern (Y / N)		
Carling Av	enue				
1314	Seven-Up Bottling Company (1 underground storage tank (UST))	70 m East	Ν		
1331	Barrington Petroleum Products Limited (bulk fuel storage)	60 m Northeast	N		
1340	Retail fuel outlet and automotive service garage (2 USTs)	35 m East	Y		
1351	Retail fuel outlet and automotive service garage (2 USTs)	40 m Northeast	Y		
1359	Ontario Department of Highways (2 USTs and automotive service garage)	15 m North	Y		
1447	W.L. Ballentine Co. Ltd. Contractors Equipment (storage and repairs)	180 m West	Ν		
Merivale Road					
840	Automotive service garage (2 USTs)	200 m East	Ν		
910	Retail fuel outlet and automotive service garage (7 USTs)	240 m Southeast	Ν		

The former retail fuel outlets/automotive service garages east and northeast of the Phase I Property, previously addressed 1340 and 1351 Carling Avenue, are situated a fair distance from the Phase I property, however based on regional topography and anticipated local groundwater flow direction to the south, they are considered to represent APECs on the northeast portion of the Phase I Property with the potential for concern considered to be low to moderate. The former Ontario Department of Highways is considered to represent an APEC on the northwest portion of the Phase I Property based on its proximity and location upgradient of the Phase I Property.

The remaining PCAs noted above are not considered to represent APECs on the Phase I Property based on their respective distances from the subject land.

### **City of Ottawa Street Directories**

As part of the Phase I ESA, city directories at the National Archives were reviewed in approximate 10 year intervals from 1930 through 2010.

Listings for the residential dwellings previously situated along Meath Street and Archibald Street (as shown on the 1956 FIPs) were not identified during the city directory review. An automotive service garage at 1350 Carling Avenue (currently 1354 Carling Avenue) and a retail fuel outlet at 1384 Carling Avenue (currently 1376 Carling Avenue) were first listed between 1949 and 1956 until the 1960's.

Neighbouring properties within the Phase I study area were used primarily for residential and commercial purposes, with several institutional or industrial properties. Potentially Contaminating Activities identified within the Phase I study area are summarized in Table 2.

Table 2: City Directories – Potentially Contaminating Activities in Phase I           Study Area							
Address	Listed Activity (years listed)	Distance / Orientation from site	Potential Environmental Concern (Y / N)				
Carling Aver	Carling Avenue						
1309	Browns Cleaners (2000)	130 m Northeast	Ν				
1314	Seven-Up Bottling Company (1960)	70 m East	Ν				
1316	Patton's Cleaners (1970)	70 m East	Ν				
1317	Paul Service Stores dry cleaning (1960)	100 m Northeast	N				
1330	Gus and John's Service Station Ltd. (1970, 1980)	35 m East	Y				
1331	Barrington Fuel Oil (1960) BP Oil Ltd. (1970)	60 m Northeast	N				
1331A	Daly's BP Service Station (1970)	40 m Northeast	Y				
1387-1427	Patton's Cleaners (1970)	125 m West	Ν				
1435	Valliant Esso Service (1960)	200 m West	N				
1475	Imperial 3 Star Centre service station (1970)	230 m West	N				
1500	U-Haul (1970, 1980, 1990, 2000)	230 m Southwest	Ν				

The retail fuel outlets (and possible automotive service garages according to the FIPs) addressed 1330 Carling Avenue (addressed as 1340 Carling Avenue on the 1956 FIP) and 1331A Carling Avenue (1351 Carling Avenue on the 1956 FIP) are considered to represent APECs on the Phase I Property, based on separation distance and orientation with respect to the Phase I Property, as previously discussed.

Other PCAs listed above are not considered to represent APECs on the Phase I Property based on their significant separation distances from the Phase I Property.

#### Chain of Title

Paterson verified the current land title for the subject properties with Read Abstracts Limited.

According to the chain of title dated October 17, 2016, the property was owned by private individuals from 1903 through 1962. The property was leased by Supertest Petroleum Corporation and/or Imperial Petroleum Corporation from 1956 through 1963. Talisman Hotels Limited purchased the property in stages from 1962 through 1967, after which the land was sold to private corporations including several hotels. The current property owner, Royal Host GP Inc., has owned the property in its entirety, since 1998.

#### **Engineering Reports**

According to Mr. Gavin MacDonald with Holloway Lodging Corporation, no previous Phase I or Phase II Environmental Site Assessment reports were available for review. Mr. MacDonald provided a previous Asbestos Assessment Report prepared by Pinchin Environmental in November of 2012. According to this report, asbestos containing materials are present within each building phase.

#### **Topographical Plan**

A topographical plan, prepared by Annis, O'Sullivan, Vollebekk Ltd. and dated January 21, 2016, was reviewed as part of this assessment. A copy of the plan is provided in Appendix I.

## 4.2 Environmental Source Information

#### **Environment Canada**

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on September 26, 2016. The Phase I Property was not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

#### PCB Inventory

A search of national PCB waste storage sites was conducted. No PCB waste storage sites are located within the Phase I study area.

#### **Ontario Ministry of Environment and Climate Change (MOECC) Instruments**

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOE issued instruments for the site. A response from the MOECC had not been received at the time this report was issued. A copy of the initial MOECC response is provided in Appendix 2.

#### **MOECC Coal Gasification Plant Inventory**

The Ontario Ministry of Environment document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. No coal gasification plants were identified within 1 km of the subject site.

#### **MOECC** Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. A response from the MOECC had not been received at the time this report was issued. A copy of the initial MOECC response is provided in Appendix 2.

#### **MOECC Waste Management Records**

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. Applicable information of current and historical waste storage locations, waste generators and waste receivers pursuant to Ontario Regulation 347 was considered in this review. A response from the MOECC had not been received at the time this report was issued. A copy of the initial MOECC response is provided in Appendix 2.

#### **MOECC** Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions that have been submitted to the MOECC. A response from the MOECC had not been received at the time this report was issued. A copy of the initial MOECC response is provided in Appendix 2.

#### MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No Records of Site Condition (RSCs) were filed for the Phase I Property or for other properties within the Phase I study area.

#### MOECC Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. There are no active or closed waste disposal sites or former manufactured gas or coal tar distillation plans within the Phase I ESA study area.

#### Areas of Natural Significance (ANSIs)

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on September 26, 2016. The search did not reveal any natural features or ANSIs within the Phase I study area.

#### Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on April September 26, 2016 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. No records are listed in the TSSA registry for the Phase I Property or for the immediately adjacent and neighbouring properties within the Phase I study area. A copy of the TSSA correspondence is included in Appendix 2.

#### **City of Ottawa Landfill Document**

The document entitled "Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa", was reviewed. Based on this document, there are no former landfills within the Phase I ESA study area.

#### **Former Industrial Sites**

The report entitled "Mapping and Assessment of Former Industrial Sites, City of Ottawa" was also reviewed. The Phase I Property was not listed in the database of former industrial sites. One former industrial site was identified within the Phase I Study Area: Barrington Petroleum Products Ltd. (Site No. 20) located on the north side of Carling Avenue at Archibald Street. According to the report, this property was listed as non-industrial and used for the bulk storage of oil and gas. Based on its distance of approximately 70 m northeast of the Phase I Property, the former Barrington Petroleum Products Ltd. site is not considered to pose a significant concern to the property.

#### City of Ottawa Historical Land Use Inventory (HLUI)

A search of the City of Ottawa's Historical Land Use Inventory (HLUI) database was conducted as part of this assessment. The HLUI search identified two activities associated with the Phase I Property, as well as 16 activities associated with properties within the Phase I Study Area. The HLUI search results are summarized in Table 3.

Address	Listed Activity (years listed)	Approximate Distance / Orientation from site	Potentially Environmental Concern (Y/N)	
1350 Carling Avenue	Perry's Garage (circa 1957-1960)	Subject Property	Y	
1384 to 1386 Carling Avenue	George F. Lefebvre Gasoline Service Station (circa 1957-1960)	Subject Property	Y	
824 Meath Street	P.B. Fraser and Associates (circa 1998) <sup>1</sup>	15 m West	Ν	
1321 Thames Street	Aspen Transportation Logistics (circa 2005)	Adjacent to the south	Ν	
1322 Thames Street	Meteor Painters Contractors (circa 2005)	45 m south	Ν	
1325 Thames Street	Custom Plastics (circa 2005) <sup>2</sup>	Adjacent to the south	Ν	
1340 Thames Street	2 50 m S		Ν	
1320 Carling Avenue	Tenaquip, equipment and supplies wholesale (circa 2001)	60 m East	Ν	
1330 Carling Avenue	Gasoline Service Station (circa 1957-980)	15 m East	Y	
1331 Carling Avenue			Y	
Dental Lab (circa 1998)Ottawa Consumer Electronics (circa 2001)1335 Carling AvenueElectro Sonic Inc. (circa 2001-2005)E.B. Eddy Forest Products Ltd. (circa 1994) Kidney Foundation Ottawa (circa 2005)2		80 m Northeast	Ν	
1339 Carling Avenue	rling Sun Oil Company Limited (Petroleum Products Wholesale; circa 1948-1970)		Ν	
1359 Carling Avenue	Ontario Department of Highways (circa 1948-1957)	15 m North	Y	
on information obtain property is considere 2 – The HLUI report i	dentifies the property at 824 Meath Street a ed from city directories in combination with d to have been occupied by office space sir dentifies the Kidney Foundation of Ottawa a ation is considered to be inaccurate.	a review of aerial pho nce the 1990's	tographs, this	

As discussed in previous sections, on-site PCAs representing APECs on the Phase I Property include the former garage and retail fuel outlet at 1350 and 1384-1386 Carling Avenue, respectively. Off-site PCAs considered to represent APECs on the Phase I Property include the former retail fuel outlets at 1330 and 1331 Carling Avenue and the Ontario Department of Highways at 1359 Carling Avenue. Other activities listed above are not considered to be PCAs based on the nature of the activity.

It should be noted civic addresses have changed over the years and those listed above may not currently exist. The respective distances of the above noted activities from the RSC property were determined using FIPs and the City of Ottawa electronic mapping website.

## 4.3 Physical Setting Sources

#### Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. The review period dates back to the first available air photos for the site. Based on the review, the following observations have been made:

- 1928 (City of Ottawa) The Phase I Property appears to be used for residential and possibly agricultural purposes. A creek or drainage ditch runs across the southern portion of the site in a southwestnortheast direction. Meath Street, Archibald Street, Thames Street and Carling Avenue are present at this time. Adjacent and neighbouring properties generally appear to have been used for a combination of residential and agricultural purposes, with a railway line present further north of across Carling Avenue.
- Due to the scale of the photograph, it is difficult to distinguish site details pertaining to the Phase I Property and properties within the Phase I study area. The Phase I Property appears to remain unchanged. The property to the north of the Phase I Property, across Carling Avenue, appears to have been redeveloped for commercial purposes. An apparent commercial property has been developed to the northeast of the Phase I Property, also on the north side of Carling Avenue. No other significant changes appear to have been made to the adjacent or neighbouring properties.

1959 Additional residential development appears to have occurred along Archibald Street on the eastern portion of the Phase I Property. Possible commercial structures have been developed on the northwestern and northeastern portions of the Phase I Property. The central portion of the Phase I property appears to be vacant, treed land.

> The properties to the southwest of the Phase I Property, across Meath Street appear to have undergone residential development, while the land west of the Phase I Property, immediately south of Carling Avenue, appears to be undergoing development. Additional residential development has also occurred to the south and east of the Phase I Property along Thames and Archibald Streets.

> Additional commercial development appears to have occurred further to the north of the Phase I Property, across Carling Avenue, and to the east of the Phase I Property, along both sides of Carling Avenue. Further to the north, Highway No. 417 is under construction, along the former railway easement.

- 1962 The Phase I Property appears to remain unchanged. The adjacent land to the west, across Meath Street and immediately south of Carling Avenue appears to have been redeveloped with a residential apartment building. The land north of the Phase I Property, between Carling Avenue and Highway No. 417, is occupied by access ramps and landscaping. Additional residential development appears to have occurred along the south side of Thames Street, further south of the Phase I Property. Otherwise, no significant changes appear to have been made to the adjacent and neighbouring properties.
- 1965 (City of Ottawa) The northwestern corner of the Phase I Property is occupied by what appears to be a retail fuel outlet with a kiosk and pump island. The land to the south of the retail fuel outlet is occupied by a parking lot followed by a residential dwelling (seen in previous photographs). The central portion of the site is occupied by the original portions of the existing hotel complex. The eastern portion of the site is occupied by the residential structure previously seen along Carling Avenue, as well as a paved area; the commercial structure and second dwelling formerly situated on the northeastern portion of the property are no longer present.

Residential dwellings on the southeastern portion of the Phase I Property, fronting onto Archibald Street, remain unchanged.

Additional residential development has occurred further south of the Phase I Property, along Coldrey Avenue. Otherwise no significant changes appear to have been made to the adjacent and neighbouring properties.

- 1975 The western and eastern portions of the Phase I Property have been redeveloped with the additions to the existing hotel complex and a parking structure. The adjacent and surrounding properties appear to remain unchanged. It should be noted that the properties to the north, across Carling Avenue are not fully covered in this photograph.
- 1983 The Phase I Property remains unchanged from the previous photograph. Commercial redevelopment has occurred immediately east of the Highway No. 417 access ramp, northeast of the Phase I Property. The property at the southeast corner of Carling Avenue and Archibald Street, has been redeveloped, although it continues to be used for commercial purposes. No other significant changes appear to have been made to the adjacent and neighbouring properties.
- 1993 No apparent changes have been made to the Phase I Property or to the adjacent and neighbouring properties. It should be noted that this photo does not cover the adjacent properties to the east, across Archibald Street.
- 2002 The Phase I Property appears to remain unchanged. The adjacent and neighbouring properties appear to remain unchanged.
- 2014 (City of Ottawa) The Phase I Property and properties with the Phase I ESA study area appear as they currently exist.

Laser copies of selected aerial photographs reviewed are included in Appendix 1.

### Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the local topography in the immediate vicinity of the site slopes gently downward to the south, while the regional topography generally slopes down to the northwest, toward the Ottawa River.

According to the maps, the nearest water body is the Ottawa River, located approximately 2 km to the northwest of the Phase I Property. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report

#### Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." The subject site is located in the Central St. Lawrence Lowland, which is generally less than 150 m above sea level.

#### Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of interbedded limestone and dolomite of the Gull River Formation. Overburden is reported to consist of Glacial Till of depths ranging from 5 to 10 m over the majority of the site and 10 to 15 m on the southwestern corner of the site.

#### Water Well Records

Well records for all drilled wells within the Phase I study area were obtained from the MOECC website. Based on the results of the well records search, there are no well records for the Phase I Property. A total of 37 well records were obtained for properties within 250 m of the subject land.

Records of 25 monitoring wells were located for the properties at 1447 Carling Avenue, 848 Merivale Road and Thames Street and are not considered to represent a concern to the Phase I Property based on their separations distances (1447 Carling Avenue and 848 Merivale Road) or the nature of their purpose (monitoring wells along Thames Street associated with an environmental screening program for a water main rehabilitation).

The remaining well records were for historical potable wells which are no longer present; all properties within the Phase I ESA study area are currently serviced with municipal water. Copies of the well records are provided in Appendix 2.

#### Water Bodies and Areas of Natural Significance

No water bodies are present within the Phase I study area. The Ottawa River is the closest significant water body and is present approximately 2 km northwest of the Phase I Property. The Phase I study area has been developed with primarily residential and commercial properties since the early 1900's; no areas of natural significance are known to exist within the Phase I study area.

## 5.0 INTERVIEWS

#### **Property Owner Representative**

Mr. Jean-Pierre Benjamin, the General Manager of the Travelodge Hotel, was interviewed by telephone on September 28, 2016, prior to the site visit. According to Mr. Benjamin, the property was residential and/or vacant prior to being developed with the hotel, in three phases during the early 1970's. To his knowledge the subject buildings were always heated with natural gas. Mr. Benjamin indicated that building plans were available for review and that a long-time hotel employee Mr. Pete Lacasse, with the hotel for approximately 30 years, would be able to provide more information with regards to the history of the property at the time of the site visit. Mr. Benjamin also notified Paterson that the tower at 1354 Carling Avenue was condemned due to the presence of asbestos, and would not be accessible during the site visit.

Mr. Benjamin and Mr. Lacasse, accompanied Paterson personnel on a walkthrough of the site on October 3, 2016. To the knowledge of Mr. Lacasse, the property has always been heated with a combination of natural gas fired equipment and electricity and that fuel-oil has never been stored on-site, with the exception of a small diesel tank beneath the backup generator in the Beachcomber mechanical room (1376 Carling Avenue). Mr. Lacasse indicated that a back-up generator was also present in the basement of the hotel tower (1354 Carling Avenue), although this generator is powered via natural gas.

The hotel staff interviewed as part of this assessment were unaware of the previous commercial use (retail fuel outlets and automotive service garage) of the property in additional to the previous residential land use. Otherwise, the information obtained in this interview is generally consistent with site information obtained from other sources and is considered to be valid.

# 6.0 SITE RECONNAISSANCE

## 6.1 General Requirements

A representative from the Environmental Department of Paterson Group conducted a site visit on October 3, 2016. Weather conditions were overcast with a temperature of approximately 10°C. At the time of the site visit, the neighbouring properties within the Phase I study area were also observed from publicly accessible areas.

## 6.2 Specific Observations at Phase I Property

#### **Buildings and Structures**

The Phase I Property is currently occupied by a hotel and a parking garage structure. The hotel consists of a lobby, three wings of guest rooms, the Greenery/Beachcomber (situated on the northwestern portion of the site), the Centennial ballroom adjacent to the east of the guest rooms, and a tower. On the exterior the tower appears to stand alone, however it is connected via the basement level, to the remainder of the hotel. The former exterior pool situated between the two western most wings, was enclosed at some time between 2002 and 2005, and retrofitted as an interior water park. Two stairwells providing access to the basement level of the hotel structure, are present on the northern portion of the property along Meath Street.

The hotel structure ranges from 1 to 3 stories, with the exception of the hotel tower which has 7 stories including the penthouse level. A full basement is present beneath the entire footprint of the hotel, including the tower. The boiler room of the tower is situated within a sub-basement, approximately 2 m lower than the basement level throughout the remainder of the structure.

The hotel and tower were constructed with concrete foundations and finished on the exterior with a combination of red brick, decorative stone and mortar, wood panelling, parging, vinyl siding and glass. The rooftops are generally flat tar and gravel style or finished with asphaltic shingles. The roof of the former Greenery restaurant is partially finished with glass windows.

The buildings are heated with a combination of electricity and natural gas fired equipment.

A parking garage structure, consisting of a below-grade level and an abovegrade level, occupies the eastern portion of the subject property. A concrete slab with a manhole and what appeared to be an exterior pipe, was present immediately south of the water park. According to building plans reviewed in conjunction with the site visit, an underground storm water storage tank is present at this location. A below ground pool, was previously present at the location of the current garden and has reportedly filled in.

No other buildings or structures were present on the Phase I Property at the time of the site visit.

#### Underground Utilities

Underground service locates were completed for the subject site in October of 2016. Underground utilities include natural gas, telephone, fibre optic, cable, electricity and municipal water and sewers. Private electrical services and sewers are also present on the subject property. The approximate locations of some of the aforementioned utilities are shown on Drawing PE3896-1 - Site Plan.

#### Site Features

The subject buildings and parking garage structure occupy the majority of the Phase I Property. Groundcover at the Phase I Property where buildings and structures are not present, consists of paved access laneways and parking areas, as well as landscaped areas.

No aboveground storage tanks (ASTs) or signs of underground storage tanks (USTs) were observed on the exterior of the property at the time of the site visit. Based on the age of the buildings (1963 through 1972) and information provided by Mr. Jean-Pierre Benjamin and Mr. Pete, the structure is considered to have been heated with natural gas since its construction.

Other than the aforementioned underground utilities, catch basins and storm water storage tank associated with the private sewer system, there was no evidence of belowground structures observed on the exterior of the Phase I Property at the time of the site visit. Drawings reviewed in conjunction with the site visit indicate that the storm water storage tank is situated approximately 2.1 m below grade and has a volume of 30.2 m<sup>3</sup> or 30,200 L. Tank construction details were not available for review. As noted above, a former in-ground pool within the existing garden area, has been in-filled.

No evidence of recent excavation or current or former railway or spur lines was observed on the exterior of the subject property at the time of the site visit. There were no unidentified substances observed on the exterior of the Phase I Property at the time of the site visit.

The subject property is serviced with municipal water. There were no potable wells observed on the Phase I Property or on other properties within the Phase I study area, at the time of the site visit.

The above-noted site features are shown on Drawing PE3896-1 - Site Plan.

#### Fill Material

Fill material was identified on the Phase I Property during the Phase II ESA investigation conducted subsequent to the completion of the Phase I site visit. The fill material generally consisted of granular material associated with the pavement structure, over brown silty sand with gravel. Pieces of brick, glass and possible slag were identified at two locations in the vicinity of the former automotive service garage, east and south of the existing tower. Please refer to Report: PE3896-2 for further details pertaining to the subsurface investigation.

#### Interior Assessment

The basement level of the hotel tower at 1354 Carling Avenue was accessible at the time of the site visit, however the remainder of the building had been sealed off due to the presence of asbestos, and was not accessible. The basement of the tower consisted of a boiler room, mechanical room, gas meter room, maintenance room and storage area. Surfaces were primarily unfinished, consisting of poured concrete floors, ceilings and concrete or concrete block walls. Where present, surface finishes consisted of vinyl floor tiles, stipple ceiling finish and acoustic ceiling tiles.

The operational portion of the hotel consists of three wings of guest rooms, a main floor lobby with gift shop and washrooms, a dining area and kitchen (no longer operational; serves continental breakfast only), a water park and the Greenery (former restaurant).

The basement levels consist of ball rooms/conference rooms (including the Centennial), the former Beachcomber nightclub, washrooms, office space, a former kitchen, a laundry room, a garbage room and storage rooms, as well as mechanical and electrical rooms.

Generally, interior finishes consist of the following:

- □ Floors consist of a combination of carpet, ceramic tile, vinyl tile, laminate and unfinished poured concrete.
- Walls are finished with gypsum board ceramic tile (kitchens), concrete and/or concrete block.
- Ceilings are finished with gypsum board, stipple or poured concrete.
- Lighting throughout the building is provided by halogen, fluorescent and incandescent fixtures.

As discussed previously, the subject structures are heated and cooled with a combination of natural gas fired heating equipment and electricity. There are several boiler rooms within the subject structures: tower boiler room (1354 Carling Avenue), Beachcomber boiler room and a main kitchen boiler room (1376 Carling Avenue). The guest rooms at 1376 Carling Avenue are heated with individual electrical units. The Centennial Ballroom was previously heated through the use of a boiler, however it is now heated/cooled with two rooftop heating, ventilation and air conditioning (HVAC) units. In addition to the boiler rooms, there is a natural gas fired heating system associated with the pool.

As noted previously, there are two back-up generators present in the tower mechanical room and the Beachcomber mechanical room. The generators are fuelled with natural gas and diesel fuel, respectively.

Liquid discharged from the subject site includes wash water and sewage from the subject structure. Multiple floor drains were observed on the interior of the structure at the time of the site visit. Water noted in the floor drains was generally clear, or clouded with organic build up. No concerns were identified with respect to floor drains.

Two sump pits were observed in the mechanical room of the tower (1354 Carling Avenue); the pits were approximately  $0.7m \times 0.7m \times 2m$ . A lift station with two sump pits was located near the Beachcomber Room. The pits were approximately  $0.5m \times 0.5m \times 1.0m$  and  $2m \times 1m \times 2m$ . A sump pit was also present in the Beachcomber mechanical room, with approximate dimensions of  $0.7m \times 0.7m \times 2m$ . A fifth sump pit was observed in the garbage room near the shipping and receiving area adjacent the Centennial room, within the south-central portion of the structure (1376 Carling Avenue). The pit was similar in construction to the aforementioned pits with approximate dimensions of  $0.7m \times 2m$ . With the exception of one of the sump pits, all were accessible at the time of the site visit. No obvious signs of impact were noted on the water in any of the pits.

A total of three elevators are present within the subject buildings (1354 and 1376 Carling Avenue).

Two (2) grease traps were present in the main kitchen. The kitchen was reportedly shut down in 2015, at which time the grease traps were most recently cleaned by a licenced contractor. Prior to this time, the grease traps were cleaned on an as-needed basis. No concerns were noted with regards to the grease traps.

Chemical storage within the subject structure at the time of the site visit included commercially-available cleaning products and paint, as well as small quantities of lubricants and motor oils (less than 10 L containers) and propylene glycol (two 20 L pails) associated with the mechanical equipment.

As mentioned above, a small diesel generator with a sub-base diesel tank, was present in the mechanical room of the Beachcomber. Minor staining was observed on the concrete floor in the vicinity of the generator; the floor slab was in good condition with no potential migratory pathways.

Pool maintenance chemicals were also stored on site, including 4.5 L, 20 L and 4 L containers of Aqua Balance Total Alkalinity, Aqua Balance Pool Disinfectant and Aqua Balance muriatic acid, respectively. All chemicals were properly stored in sealed containers and are not considered to pose a concern to the Phase I Property.

#### Hazardous Building Materials

Mr. MacDonald provided an Asbestos Assessment Report prepared by Pinchin Environmental (Pinchin) in November of 2012. According to this report, asbestos containing materials (ACMs) are present within each building phase. Please refer to the Pinchin report for further details.

Paint samples were not analysed during the Pinchin assessment. Based on the age of the buildings (1963 through 1972), it is considered possible that lead-based paint (LBP) is present on original or older painted surfaces.

Based on the age of the buildings, PCBs may be present within original or older electrical equipment, such as transformers, particularly within the Hydro Vault which was not accessible at the time of the site assessment. PCBs may also be present within fluorescent light ballasts, however it is considered likely that any original ballasts have by now been replaced with PCB-free ballasts. Ozone-depleting substances (ODSs) may be present within refrigerators, freezers and fire extinguishers on-site. These appliances should be maintained by a licenced contractor.

Urea formaldehyde foam insulation (UFFI) was not observed at the time of the site visit. It should be noted that interior wall cavities were not accessed at this time.

#### **Neighbouring Properties**

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection. Land use adjacent to the Phase I Property was as follows:

- North Carling Avenue followed by vacant, undeveloped land and Highway No. 417;
- □ South Residential followed by Thames Street;
- East Archibald Street followed by commercial (2<sup>nd</sup> Chance Auto Sales at 1330 Carling Avenue/815 Archibald Street) and residential; and
- West Meath Street followed by residential and commercial (office building) and residential followed by commercial and residential properties.

Existing PCAs are not considered to be present on the immediately adjacent properties.

Land use within the Phase I study area (250 m radius) is primarily used for residential and commercial purposes with some institutional land use. No existing off-site PCAs were identified at the time of the site visit. Surrounding land use is shown on Drawing PE3896-2 – Surrounding Land Use Plan.

# 7.0 REVIEW AND EVALUATION OF INFORMATION

## 7.1 Land Use History

The following table outlines the general ownership and land use dating back to the first developed use of the Phase I Property.

Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photos, FIPs, etc.
Vesting order r individuals	registered June 13	, 1903 to Jessie S	Stewart; subseque	ently sold in parcels to various
1903 to 1958/1962	Sold in parcels to various individuals (leased to Supertest Petroleum Corporation between 1956 and 1963)	Residential (retail fuel outlets, automotive service garage circa 1956)	Residential followed by Residential and Commercial	<ul> <li>1928 aerial shows residential properties along Carling Avenue, Meath Street and Archibald Street with apparent outbuildings on the south-central portion of site associated with residential properties along Thames Street.</li> <li>1956 FIP shows retail fuel outlet and automotive service garage on the northwestern and northeastern portions of the Phase I Property; 1958 aerial similar to FIP.</li> </ul>
1958/1962 to 1989	Owned by various corporations	Retail fuel outlet and hotel (fuel outlet no longer present circa 1965)	Residential and Commercial followed by Commercial only	Original portion of hotel complex present on central portion of Phase I Property in 1965 photograph; automotive service garage no longer present although retail fuel outlet remains on northwest corner of property; 1976 photo shows Phase I Property as it appears today.
1989-1998	Shenkman Corporation	Hotel	Commercial	Land use remains unchanged in 1983 and 1993 aerials.
1998-2008	1283293 Ontario Limited	Hotel	Commercial	No changes to land use in 1999 or 2002 aerials.
2008-2011	Royal Host hotels GP Inc.	Hotel	Commercial	Property remains unchanged in 2008 and 2011 aerials.
2011- present	Royal Host GP Inc.	Hotel	Commercial	2014 aerial similar to previous aerials.

# Potentially Contaminating Activities and Areas of Potential Environmental Concern

Potentially contaminating activities (PCAs) considered to result in areas of potential environmental concern (APECs) on the Phase I Property, are described in Table 6 below and shown in red on Drawing PE3896-2 – Surrounding Land Use Plan. The anticipated APECs on the Phase I Property are outlined in red on Drawing PE3896-1 – Site Plan.

Additional historical PCAs identified within the Phase I study area were not considered to represent APECs on the Phase I Property based on their respective separation distances and/or their inferred down-gradient or cross-gradient orientations with respect to the Phase I Property. These PCAs are shown in green on Drawing PE3896-2.

1354 and 1376 Carling Avenue Ottawa, Ontario

Area of Potential Environmental Concern APEC 1:	Location of Area of Potential Environmental Concern with respect to Phase I Property	Potentially Contaminating Activity	Location of PCA (on-site or off- site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
resulting from historical underground storage tanks (USTs) at former Ontario Department of Highways to the north of the northwestern portion of the Phase I Property	Northwestern portion of the Phase I Property	Item 28, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Gasoline and Associated Products Storage in Fixed Tanks")	Off-site	VOCs, PHCs (F1-F4)	Soil and Groundwater
APEC 2: resulting from former on-site retail fuel outlet (3 USTs) on northwestern portion of Phase I Property	Northwestern portion of Phase I Property	Item 28, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Gasoline and Associated Products Storage in Fixed Tanks")	On-site	BTEX, PHCs (F1-F4)	Soil and Groundwater
APEC 3: resulting from on-site diesel generator	Northwestern portion of Phase I Property	Item 28, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Gasoline and Associated Products Storage in Fixed Tanks")	On-site	BTEX, PHCs (F1-F4)	Soil and Groundwater
APEC 4: Resulting from former retail fuel outlet (2 USTs) on northeastern portion of Phase I Property	Northeastern portion of Phase I Property	Item 28, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Gasoline and Associated Products Storage in Fixed Tanks")	On-site	BTEX, PHCs (F <sub>1</sub> -F <sub>4)</sub>	Soil and Groundwater

Area of	Location of	nmental Concer Potentially	Location	Contaminants	Media
Potential Environmental Concern	Area of Potential Environmenta I Concern with respect to Phase I Property	Contaminating Activity	of PCA (on-site or off- site)	of Potential Concern	Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 5: Resulting from former automotive service garage on northeastern portion of Phase I Property	Northeastern portion of Phase I Property	Item 52, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems")	On-site	VOCs, PHCs (F <sub>1</sub> -F <sub>4)</sub> , PAHs	Soil and Groundwater
APEC 6: Resulting from former retail fuel outlet (2 USTs) at 1330 Carling Avenue, across Archibald Street	Northeastern portion of Phase I Property	Item 28, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Gasoline and Associated Products Storage in Fixed Tanks")	Off-site	VOCs, PHCs (F <sub>1</sub> -F <sub>4)</sub>	Soil and Groundwater
APEC 7: Resulting from former retail fuel outlet (2 USTs) across Carling Avenue	Northeastern portion of Phase I Property	Item 28, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Gasoline and Associated Products Storage in Fixed Tanks")	Off-site	VOCs, PHCs (F1-F4)	Soil and Groundwater
APEC 8: Resulting from imported fill material	Eastern portion of Phase I Property	Item 30, Table 2, O.Reg.153/04 as amended by O.Reg.269/11 ("Importation of Fill Material of Unknown Quality")	On-site	Metals PAHs	Soil Soil and Groundwater

#### **Contaminants of Potential Concern (CPCs)**

Based on the PCAs identified above, CPCs potentially present on or beneath the Phase I Property include volatile organic compounds (VOCs), benzene, toluene, ethylbenzene and xylenes (BTEX), petroleum hydrocarbons (PHCs), polynuclear aromatic hydrocarbons (PAHs) and metals.

# 7.2 Conceptual Site Model

#### Geological and Hydrogeological Setting

Based on The Geological Survey of Canada website, bedrock in the area of the site consists of interbedded limestone and dolomite of the Gull River Formation. Overburden is reported to consist of Glacial Till of depths ranging from 5 to 10 m over the majority of the site and 10 to 15 m on the southwestern corner of the site. Based on the findings of the Geotechnical and Phase II ESA investigations conducted in conjunction with the Phase I ESA, overburden generally consists of silty clay over Glacial till and bedrock ranges in depth from approximately 6 to 10 m below grade.

The regional topography slopes down to the north, however the topography in the immediate vicinity of the Phase I Property slopes down to the south. The local groundwater flow beneath the Phase I Property is inferred to be in a southerly direction.

#### **Contaminants of Potential Concern**

As noted above, the CPCs identified in this Phase I ESA included VOCs or BTEX, PHCs, PAHs and metals. CPCs may be encountered in the soil or groundwater in the vicinity of the historical on-site and off-site retail fuel outlets and automotive service garage, on the northeastern and northwestern portions of the Phase I Property. Potential mechanisms of contaminant transport within the groundwater system include advection, dispersion, and diffusion.

#### **Existing Buildings and Structures**

The subject site is occupied by an operational hotel with an interior water park. The portions of the hotel occupied by guest rooms are 3 stories, while the lobby and common areas are 1 to 2 stories. A tower, previously housing guest rooms, is present on the eastern portion of the Phase I Property and has 7 stories including the penthouse level; the tower was not operational at the time of the site visit due to the presence of asbestos. A basement level connects the tower to the main hotel building.

Two access stairwells leading to the basement of the western portion of the hotel, are present on the west portion of the Phase I property along Meath Street.

A parking garage structure is present on the eastern portion of the subject property. The garage consists of a below grade and an above grade level.

#### Water Bodies

There are no water bodies on the Phase I Property or within the Phase I study area. The closest water body is the Ottawa River, located approximately 2km to the northwest.

#### Areas of Natural Significance

No areas of natural significance were identified on the Phase I Property or in the Phase I study area.

#### Drinking Water Wells

No drinking water wells are located on the Phase I Property or within the Phase I study area.

#### **Groundwater Monitoring Wells**

No groundwater monitoring wells were observed on the Phase I Property or within the Phase I study area at the time of the site visit.

According to electronic mapping provided by the MOECC, there are 25 records for monitoring wells in the Phase I Study area at the following addresses: 1447 Carling Avenue, 848 Merivale Road and Thames Street. The properties at 1447 Carling Avenue and 848 Merivale Road are not considered to pose a concern to the Phase I Property based on their separation distances of over 150 m. The monitoring wells installed on Thames Street were installed as part of an Environmental Screening Program for a municipal water main replacement project and are not considered to be representative of a concern in the vicinity, based on the findings of the historical research conducted as part of the Phase I ESA. Records for the decommissioning of the aforementioned wells at 1447 Carling Avenue were also identified.

#### Neighbouring Land Use

Neighbouring land use in the Phase I study area is primarily commercial and residential with occasional community or institutional uses. Land use is shown on Drawing PE3896-2 - Surrounding Land Use Plan.

# Potentially Contaminating Activities and Areas of Potential Environmental Concern

Potentially contaminating activities (PCAs) that are considered to represent areas of potential environmental concern (APECs) on the Phase I Property were presented above in Table 5, in Section 7.1 of this report.

Additional historical PCAs were identified within the Phase I study area, however these activities were not considered to represent APECs on the Phase I Property based on their respective separation distances and inferred orientations down or cross-gradient with respect to the Phase I Property.

#### Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that there are areas of potential environmental concern on the subject site resulting from current and historical uses of neighbouring properties. The presence of potentially contaminating activities was confirmed by a variety of independent sources. The conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

# 8.0 CONCLUSIONS

#### Assessment

Paterson Group was retained by Holloway Lodging Corporation to conduct a Phase I Environmental Site Assessment (ESA) of the property addressed 1354 and 1376 Carling Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

The results of the historical research indicated that the subject property was first developed in the early 1900's with residential dwellings. The northwestern and northeastern portions of the site were later developed for commercial purposes circa 1956. A retail fuel outlet (addressed 1384-1386 Carling Avenue at the time) with three USTs, operated on the northwestern portion of the site until circa 1965. A retail fuel outlet and automotive service garage operated on the northeastern portion of the site (addressed 1350 Carling Avenue at the time) until circa 1963. The original portion of the existing hotel complex, was built in 1963 with the remaining phases completed by 1972. The former retail fuel outlets and automotive service garage are potentially contaminating activities (PCAs) which represent areas of potential environmental concern (APECs) on the Phase I Property.

Several off-site historical PCAs, including former retail fuel outlets and/or automotive service garages, were present to the north and northeast of the site, across Carling Avenue, and east of the site, across Archibald Street. These properties are considered to have had the potential to impact the subject land based on their proximity and the local topography and inferred groundwater flow direction, to the south, in the immediate vicinity of the Phase I Property.

At the time of the site visit, no PCAs were identified on the Phase I Property with the exception of diesel fuel storage associated with a small back-up generator in the mechanical room of the Beachcomber (former nightclub). No other on-site PCAs were present at the time of the site visit. No existing off-site PCAs were observed within the Phase I ESA study area at the time of the site visit.

## Recommendations

Based on the results of this Phase I ESA, it is our opinion that a Phase II Environmental Site Assessment is required for the property.

It is our understanding that the Phase I Property is to be redeveloped. As part of the redevelopment, the existing structures will be demolished in stages, beginning with the parking garage structure and tower on the northeastern portion of the Phase I Property.

An asbestos survey for the subject buildings, has been completed by Pinchin (November, 2012). The survey confirmed the present of asbestos throughout each phase of the hotel. Prior to the demolition, an asbestos abatement program must be conducted, in accordance with Ontario Regulation 278/05 under the Health and Safety Act. A designated substance survey (DSS) must also be conducted in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act, in order to address other designated substances, including but not limited to, lead-based paint.

Datersongroup Ottawa Kingston North Bay

## 9.0 STATEMENT OF LIMITATIONS

This Phase I Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04 as amended by O.Reg. 269/11, and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Holloway Lodging Corporation. Permission and notification from Holloway Lodging Corporation and Paterson will be required to release this report to any other party.

#### Paterson Group Inc.

Kaup Munch:

Karyn Munch, P.Eng., QPESA



Mark S. D'Arcy, P.Eng., QPESA



#### **Report Distribution:**

- Holloway Lodging Corporation (6 copies)
- Paterson Group (1 copy)

### 10.0 REFERENCES

### Federal Records

Air photos at the Energy Mines and Resources Air Photo Library. National Archives. Maps and photographs (Geological Survey of Canada surficial and subsurface mapping). Natural Resources Canada – The Atlas of Canada. Environment Canada, National Pollutant Release Inventory.

PCB Waste Storage Site Inventory.

### **Provincial Records**

MOECC Freedom of Information and Privacy Office. MOECC Municipal Coal Gasification Plant Site Inventory, 1991. MOECC document titled "Waste Disposal Site Inventory in Ontario". MOECC Brownfields Environmental Site Registry. Office of Technical Standards and Safety Authority, Fuels Safety Branch. MNR Areas of Natural Significance. MOECC Water Well Inventory.

### **Municipal Records**

City of Ottawa Document "Old Landfill Management Strategy, Phase I -Identification of Sites.", prepared by Golder Associates, 2004. Intera Technologies Limited Report "Mapping and Assessment of Former Industrial Sites, City of Ottawa", 1988. City of Ottawa Historical Land Use Inventory (HLUI) database The City of Ottawa eMap website.

### **Local Information Sources**

Chain of Title obtained through Read Abstracts Limited, October 17, 2016. Topographical Plan, prepared by Annis, O'Sullivan, Vollebekk Ltd., January 21, 2016.

Personal Interviews. Previous Engineering Reports.

### **Public Information Sources**

Google Earth. Google Maps/Street View.

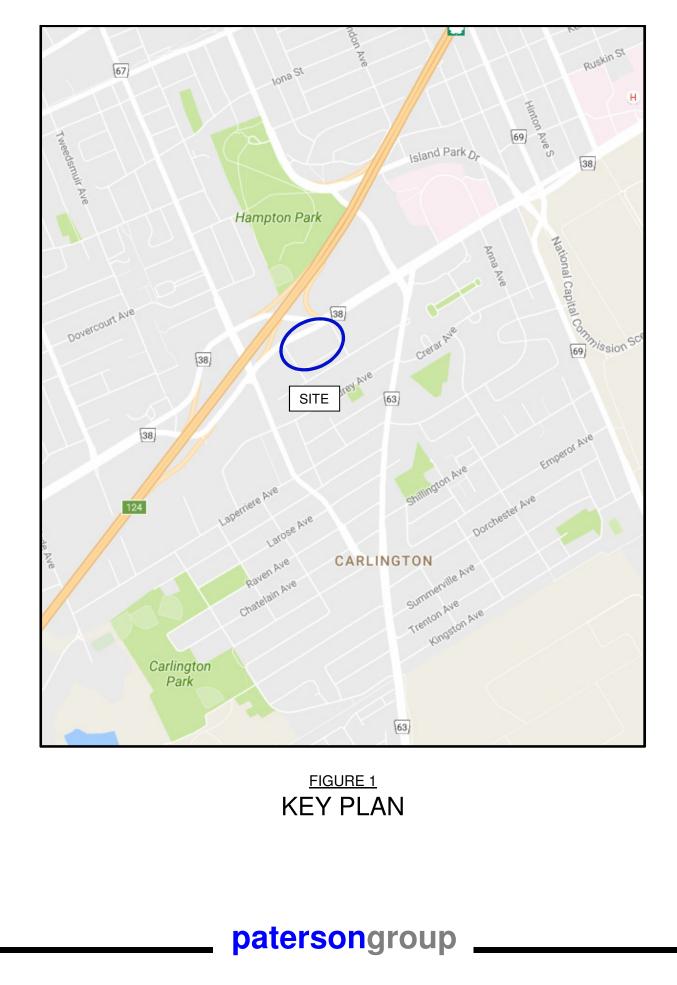
# **FIGURES**

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE3896-1 – SITE PLAN

DRAWING PE3896-2 – SURROUNDING LAND USE PLAN



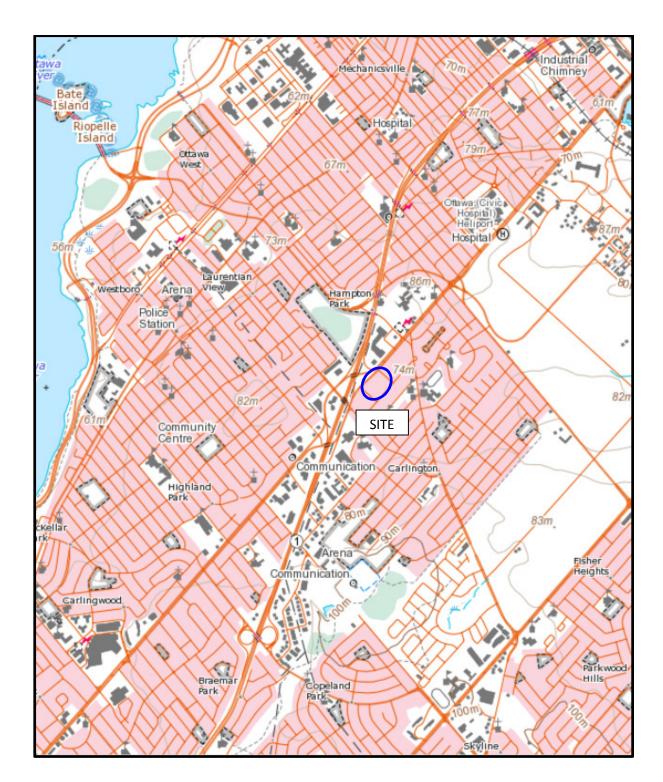
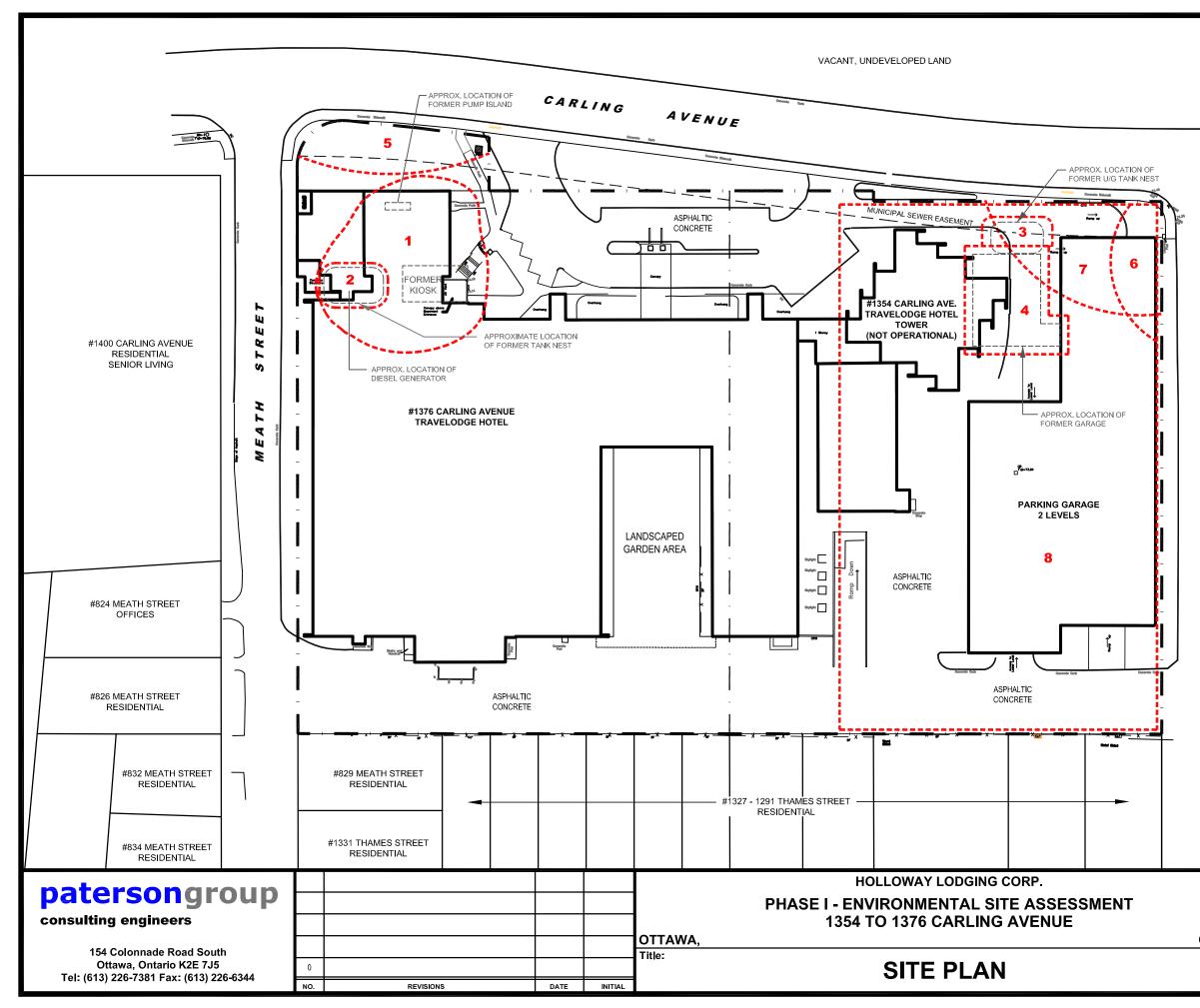
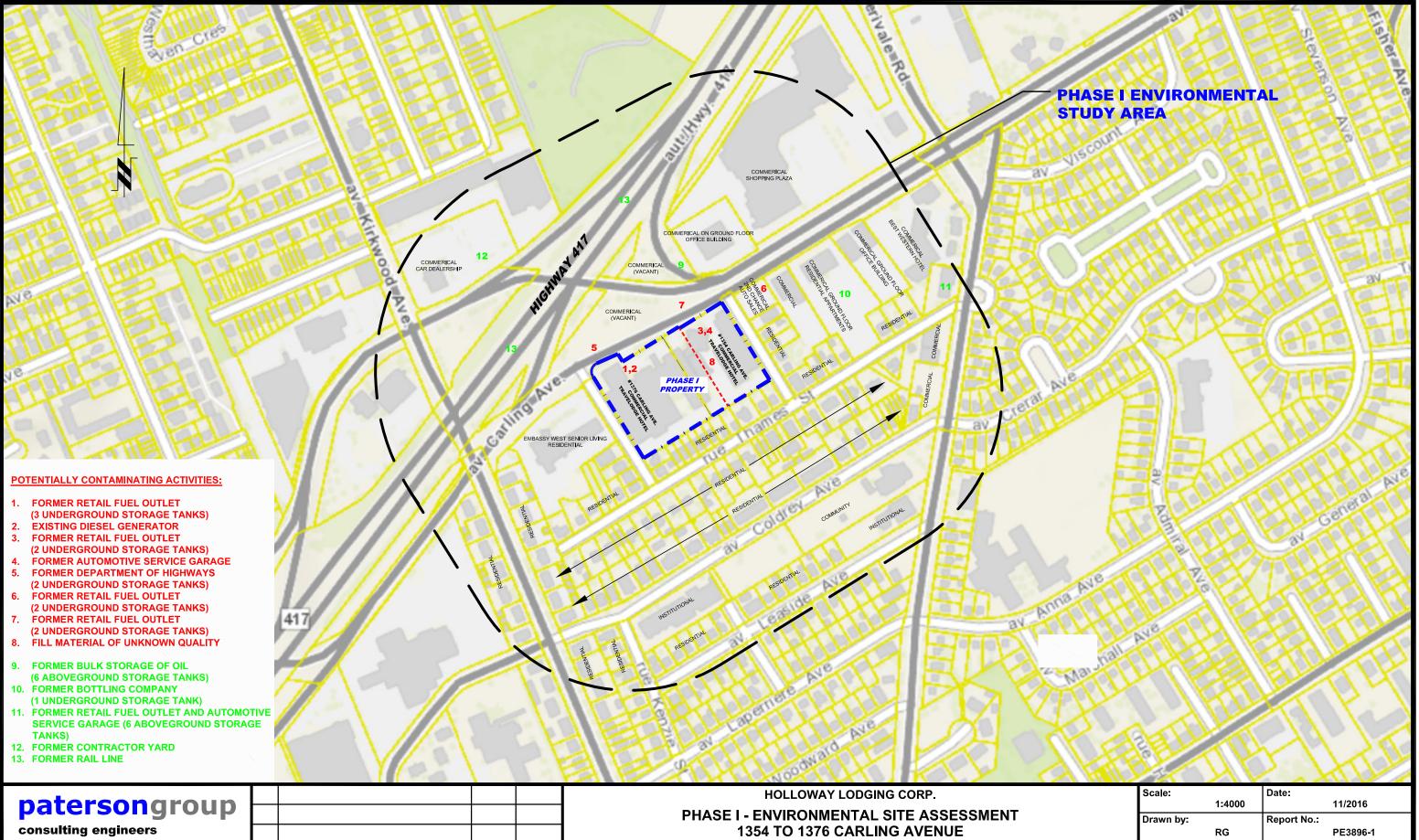


FIGURE 2 TOPOGRAPHIC MAP



	FIF	NCHMARK			` 	
REET	Top of Spindle Elev=75.14 <sup>●</sup> #1330 CARLING AVENUE COMMERCIAL 2ND CHANCE AUTO (CAR DEALER			rship)	#1320 CARLING AVENUE COMMERCIAL	
S T	#815 ARCHIBALD STREET RESIDENTIAL					
HIBALD		#819 ARCHIB/ RESIDE				
RC		AL CONCERN:				
4	_	AREAS OF POTENTIAL ENVIRONMENTAL CONCERN: 1. RESULTING FROM FORMER ON-SITE RETAIL FUEL OUTLET (3 UNDERGROUND STORAGE TANKS)				
	_	3. RESULTING		IER ON-SI	L GENERATOR TE RETAIL FUEL OUTLET KS)	
		4. RESULTING FROM FORMER ON-SITE AUTOMOTIVE SERVICE GARAGE				
		5. RESULTING FROM FORMER ONTARIO DEPARTMENT OF HIGHWAYS PROPERTY, NORTH OF WESTERN PORTION OF PHASE I PROPERTY (2 UNDERGROUND STORAGE TANKS ALONG CARLING AVENUE)				
		6. RESULTING FROM FORMER OFF-SITE RETAIL FUEL OUTLET, EAST OF ARCHIBALD STREET (2 UNDERGROUND STORAGE TANKS ALONG ARCHIBALD STREET)				
		7. RESULTING FROM FORMER OFF-SITE RETAIL FUEL OUTLET NORTHEAST OF PHASE I PROPERTY (2 UNDERGROUND STORAGE TANKS ALONG CARLING AVENUE)				
		8. FILL MATE	RIAL OF UNKI	NOMN QU	ALITY	
		Scale:	1:750	Date:	11/2016	
ONTARIO		Drawn by:	MPG	Report	No.: PE3896-1	
		Checked by:	KM	Dwg. N	₀ PE3896-1	
		Approved by:	MSD	Revisio		

ocad drawings\environmental\pe38xx\pe3896\pe3896-1 site plan.dv



154 Colonnade Road South Ottawa, Ontario K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344

p	0				OTTAWA Title:
•	NO.	REVISIONS	DATE	INITIAL	

**ONTARIO** Checked by:

Approved by:

## SURROUNDING LAND USE PLAN

Dwg. No.:

Revision No.:

PE3896-2

0

ΚM

MSD

# **APPENDIX 1**

CHAIN OF TITLE

PLAN OF SURVEY

**AERIAL PHOTOGRAPHS** 

SITE PHOTOGRAPHS



## **READ Abstracts Limited**

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4 Email: search@readsearch.com Tel.: 613-236-0664 Fax: 613-236-3677

#### ENVIRONMENTAL SEARCH

October 17, 2016

Patersongroup Attn: Karyn Munch

#### BRIEF DESCRIPTION OF LAND:

1354-1376 Carling Ave. Part of Block 6 and 7 Plan 221 PIN: 04002-0020 04002-0019

#### LAST REGISTERED OWNER: ROYAL HOST GP INC.

#### CHAIN OF TITLE:

Deed RO9296 registered January 5, 1956 From Allen Gilmour to Archibald Stevenson

Deed NP9090 registered March 10 1883 From Archibald Stevenson to Thomas McTiernan

Vesting Order NP19665 registered June 13, 1903 To Jessie Stewart

Plan 221 registered December 7, 1903 By Jessie Stewart

Deed NP22252 registered September 8, 1908 From Jessie Stewart to Allan McDonald

Deed NP22252 registered September 8, 1908 From Jessie Stewart to Albert Summers

Deed NP23095 registered November 10, 1909 From Albert Summers to Richard Traverse Deed NP24520 registered July 15, 1911 From Richard Traverse to William Robertson

Deed NP27252 registered September 1913 From Allan McDonald to Angus McLean

Deed NP27253 registered September 1913 From Allan McDonald to Mary McLean

Deed NP30633 registered August 5, 1918 From William Robertson to Frederick Smith

Deed NP32800 registered July 17, 1918 From Allan McDonald to James McGuire

Deed NP33179 registered December 10, 1919 From William Robertson to Frederick Smith

Deed NP33461 registered March 29, 1920 From William Robertson to Maude Linford

Deed NP33814 registered July 30, 1920 From Allan McDonald to James McGuire

Deed NP34855 registered July 26, 1920 From Frederick Smith to John Miller

Deed NP43911 registered August 25, 1933 From Mary McLean to Andrew Noccey

Deed NP46281 registered September 7, 1958 From Maud Linford to Dorothy Milones

Deed NP53913 registered December 10, 1945 From Andrew Noccey to Mary J. Bennett

Deed NP54140 registered February 6, 1946 From John Miller, estate to Ellen Miller

Deed NP54923 registered June 4, 1946 From Angus McLean to Frank C. Bennett Deed NP60267 registered August 19, 1948 From Frank C. Bennett to Ephraim Rowlings

Deed NP60355 registered August 31, 1949 From James McGuire to Frank C. Bennett

Deed NP61322 registered January 4, 1949 From Frank C. Bennett to Mary J. Bennett

Deed NP62407 registered June 16, 1949 From Mary J Bennett to Lindsay Day

Deed NP62838 registered July 29, 1949 From Ephraim Rowlings to Howard and Dores Polk

Deed OT3910 registered November 2, 1950 From Ellen Miller, estate to James Cummings

Deed 305421 registered Oct 230, 1952 From Dorothy Milones to J. Harold Shenkman

Deed 305598 registered November 3, 1952 From James Cummings to J. Harlold Shenkman

Deed 311453 registered June 5, 1953 From Howard and Dores Polk to Aileen and Buddie Mayhew

Lease 351303 registered September 20, 1956 From Lindsay Day to Supertest Petroleum Corporation Limited

Deed 381274 registered December 1, 1958 From Aikleen and Buddie Mayhew to Hain Holding Limited

Deed 388847 registered June 3, 1959 From Lindsay Day to Robert Coates

Deed 343098 registered August 19, 1959 From James McGuire to Robert Coates

Deed 406395 registered June 3, 1960 From Orville and Nero Scharf to Shenkman Properties Limited

Deed 490525 registered August 5, 1960 From Shenkman Properties Limited to J. Harold Shenkman Deed 465965 registered September 8, 1962 From Robert Coates to Talisman Hotels Limited

Release of Lease 465966 registered September 18, 1963 From Imperial Petroleum Corporation to Talisman hotels Limited

Deed 474026 registered March 12, 1964 From Talisman Hotels Limited to Shenkman Properties Co. Limited, William Teron Limited, Seaway City Hotel (Ottawa) Limited.

Lease 474027 registered March 12, 1964 From J. Harold Shenkman to Shenkman Properties Co. Limited, William Teron Limited, Seaway City Hotel (Ottawa) Limited.

Deed 508355 registered April 15, 1966 From Hain Holdings Limited to Edifice Holding Limited

Deed 509794 registered May 13, 1966 From Edifice Holding Limited to Talisman Hotels Limited

Deed 523674 regsitered April 18, 1967 From Talisman Hotels Limited to Shenkman Properties Co. Limited, William Teron Limited, Seaway City Hotel (Ottawa) Limited

Deed 528038 registered July 18, 1967 From William Teron Limited to Etron Limited (percentage interest)

Deed 608301 registered April 4, 1972 From Mary J. Bennet to Shenkman Properties Co. Limited, Seaway City Hotels (Ottawa) Limited, Community Hotels Eastern Ltd. (formely Etron Limited)

Deed NS277614 registered March 1, 1985 From The Seaway Hiotels (Ontario ) Ltd., Shenkman Corp., Community Hotels Eastern Ltd. To Vagabond Motor Inn (Ontario) Ltd.

Deed N356901 registered September 26, 1986 From J. Harold Shenkman to Shenkman Corp.

Deed N504396 registered September 20, 1989 From Vagabond Motor Inn (Ontario) Ltd. To 836499 Ontario Limited

Deed N505180 registered September 27, 1989 From Shenkman Corp. To 836499 Ontario Limited

Deed N505181 registered September 27, 1989

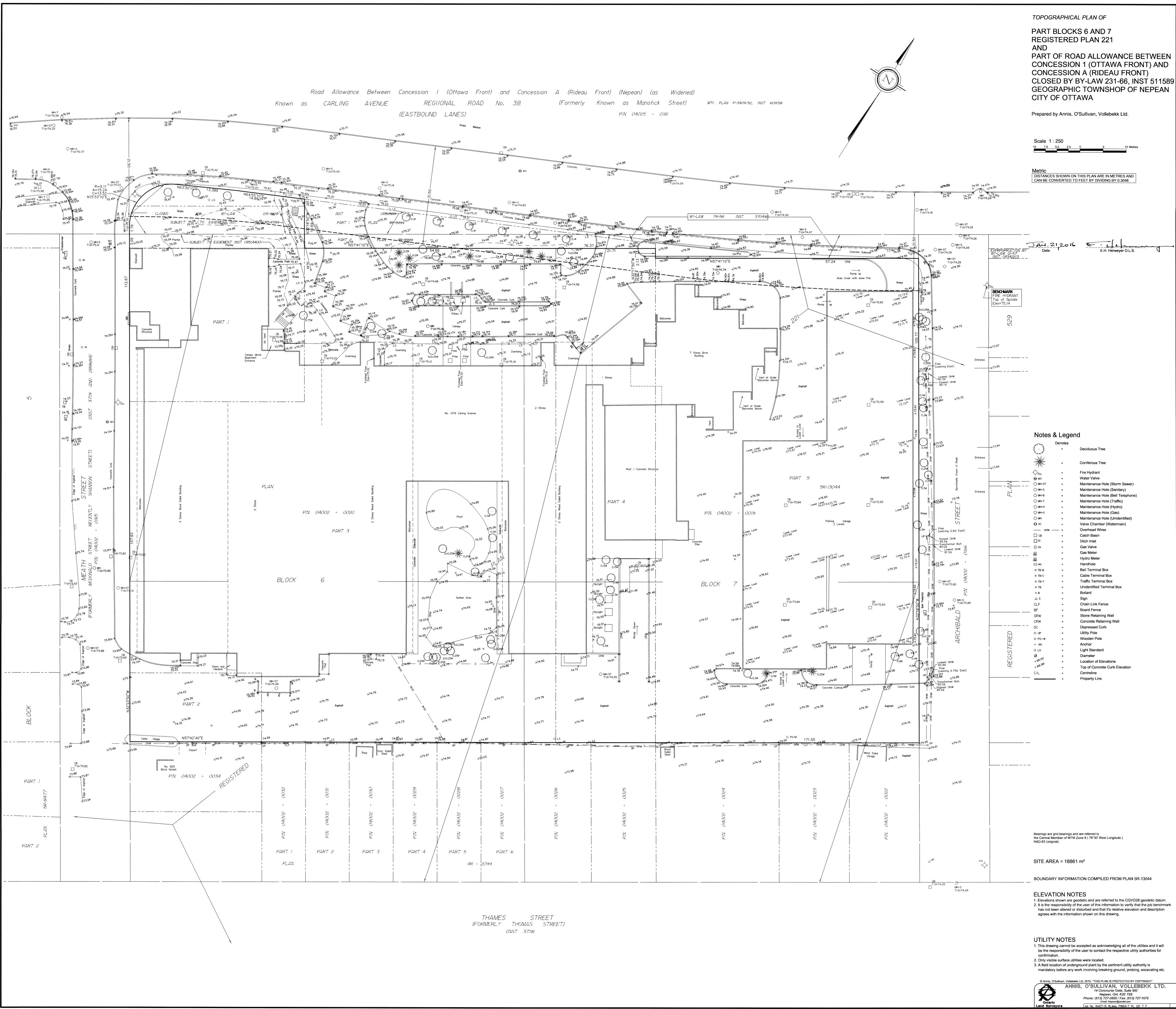
From 836499 Ontario Limited to Shenkman Corp.

Vesting Order LT1116287 registered April 22, 1998 To 1283293 Ontario Limited (lands of 836499 Ontario Limited)

Deed LT1116288 registered April 22, 1998 From Shenkman Corporation to 1283293 Ontario Limited

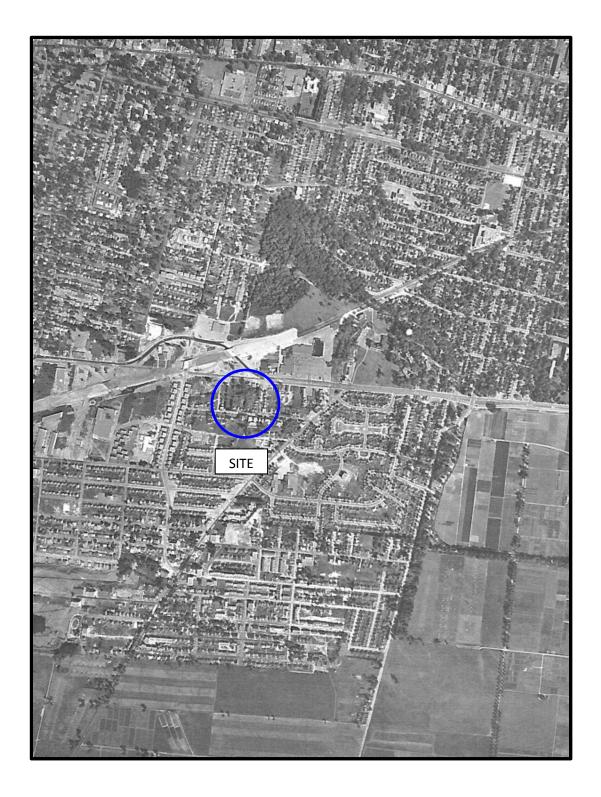
Name Change OC936608 registered December 10, 2008 From 1283293 Ontario Limited to Royal Host hotels GP Inc.

Deed OC1208456 registered February 17, 2011 From Royal Host hotels GP Inc. to Royal Host GP Inc.

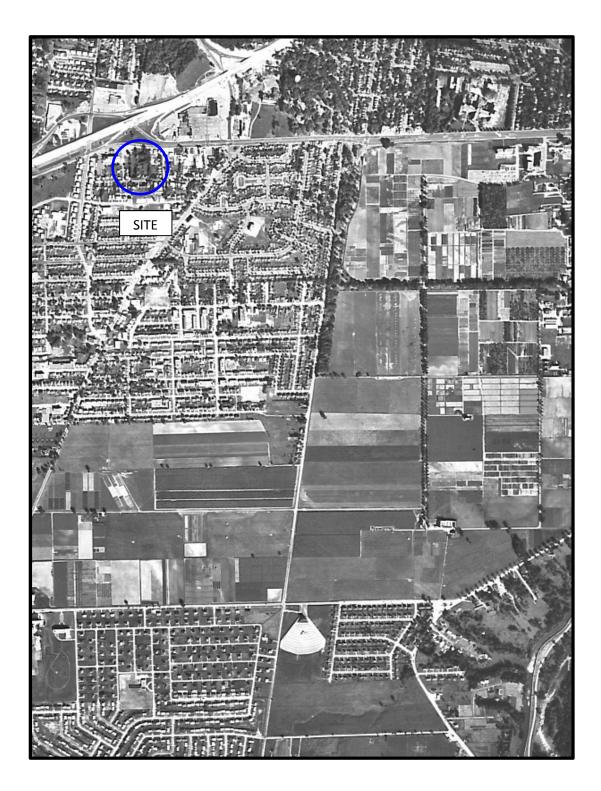


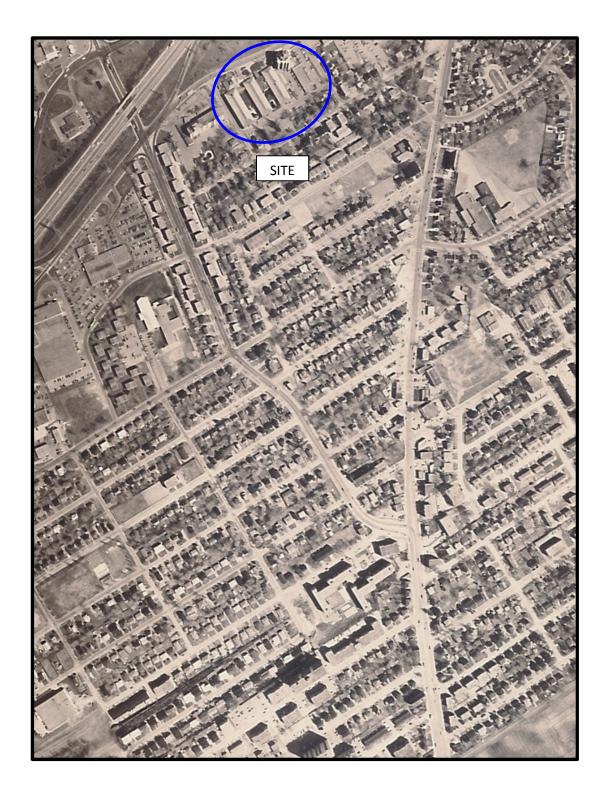


# patersongroup \_\_\_\_

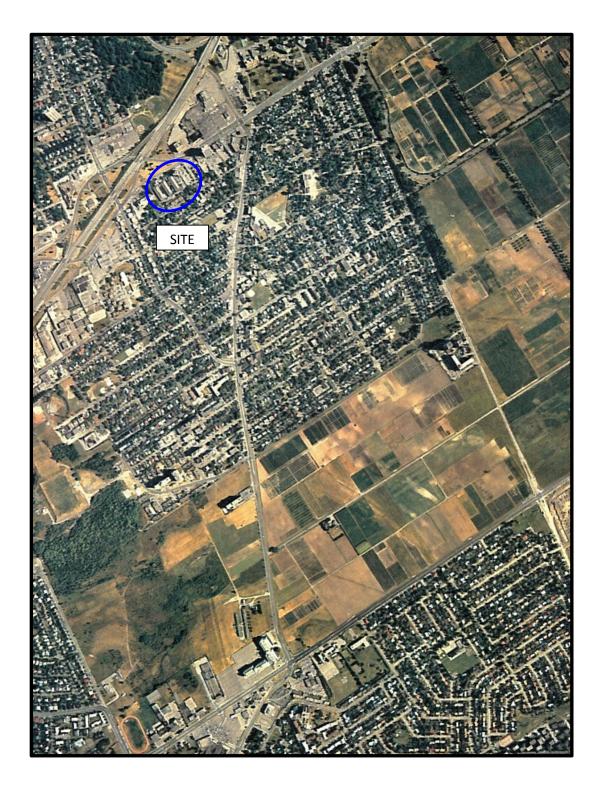


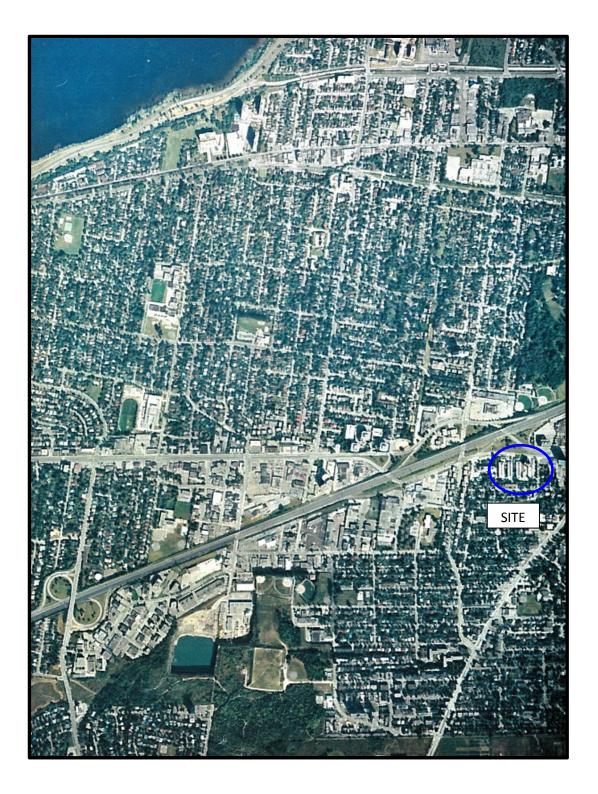
# patersongroup \_\_\_\_

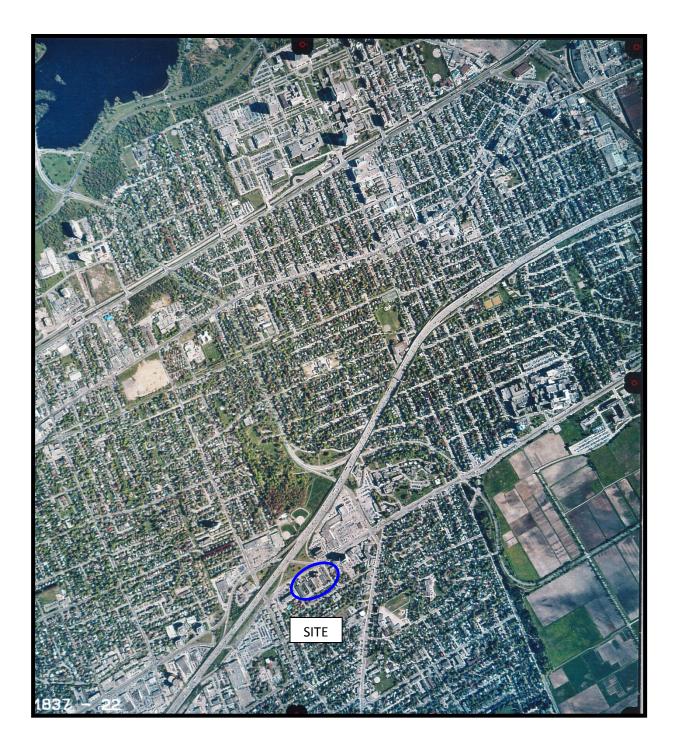




# — patersongroup ——







patersongroup \_\_\_\_

PE3896

#### 1354 and 1376 Carling Avenue, Ottawa

October 3, 2016



Photograph 1: View of northwest portion of Phase I Property, facing east-southeast.



Photograph 2: Photograph shows condemned tower on northeast portion of Phase I Property, facing west.

PE3896

#### 1354 and 1376 Carling Avenue, Ottawa

October 3, 2016



Photograph 3: Photo illustrates the eastern portion of the tower and the parking structure on the northeast corner of the Phase I Property, facing south.



Photograph 4: Photo illustrates the entrance to the parking structure as well as the commercial properties to the east and northeast of the Phase I Property, looking east.

PE3896

#### 1354 and 1376 Carling Avenue, Ottawa

October 3, 2016



Photograph 5: Photo illustrates the southeastern portion of the Phase I Property. Photograph illustrates the south face of the tower, the above-grade portion of the former Centennial Ballroom, and the east-face of the guest rooms in the original portion of the hotel complex, facing north.



Photograph 6: Photo illustrates the access ramp to the shipping and receiving area, south of the former Centennial Ballroom, facing north.

PE3896

1354 and 1376 Carling Avenue, Ottawa

October 3, 2016



Photograph 7: Photo illustrates the access laneway on the southernmost portion of the Phase I Property, as well as the residential properties to the south, facing west.



Photograph 8: Photo illustrates the access laneway on the southernmost portion of the Phase I Property, further west of Photograph 8. The location of the interior waterpark and storm water tank (concrete pad surrounded by bollards) can be seen.

PE3896

#### 1354 and 1376 Carling Avenue, Ottawa



Photograph 9: Photograph illustrates southernmost access to the basement level, situated along Meath Street, facing east-southeast.



Photograph 10: Photograph illustrates northwest corner of Phase I Property and exterior access to basement of the Beachcomber (former nightclub), facing northeast.

PE3896

#### 1354 and 1376 Carling Avenue, Ottawa

October 3, 2016



Photograph 11: Photograph illustrates diesel generator in the Beachcomber mechanical room.



Photograph 12: Photograph illustrates former exterior in-ground pool area which has been retrofitted as an interior water park.



PE3896

1354 and 1376 Carling Avenue, Ottawa



Photograph 13: Photograph illustrates residential properties to the east, across Archibald Street, facing southeast.



Photograph 14: Photograph illustrates adjacent property to west, across Meath Street, facing northwest.



# **APPENDIX 2**

**MOECC FREEDOM OF INFORMATION INITIAL RESPONSE** 

**CITY OF OTTAWA HLUI SEARCH RESULTS** 

**TSSA CORRESPONDENCE** 

**MOECC WELL RECORDS** 



File Number: C10-01-16-0271

October 14, 2016

Karyn Munch Paterson Group 154 Colonnade Rd. S Ottawa, ON K2E 7J5

Sent via email [KMunch@PatersonGroup.ca]

Dear Karyn Munch,

#### Re: Information Request 1354, 1376 Carling Avenue, Ottawa, Ontario ("Subject Properties")

#### Internal Department Circulation

The Planning, Infrastructure and Economic Development Department has the following information in response to your request for information regarding the Subject Properties:

No information was returned on the Subject Properties from Departmental circulation.

#### Search of Historical Land Use Inventory

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

A search of the HLUI database revealed the following information:

• There are 2 activities associated with the Subject Properties: Activity Numbers 10519 and 5789.

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

Shaping our future together Ensemble, formons notre avenir City of Ottawa Planning, Infrastructure and Economic Development Department

110 Laurier Avenue West, 4th Floor Ottawa, ON K1P 1J1 Tel: (613) 580-2424 ext. 24856 Fax: (613) 560-6006 www.ottawa.ca Ville d'Ottawa Services de la planification, de l'infrastructure et du développement économique

110, avenue Laurier Ouest, 4e étage Ottawa (Ontario) K1P 1J1 Tél.: (613) 580-2424 ext. 24856 Téléc: (613) 560-6006 www.ottawa.ca • There are 16 activities associated with the properties located within 50m of the Subject Properties: Activity Numbers 10013, 10394, 107, 14391, 2331, 4697, 7626, 854, 6225, 13543, 1337, 4052, 9284, 8832, 10141 and 5789.

Please note that Activity Numbers 10394 and 14391, have a PIN Certainty of "2". This identifier acknowledges that there is some uncertainty about the exact location of the land use activity and that the activity may or may not have been located on the Subject Properties. All database entries with a PIN Certainty of "2" require independent verification as to their precise location.

A site map has been included to show the location of the Subject Properties as well as the location of all the activities noted above, including the HLUI database's location of the Activity Numbers with a PIN Certainty of "2".

Additional information may be obtained by contacting:

#### **Ontario's Environmental Registry**

The Environmental Registry found at <u>http://www.ebr.gov.on.ca/ERS-WEB-External/</u> contains "public notices" about environmental matters being proposed by all government ministries covered by the Environmental Bill of Rights. The public notices may contain information about proposed new laws, regulations, policies and programs or about proposals to change or eliminate existing ones. By using keys words i.e. name of proponent/owner and the address one can ascertain if there is any information on the proponent and address under the following categories: Ministry, keywords, notice types, Notice Status, Acts, Instruments and published date (all years).

#### The Ontario Land Registry Office

Registration of real property is recorded in the Ontario Land Registry Office through the Land Titles Act or the Registry Act. Documents relating to title and other agreements that may affect your property are available to the public for a fee. It is recommended that a property search at the Land Registry Office be included in any investigation as to the historic use of your property. The City of Ottawa cannot comment on any documents to which it is not a party.

Court House 161 Elgin Street 4th Floor Ottawa ON K2P 2K1 Tel: (613) 239-1230 Fax: (613) 239-1422

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an "as is" basis with no

representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.

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

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

If you have any further questions or comments, please contact Stephanie Mirtitsch at 613-580-2424 ext. 24856 or HLUI@ottawa.ca

Sincerely,

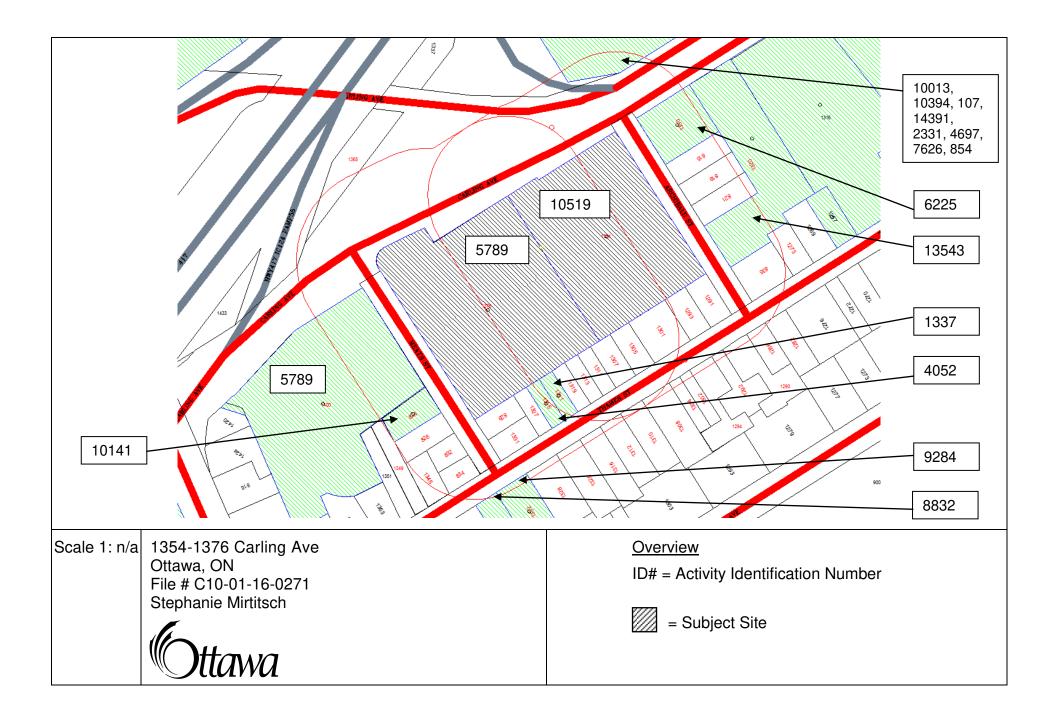
Nirtitsch

Michael Boughton, MCIP, RPP
 Senior Planner
 Development Review East
 Planning Services
 Planning, Infrastructure and Economic Development Department

MB/ SM

Attach: 18

cc: File no. C10-01-16-0271





Run On:

RPTC\_OT\_DEV0122 04 Oct 2016 at: 10:06:18

	<b>Study Year</b> 1998	<b>PIN</b> 040020019		Multi-NAIC Y	Multiple Activities N
	Activity ID:	10519	Multiple PINS:	N	
	PIN Certainty:	1	Previous Activity ID(s) :	3361	
	Related PINS:	040020019	2 ()		
4 F C C C C C S F H H	Name: Address: Facility Type: Comments 1: Comments 2: Generator Number: Storage Tanks: AL References 1: AL References 2: AL References 3:	PERRY'S GARAGE 1350 CARLING AVENUE Gasoline Service Stations Two USTs located on the nor M.1957, M.1960, M.1970, M.	s th side of property		
1	NAICS         SI           447190         63           811119         63           811112         63           811121         63           447110         63           811199         63	33 35 35 35 33			

Company Name	Year of Operation
Perry's Garage/West Service Garage	c. 1960
Day's Garage	c. 1957



Year of Operation

Run On: 04 Oct 2016 at: 10:06:45

RPTC\_OT\_DEV0122

Study Year 1998	<b>PIN</b> 040020020		Multi-NAIC Y	Multiple Activities N	
Activity ID:	5789	Multiple PINS:	Y		
PIN Certainty:	1	Previous Activity ID(s) :	3363		
Related PINS:	040020020				
Name: Address: Facility Type: Comments 1: Comments 2: Generator Number: Storage Tanks: HL References 1: HL References 2: HL References 3:	GEORGE F. LEFEBVRE CARLING AVENUE, OTTA Gasoline Service Stations 1384 to 1386 Three USTs located on the so M.1957, M.1960, M.1970, M.1	with west corner of property			
NAICS S	IC				
811199 6	33 33 33				

#### **Company Name**

Unnamed Gasoline Service Station	c. 1957
George F. Lefebvre	c. 1960



Run On:

RPTC\_OT\_DEV0122 04 Oct 2016 at: 10:10:30

Study Year 1998	<b>PIN</b> 040020036		Multi-NAIC Y	Multiple Activities N
Activity ID:	10141	Multiple PINS:	Ν	
PIN Certainty:	1	Previous Activity ID(s) :	5077	
Related PINS:	040020036			
Name: Address:	P B FRASER AND ASSO 824 MEATH STREET, O			
Facility Type: Comments 1: Comments 2:	Motor Vehicle Repair Sh	ops		
Generator Number: Storage Tanks:				
HL References 1: HL References 2:	SC98			
HL References 3:				
NAICS	SIC			
811119 ( 811112 (	635 635 635 639			

#### **Company Name**

P B Fraser and Associates

#### Year of Operation

c. 1998



Run On: 04 Oct 2016 at: 10:11:18

RPTC\_OT\_DEV0122

Study Year 2005	<b>PIN</b> 040020079		Multi-NAIC N	Multiple Activities N
Activity ID:	8832	Multiple PINS:	Ν	
PIN Certainty:	1	Previous Activity ID(s) :		
Related PINS:	040020079			
Name: Address:	MIKE PROTEAU DRY W. 1340 THAMES STREET,			
Facility Type:	Interior and Finishing Wo	rk		
Comments 1:	#3			
Comments 2:				
Generator Number:				
Storage Tanks:				
HL References 1:				
HL References 2:				
HL References 3:	2005 Select Phone			
NAICS	SIC			
238320 0	)			
<b>a</b> N			X (0 )	
Company Name			Year of Operation	
MIKE PROTEAU DRY	WALL & PNTNG		c. 2005	



Run On: 04 Oct 2016 at: 10:12:05

Study Year 2005	<b>PI</b> 040	N 0020078	Multi-NAIC N	Multiple Activities N
Activity ID:	9284	Multiple PINS:	Ν	
PIN Certainty:	1	Previous Activity II	D(s) :	
Related PINS:	040020078			
Name: Address: Facility Type: Comments 1: Comments 2: Generator Number Storage Tanks: HL References 1: HL References 2: HL References 3:	1332 THAMES S Interior and Finis	hing Work		
NAICS	SIC			
238320	0			
Company Name			Year of Operati	on
METEOR PAINTERS	CONTRACTORS		c. 2005	



Run On: 04 Oct 2016 at: 10:13:38

Study Year 2005		IN 0020031	Multi-NAIC N	Multiple Activities N
Activity ID:	4052	Multiple PINS:	N	
PIN Certainty:	1	Previous Activity ID	)(s) :	
Related PINS:	040020031			
Name: Address: Facility Type: Comments 1: Comments 2: Generator Number Storage Tanks: HL References 1: HL References 2: HL References 3:		STREET, oducts Industries		
NAICS	SIC			
326198	0			
Company Name CUSTOM PLASTICS			Year of Operati c. 2005	on



Run On: 04 Oct 2016 at: 10:14:05

RPTC\_OT\_DEV0122

Study Year 2005	<b>PI</b> 04	N 0020030	Multi-NAIC Y	Multiple Activities N
Activity ID:	1337	Multiple PINS:	N	
PIN Certainty:	1	Previous Activity I	D(s) :	
Related PINS:	040020030			
Name: Address: Facility Type:	ASPEN TRANSI 1321 THAMES S Truck Transport			
Comments 1: Comments 2:				
Generator Number	:			
Storage Tanks:				
HL References 1:				
HL References 2: HL References 3:	2005 Select Phone	9		
NAICS	SIC			
484122 484231 484239 484232 484121 484233	0 0 0 0 0			
	-			

## **Company Name**

ASPEN TRANSPORTATION LOGISTICS

Year of Operation

c. 2005



Run On: 04 Oct 2016 at: 10:15:04

Study Year 2005		<b>PIN</b> 040020005	Multi-NAIC N	Multiple Activities N
Activity ID:	13543	Multiple PINS:	Ν	
PIN Certainty:	1	Previous Activity I	D(s) :	
Related PINS:	040020005			
Name: Address: Facility Type: Comments 1: Comments 2: Generator Numbe Storage Tanks: HL References 1: HL References 2: HL References 3:	Industrial Mac	G AVENUE, OTTAWA hinery, Equipment and Supplies ent Survey	, Wholesale	
NAICS	SIC			
417230	0			
Company Name	)		Year of Operati c. 2001	on



Run On: 04 Oct 2016 at: 10:15:52

Study Year 1998	<b>PI</b> 040	N 0020009	Multi-NAIC Y	Multiple Activities N
Activity ID:	6225	Multiple PINS:	N	
PIN Certainty:	1	Previous Activity ID(s) :	1890, 5711	
Related PINS:	040020009			
Name: Address: Facility Type: Comments 1: Comments 2: Generator Numbe Storage Tanks:	1330 CARLING / Gasoline Service	I SHELL SERVICE STATION LIMITE AVENUE, OTTAWA Stations	ED	
HL References 1: HL References 2: HL References 3:		1.1970, M.1980; FIP1957-412-1232,Vol4		
NAICS	SIC			
447190 447110 811199	633 633 633			

Company Name	Year of Operation
Unnamed Gasoline Service Station	c. 1957
Len Desforge Service Station	c. 1960
Gus and John Shell Service Station Ltd.	c. 1970-1980



Run On: 04 Oct 2016 at: 10:16:37

<b>Study Ye</b> a 1998		<b>PIN</b> 040250173	Multi-NAIC Y	Multiple Activities
Activity ID:	10013	Multiple PINS:	N	
PIN Certain	i <b>ty:</b> 1	Previous Activity II	D(s) :	
Related PIN	<b>NS:</b> 040250173			
Name: Address: Facility Typ Comments Comments Generator N Storage Tan HL Reference HL Reference	1335 CARLIN e: Appliance, Tel 1: 2: Number: hks: ces 1: ces 2:	NSUMER ELECTRONICS G AVENUE, OTTAWA evision, Radio and Stereo Store	s	
NAICS	SIC			
443110	0			
Company	Name		Year of Operat	ion
OTTAWA CO	NSUMER ELECTRONICS		c. 2001	



## **CITY OF OTTAWA**

HLUI ID: \_\_679GKV

## AREA (Square Metres): 5231.978

Study Year 1998	<b>PIN</b> 040250173	Multi-NAIC Y	Multiple Activities

Activity ID:	10394	Multiple PINS:	Υ		
PIN Certainty:	2	Previous Activity ID(s) :	5706		
Related PINS:	040250147				
Name: Address: Facility Type:	ONTARIO DEPARTMEN 1359 CARLING AVENUE Motor Vehicles, Wholesa	, OTTAWA			
Comments 1: Comments 2:	Located at #1365 Carling	g ca. 1948.			
Generator Number: Storage Tanks: HL References 1: HL References 2: HL References 3:	: FIP1948, FIP1956 - Two USTs located on the south west corner M.1949, M.1957; FIP1912,vol2; FIP1922,vol2; FIP1948-332-1640; FIP1956-332-1-1640,vol3				
NAICS	SIC				

415190	551
811111	551
415120	551
415110	551
811310	551

## **Company Name**

Ontario Department of Highways

## Year of Operation

Report:

Run On:

c. 1948-1957

RPTC\_OT\_DEV0122



RPTC\_OT\_DEV0122

Run On: 04 Oct 2016 at: 10:16:37

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	040250173	Y	Y

Activity ID:	1	107	Multiple PINS:	Ν
PIN Certainty:	1	1	Previous Activity ID(s) :	
Related PINS:		040250173		
Name: Address: Facility Type: Comments 1:		ELECTRO SONIC INC. 1335 CARLING AVENUE Electrical and Electronic M #315	, Machinery, Equipment and Sup	plies, Wholesale
Comments 2: Generator Number	r:			
Storage Tanks: HL References 1: HL References 2:				
HL References 3:		2005 Select Phone		
NAICS	SIC			
417320 334410 416110	0 0 0			
Company Name	•			Year of Operation

Company Name	
ELECTRO SONIC INC.	c. 2001
ANIXTER CANADA INC.	c. 2001
ELECTRO SONIC INC.	c. 2005



Study Year	<b>PIN</b>	Multi-NAIC	Multiple Activities
1998	040250173	Y	

Activity ID:	14391	Multiple PINS:	Y
PIN Certainty:	2	Previous Activity ID(s) :	3316
Related PINS:	040250172		
Name: Address:	TURNERS SERVICE STA 1331 CARLING AVENUE		
Facility Type: Comments 1: Comments 2:	Gasoline Service Stations unit a	S	
Generator Number: Storage Tanks:			
HL References 1: HL References 2:	M.1960, M.1970, M.1980		
HL References 3:			
NAICS SI	IC		
	33 33 33		

## **Company Name**

Turners Service Station

## Year of Operation

Report: Run On:

c. 1960-1970

RPTC\_OT\_DEV0122



Run On:

RPTC\_OT\_DEV0122

Study Year	<b>PIN</b>	Multi-NAIC	Multiple Activities
1998	040250173	Y	

Activity ID:	2331	Multiple PINS:	Ν
PIN Certainty:	1	Previous Activity ID(s) :	868, 3315, 5707
Related PINS:	040250173		
Name: Address: Facility Type: Comments 1: Comments 2:	SUN OIL COMPANY LIN 1339 CARLING AVENUE Petroleum Products, Who	, OTTAWA	
Generator Number:			
Storage Tanks:	FIP1948, FIP1956 -Two US	Ts -gasoline, FIP1956 -Six steel A	STs, FIP1948 -Five steel ASTs
HL References 1:	M.1949, M.1957, M.1956, M FIP1956-332-1-1640.vol3; F		vol2; FIP1912,vol2; FIP1922,vol2; FIP1948-332-1640;
HL References 2:			
HL References 3:			
NAICS S	IC		

NAIOO	310
412110	511
493120	479
493130	479
447110	633
811199	633
447190	633
493190	479
419120	511
454310	511

Company Name	Year of Operation
BP Oil Ltd.	c. 1970
Barrington Petroleum Products Ltd.	c. 1956-1957
Unnamed Gasoline Service Station and Oiling	c. 1949-1956
Sun Oil Company Ltd.	c. 1948
Barrington Fuel Oil	c. 1960



## **CITY OF OTTAWA**

HLUI ID: \_\_679GKV

# AREA (Square Metres): 5231.978

Study YearPINMulti-NAICMultiple Activities1998040250173YY	i
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Activity ID:	4697	Multiple PINS:	Ν
PIN Certainty:	1	Previous Activity I	<b>D(s)</b> : 6958
Related PINS:	04025017	73	
Name:	E.B. EDI	DY FOREST PRODUCTS LIMITED	
Address:	1335 CA	ARLING AVENUE, OTTAWA	
Facility Type:	Other W	/ood Industries	
Comments 1:	GEN# =	On0009805	
Comments 2:			
Generator Number	r:		
Storage Tanks:			
HL References 1:	PID1994		
HL References 2:			
HL References 3:			
NAICS	SIC		
321217	259		
321216	259		
337920	259		
321114	259		

## **Company Name**

E.B. Eddy Forest Products Ltd.

Year of Operation

Report:

Run On:

c. 1994

RPTC\_OT\_DEV0122



Study Year	PIN	Multi-NAIC	Multiple Activities
1998	040250173	Y	Ý

Activity ID:	7626	Multiple PINS:	N
PIN Certainty:	1	Previous Activity ID(s)	:
Related PINS:	040250173		
Name:	KIDNEY FOUN	IDATION-CANADA	
Address:	1335 CARLING	GAVENUE,	
Facility Type:	Gasoline Servi	ce Stations	
Comments 1:	#101		
Comments 2:			
Generator Number:			
Storage Tanks:			
HL References 1:			
HL References 2:			
HL References 3:	2005 Select Pho	ne	
NAICS	SIC		
	0 0		

## **Company Name**

KIDNEY FOUNDATION-CANADA

Year of Operation

Report: Run On:

c. 2005

RPTC\_OT\_DEV0122



<b>Study</b> 1998	Year	<b>PIN</b> 040250173	Multi-NAIC Y	Multiple Activities

Activity ID:	854	Multiple PINS:	Ν
PIN Certainty:	1	Previous Activity ID(s) :	5097
Related PINS:	040250173		
Name: Address: Facility Type: Comments 1: Comments 2: Generator Number Storage Tanks: HL References 1: HL References 2: HL References 3:	A ZACHARY DENTAL 1335 CARLING AVEN Other Manufactured F Unit 400	IUE, OTTAWA	
NAICS	SIC		
334610	399		
Company Name			Year of Operation

A Zachary Dental Lab Ltd.

Report: Run On:

c. 1998

RPTC\_OT\_DEV0122

## **Karyn Munch**

From:	Ruchi Chohan <rchohan@tssa.org> on behalf of Public Information Services <publicinformationservices@tssa.org></publicinformationservices@tssa.org></rchohan@tssa.org>
Sent:	September-27-16 1:33 PM
То:	Karyn Munch
Subject:	RE: PE3896 - Records Search Request

Hello Karyn,

Thank you for your inquiry.

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

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

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Thank you and have a great day!

Ruchi



Ruchi Chohan | Public Information Agent Facilities and Business Services 345 Carlingview Drive Toronto, Ontario M9W 6N9 Tel: +1-416-734-3417 | Fax: +1-416-231-4903 | E-Mail: <u>rchohan@tssa.org</u> www.tssa.org

From: Karyn Munch [mailto:KMunch@Patersongroup.ca]
Sent: Monday, September 26, 2016 2:27 PM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: PE3896 - Records Search Request

Good afternoon,

Could you please search your records for the following addresses in the City of Ottawa:

1330, 1335, 1354, 1376 and 1400 Carling Avenue 815 and 835 Archibald Street 1331, 1305 and 1291 Thames Street

Thank-you very much.

Best Regards, Karyn Munch, P.Eng.

## patersongroup solution oriented engineering

154 Colonnade Road South Ottawa, Ontario, K2E 7J5 Tel: (613) 226-7381 Ext. 217 Fax: (613) 226-6344 Email: <u>kmunch@patersongroup.ca</u>

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Hev. $ 9  R  02 50$ The	ONTARIO Well Drillers Act		MAR 23		
Basin 215 Department o	f Mines, Province	e of Ontar	IMAR & J io GEOLOGICAL D	DRANOU	X
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County or District (Melin	lesto		LotAcre	k. Pt. Lot s	
	ncluding	<b>9</b> pump)	1.1.3:		
Pipe and Casing Record	· · · · · · · · · · · · · · · · · · ·	Pu	mping Test		
Casing diameter(s)	Date				
Length(s) of casing(s) 2 of feet.	Developed Cap				
Length of screen		400.9	raba hu		
Type of pump	Drawdown	9			
Capacity of pump		completed w	rell	fun Kg	
Depth of pump setting	Is well a gravel	-wan type:		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · ·
	Water Record				
Kind (fresh or mineral) freek			Depth(s) to	Kind of Water	No. of Feet Water Rise
Quality (hard, soft, contains iron, sulphur etc.)		••••••••	Water Horizon(s)	Juch	16 1
Appearance (clear, cloudy, coloured) Clean	¥		1 100	Under 1	<i><b>T</b></i>
Appearance (clear, cloudy, coloured) Clean For what purpose(s) is the water to be used?	mestri				
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How far is well from possible source of contamination What is source of contamination?					
Enclose a copy of any mineral analysis that has bee					
Well Log Drift and Bedrock Record	From	To		ation of Wel	
			n diagram belo rom road and lo		ances of well
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Situation: Is well on upland, in valley, or on hill	side?			. 6	• • • • • • • • •
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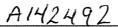
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Department of	Mines, Prov	ince of Ont	ario		
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Date Completed	of Well (exclu				
(day) (month) (year)	• 				
Pipe and Casing Record			Pumping Test		
Casing diameter (s)	. Date	5. ang	.1954		
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<i>f</i>	Vater Record	u		<u></u>	
Kind (fresh or mineral)	·····		. Depth(s) to Water	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur, etc.)		••••••	$\cdots$ Horizon(s)		
For what purpose(s) is the water to be used?		· · · · · · · · · · · · · · · · · · ·		freak	20' 37'
				-	
How far is well from possible source of contamination?.			•••		
What is the source of contamination?	ic la	Æ		-	
Enclose a copy of any mineral analysis that has been ma	ade of water.	Chat	•••		
Well Log Overburden and Bedrock Record	From	To	Loc	ation of Well	
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Situation: Is well on upland, in valley, or on hillside?	·····lfpl	and			
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County or District		Town	ship/Borough/Cit	y/Town/Village	9		Con block tract	survey, etc. L	.ot 25-27
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	LOG C	F OVERBUR	DEN AND BED	ROCK MAT	ERIALS (	1.	i k	Der	oth - feet
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41 WATER I			OPEN HOLE			Sizes of o	opening 31-30 Di	ameter 34-36 Ler	75 80 ngth 39-40
Water found at - feet	Kind of water Inside diam inches	Material	Wall thickness inches	Depth From	- feet To	CSCHEEN Material a	10	Z inches /	5, ° feet
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1 🗆 Fr 2 🗆 Sa	4 Minarale	3 Concrete 4 Open hol 5 Plastic				0.000	30-33 80 -	onite sta	
ISABIC level end o 19-21 feet If flowing give rate Recommended pump	Bailer         GF           In level         25         Water levels during           22-24         15 minutes 26-28         30 minutes           feet         feet         15           38-41         Pump intake set at         30           GPM         15         15	1 D Pumping	5-16         17-16           2         Recovery           34         60 minuteg           34         60 minuteg           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1           1         1		In diagra Indicate		2.4	fild st	ot line.
FINAL STATUS O	<ul> <li>Abandoned, insufficier</li> <li>Abandoned, poor quai</li> <li>Abandoned (Other)</li> </ul>	de comise	placement well			the way	the with	Dizm X iver	
WATER USE 1 Domestic 2 Stock 3 Irrigation 4 Industrial	56-56 5 Commercial 6 Municipal 7 Public supply 8 Cooling & air condition	ing envi	tuse ron mental se	eger el"	-	neters	·	De la	ibm le
METHOD OF CON 1 Cable tool 2 Rotary (conver 3 Rotary (revers 4 Rotary (air)	ntional)	8   Dr 10   Dig 11   Ot		Q2"	monitor lecomise bt of s	ing wells scored with sand/grave	Well to #A09068 Bentonite chi l on top.	239	reinte 784
Name of Well Contractor DST Cons Address	sulting Engineers	68	S. 1			sa Contractor		OCT 0 4	····
605 H Name of Well Technician		Well Tech	Y, ON	SO A Rema	arks			-	
Manon	Giroux	T- 3	3025	ISTR					
Signature of Technician/	Dirow	Submissio day30	-	MIN				1000	
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Pipe and Casing Record	<u> </u>		Pumping Test		
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For what purpose(s) is the water to be used?	· · · · · · · · · · · · · · · · · · ·	•••••	····	frenk	/35
Overburden and Bedrock Record	From	To	Loc	ation of Well	
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Situation: Is well on upland, in valley, or on hillside? Drilling Firm		.Address.	•••••••••••••••••••••••••••••••••••••••	•••••	Basin T
Form 5		• •	Signature of	Licensee	Elev.
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Well Tag No. (Place Sticker and/or Print Below)



Measurements recorded in: 🔀 Metric 🗌 Imperial

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Address of Well Location (Street Number/Name) 999 MERIVALE County/District/Municipality Township Concession Lot ROAD Postal Code City/Town/Village Province Municipal Plan and Sublot Number Ontario K1 Z6A6 UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number NAD 8 3 18 36 18 70 5026969 Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form) Other Depth (*m/ft)* From To Most Common Material Other Materials General Description General Colour To Crushed sand & gravel silt, possible abbles Sitty Clay Decial till sand, marel, possible Grey Ofill mater Grey Grey 3, 3 in to stiff 4 4.9 Jacia Silty clay **Results of Well Yield Testing** Annular Space Draw Down Type of Sealant Used (Material and Type) After test of well yield, water was: Recover Depth Set at (m/ft) Volume Placed (m<sup>3</sup>/ft<sup>3</sup>) Time Water Level Time Wate From То Clear and sand free 7.2 0 14 (min) r n/ft) Bentonite Other, specify (m/ft) (min) Static If pumping discontinued, give reason: Leve 1 Pump intake set at (m/ft) 2 2 3 3 Pumping rate (Ilmin / GPM) Method of Construction Well Use 4 4 Public Cable Tool Diamond Commercial Not used Duration of pumping Rotary (Conventional) Jetting Domestic Municipal Dewatering 5 min hrs +\_\_\_\_ Monitoring Livestock Test Hole Rotary (Reverse) Driving Final water level end of pumping (m/f) Cooling & Air Conditioning Digging Boring Irrigation 10 10 Industrial Air percussion Other, specify H.S. A Other, specify 15 15 If flowing give rate (IImin / GPM) **Construction Record - Casing** Status of Well 20 20 Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel) Depth (m/ft) Water Supply Recommended pump depth (m/ft) Inside Wall Thickness (cm/in) Diameter Replacement Well 25 25 From То (cmlin) Test Hole Recommended pump rate SCHED 30 30 .1 7.6 Recharge Well PVC  $\bigcirc$ (Ilmin | GPM) 40 Dewatering Well 40 40 Observation and/or Well production (Ilmin / GPM) Monitoring Hole 50 50 Alteration fected? (Construction) 60 60 Yes 🗌 No Abandoned, Insufficient Supply Map of Well Location **Construction Record - Screen** Abandoned, Poor Water Quality Outside Depth (m/ft) Material Diamete (cm/in) Slot No Abandoned, other, (Plastic, Galvanized, Steel) From То specify 10.6 6 8 7 lOBH13-3 78.53 Other, specify S 74 AU Water Details Hole Diameter BH13-6 Depth (m/ft) Diamete Water found at Depth Kind of Water: Fresh K Untested 78.63 7 

 2
 4
 (m/ft)
 Gas
 Other, specify

 Water found at Depth
 Kind of Water:
 Fresh
 Untested

 From То (cmlin) 6 20 10. ( )(m/ft) Gas Other, specify Water found at Depth Kind of Water: Fresh Untested (m/ft) Gas Other, specify Well Contractor and Well Technician Information ALE ROAD BH13-5 78.55 Well Contractor's Licence No. Business Name of Well Contractor Ing Ltd. 1844 Municipality Grenville-Sur-la-Rouge George Downing Estate Orilling Business Address (Street Number/Name) Principale Postal Code Business E-mail Address Busites E-mail Address C JD VI BO downing Chawk (195. net Busites E-mail Address Busites E-mail Add Well owner's information Ministry Use Only Date Package Delivered Audit No. IVIY WIMIM package delivered z 161274 Date Work Completed \_\_\_ Yes MAY 2 9 2013 Dr Date Submitted 3 3 1216 🗌 No 0130405 0506E (2007/12) © Queen's Printer for Ontario, 2007 Ministry's Copy

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County Count of the section of the			snip		Lot	Concess	ion	
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Overhundlick and Badrock Materials         Other Materials         General Description         Dugler (Merring Description)           Cleared Coars         Materials         General Description         0         1.8         3.9         7           Crear         Stance         Stance         Stance         Stance         3.9         7           Crear         Stance         S			it Make Model		f Operation:	Undifferentiated	UAV	eraged
Construction         Most Common Material         Other Materials         General Description         Public March         Bit           Class         Starte         0         1/8         0 <t< td=""><td></td><td></td><td></td><td>Mfra K 🗆 Differ</td><td>rentiated, specify</td><td></td><td></td><td></td></t<>				Mfra K 🗆 Differ	rentiated, specify			
Open Res       Tem Production       Tem Product		and the second se	1)	General	Description		Dept	n (Metres)
Buun       Sand Hill       1.8       3.9         Gray       Sand Hill       S.1         Gray       Sand Hill       S.1         Gray       Backack       S.1         Temporary installation only       Temporary installation only         Image: Status of Meril       Construction	A1 C	Other Materials		General	Description		From	To
Study     Study     Study     Study     Study       Output State (Merce)     Temporary installation only     Study     Study       Option State (Merce)     Developing (Study     Study     Study       Option State (Study)     Developing (Study)     Developing (Study)     Study       Option State (Study)     Developing (Study)     Study     Developing (Study)       Option State (Study)     Developing (Study)     Developing (Study)     Developing (Study)       Option State (Study)     Developing (Study)     Developing (Study)       Option State (Study)     D	clear stone.				<u></u>		0	1.8
Grund       Bettack       Grund       <	Brown Jand +ill.			<u> Andreas ann an Anna a</u>			1.8	3.7
Manual Speech Abadomment Seating Record       Viame Prace         Orgen Seat (Merror)       Top of Seating Using Record       Viame Prace         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       International Control (Calc Merror)         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       International Control (Calc Merror)         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       International Control (Calc Merror)         O odd poi	Grey Sand till	boulders	State State				3.9	5.1
Manual Speech Abadomment Seating Record       Viame Prace         Orgen Seat (Merror)       Top of Seating Using Record       Viame Prace         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         O 0.5       Buthout International Control (Calc Merror)       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       October of the ford of odd point.         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       International Control (Calc Merror)         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       International Control (Calc Merror)         Orgen Seatonal Control (Calc Merror)       October of the ford of odd point.       International Control (Calc Merror)         O odd poi	Gren Bodiork						5.	1
Annular Space/Abadonment Sealing Record Prom to the (Meree)       Results of Well Yield Testing       Dependent of well yield of well yield.       Draw Down       Records of the field of well yield.         Depth State (Meree)       Type of Sealing Libro diversity       Down of the field of well yield.       Draw Down free diversity       Draw Down free diversity         Depth State (Meree)       Diversity Down free diversity       <								a Section
Annular Space/Abadonment Sealing Record Prom to the (Meree)       Results of Well Yield Testing       Dependent of well yield of well yield.       Draw Down       Records of the field of well yield.         Depth State (Meree)       Type of Sealing Libro diversity       Down of the field of well yield.       Draw Down free diversity       Draw Down free diversity         Depth State (Meree)       Diversity Down free diversity       <								
Annular Space/Abadonment Sealing Record Prom to the (Meree)       Results of Well Yield Testing       Dependent of well yield of well yield.       Draw Down       Records of the field of well yield.         Depth State (Meree)       Type of Sealing Libro diversity       Down of the field of well yield.       Draw Down free diversity       Draw Down free diversity         Depth State (Meree)       Diversity Down free diversity       <				11 1	1			
Depth Stat at (Metres)         Type of Sealant Used         Volume Placed           Prom         10         0.5.5         Beny Buck         10         Kest           0         0.5.5         Beny Buck         10         Kest         11         1           0         0.5.5         Beny Buck         10         Kest         2         2         2           0         0.5.5         Beny Buck         10         Kest         2<		Iempora	y inst	allatic	on on	ly	12,000	
Depth Stat at (Metres)         Type of Sealant Used         Volume Placed           Prom         10         0.5.5         Beny Buck         10         Kest           0         0.5.5         Beny Buck         10         Kest         11         1           0         0.5.5         Beny Buck         10         Kest         2         2         2           0         0.5.5         Beny Buck         10         Kest         2<								
Depth Stat at (Metres)         Type of Sealant Used         Volume Placed           Prom         10         0.5.5         Beny Buck         10         Kest           0         0.5.5         Beny Buck         10         Kest         11         1           0         0.5.5         Beny Buck         10         Kest         2         2         2           0         0.5.5         Beny Buck         10         Kest         2<			Section Sector		Sec. Sugar	4.22 M		
Prom       To       Malerial and Type)       (Caber Metrie)         0       0.5       BUNKINLL       10       Kast         0       0.5       BUNKINLL       10       Kast         1       1       1       1         10       0.5       BUNKINLL       10       Kast         11       1       1       1       1         11       1       1       1       1       1         11       1       1       1       1       1       1         12       2	Annular Space/Aband	onment Sealing Record			Results of We	ell Yield Testin	g	en desse
Image: Provide Completed       Image: Provide					est of well yield,			and the second second second
O       0.5       10 MS1/LCC       10 MS3         Image: Status of Weak       1       1         Image: Status of Weak       1       1       1         Image: Status of Weak       Image: Status of Weak       1       1       1         Image: Status of Weak       Image: Status of Weak       Image: Status of Weak       1       1       1         Image: Status of Weak       Image: St		and Type)			d free			
Image: Supply       Demoted in the set of (Metron)         Image: Supply       Demoted in t	0 0.5 Benjonete		10 Kgs		op to sand-free		Static	-
Method of Construction         Putping less method         2         2           Method of Construction         Durnsde         Putping less method         2         3         3           Method of Construction         Durnsde         Putping less method         2         2         3         3           Method of Construction         Durnsde         Putping less method         2         2         3         3         4					nued, give reason:	Level		
Method of Construction       Water Use            • Adde Tod           • Ourmanical             • Adde Tod           • Demode             • Construction           • Demode             • Adde Tod           • Demode             • Other, specify           • Demode Tod             • Pack Set           • Demode Tod             • Pack Set           • Demode Tod             • Pack Set           • Demode Tod             • Demode Tod           • Demode Tod						<u></u>		<u> </u>
Method of Construction         Water Use         Pump intake set at (Metres)           Calle Tod         Bennod         Consents         Menciopal         Developmentod           Calle Tod         Bennod         Consents         Menciopal         Developmentod         Status of Well           Pumping ratio         Cooling & Air Conditioning         Distance of the specify         Status of Well         Distance of the specify         Status of Well           Province         Mater Supply         Observation and/or Mentioning Metres         Distance of the specify         Status of Well         Status of				Pumping test meth	bod	2	2	Sec. 19
Date Today Conventional       Public       Commercial       Putry interventional       Putry interventional         Protect       Developing       Developing       Putry interventional       Putry interventional       Putry interventional       Putry interventional         Poterventional       Developing       Developing       Putry interventional       Putry				Pump intake set a	(Matras)	3	3	
Bothy (Conventions)       Letting         Bothy (Av)       Bothy         By pervasion       Status of Well         By pervasion       Status of Well         Bothy (Av)       Bothy         By pervasion       Status of Well         Other, specify       Other, specify         Bothy       Other, specify         By pervasion       Cooling & Air Construction)         By pervasion       Abandoned, how Well         Betable       Construction)			Not used	rump intere set a	(100003)	4	4	
Indextry (Reverse)       Ording       O			Dewatering	Pumping rate (Litre	es/min)	5	5	
Date Well       Orders and Depth       Doubletial         Other, specify       Devalating       Observation and/or Monitoring Hole         Braid water Supply       Devalating Well       Observation and/or Monitoring Hole         Braid water supply       Devalating Well       Observation and/or Monitoring Hole         Braid water supply       Devalating Well       Observation and/or Monitoring Hole         Braid water supply       Devalating Well       Observation and/or Monitoring Hole         Braid water supply       Devalating Well       Observation and/or Monitoring Hole         Braid water supply       Devalating Well       Observation and/or Monitoring Hole         Braid water Supply       Devalating Mechanics, and measurements sufficient to locate the well in relation to fixed points, and measurements sufficient to locate the well in relation to fixed points, and measurements sufficient to locate the well in relation to fixed points, and make of well can also be provided         Placks& Set& AH acched       Star Brain         Matter Source and well beams       Mater Source and Processang         Water found at Depth       Kind of Water         Matter Source and Well Contractor       Matter Source and Processang         Well Contractor and Well Technician Information       Well Contractor and Well Technician Information         Buarness Name d Well Contractor and Well Technician Information       Well Contractor And				A shared a sh		5	5	and the second
Other, specify			Conditioning		Sector Sector Sector	10	10	
Status of Well       Status of Well       Coherenation and/or Monitoring Heter         Water Supply       Development       Abandoned, Insufficient Supply       Alteration (Construction)         Teat Hole       Abandoned, other, specify       Becommended pump type       30       30         Please provide a map block whortig:       Abandoned, other, specify       Metrics       30       30         Please provide a map block whortig:       Indextor full of the hole       Metrics       40       40         - an arrow indicating the Noth direction       Metrics       Metrics       40       40         - an arrow indicating the Noth direction       Fillowing five rate       60       60       60         - vidigial pictures of inside of well can also be provided       Status provided       Water found at Depth       Kind of Water         Metrics       Gas       Fresh       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Sulphur       Minerals         Water found at Depth       Kind of Water       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Sally       Sulphur       Minerals <td></td> <td></td> <td><u> </u></td> <td></td> <td>-</td> <td>15</td> <td>15</td> <td></td>			<u> </u>		-	15	15	
Water Suppy       Devalating Weil         Metris Suppy       Devalating Weil         Replacement Weil       Abandoned, Poor Water Cuality       Other, specify         Recommended pump depth       Recommended pump depth         Recommended pump depth       0         - all proopt boundaries, and measurements sufficient to locate the well in relation to fixed points, - an arrow indicating the North direction       - dotailed dreasurements sufficient to locate the well in relation to fixed points, - an arrow indicating the North direction       - dotailed dreasurements sufficient to locate the well in relation to fixed points, - an arrow indicating the North direction       - dotailed dreasurements sufficient to locate the well in relation to fixed points, - an arrow indicating the North direction       - dotailed dreasurements sufficient to locate the well on relation to fixed points, - an arrow indicating the North direction       - dotailed dreasurements sufficient to locate the well arrow indicating the North direction       - dotailed dreasurements sufficient to locate the well arrow indicating the North direction         PlictSAL SEU AHACHUS ST& PLAN.       Water found at Depth       Kind of Water         Water found at Depth       Kind of Water       Water found at Depth       Kind of Water         Water found at Depth       Kind of Water       Water found at Depth       Kind of Water         Water found at Depth       Kind of Water       Water found at Depth       Not assign and Well Detaisis         Orgen Hele					a or paintping	20	20	
The set Hole <ul> <li>Abandoned, Poor Water Quality</li> <li>Other, specify</li> <li>Recommended pump depth</li> <li>Recommended pump rate</li> <li>Recommended pump rat</li></ul>			-	Recommended pu	imp type	05		
Image: New Province       Image: New Province       Image: New Province       Image: New Province         Date Well Contractor and Well Contractor and Well Technician (Lags Nartes, Case)       Metres       Metres       Metres         Date Well Contractor and Well Contractor and Well Technician (Lags Nartes, Rep: Main 2004)       Date Well Contractor No.       Date of Inspection (Vell Technician (Lags Nartes, First Name)         Business Address (Syster No. Narte, number, RB)       Minicipality       Metres       Metres       Metres         Business Address (Syster No. Narte, number, RB)       Minicipality       Minicipality       Minicipality       Minicipality         Province       Postal Code       Business E-rgail Address       Metres       Salt 3       Well Contractor No.         Business Address (Syster No. Narte, number, RB)       Municipality       Metres       Metres       Metres         Business Address (Syster No. Narte, number, RB)       Municipality       Metres       Metres       Metres         Business Address (Syster No. Narte, number, RB)       Municipality       Municipality       Municipality       Metres         Business Case (Syster No. Narte, number, RB)       Municipality       Minicipality       Metres       Metres         Business Case (Syster No. Narte, number, RB)       Municipality       Municipality       Metres       Metres						25	25	
Please provide a map below showing:       40       40         - an arow indicating the North direction       - an arow indicating the North direction       - an arow indicating the North direction         - detailed drawings can be provided as attachments no larger than legal size (8.5° by 14°)       - dod       - dod         - vidigital pictures of inside of well can also be provided       Mater Set attachments no larger than legal size (8.5° by 14°)       - dod       - dod         - Vidigital pictures of inside of well can also be provided       State Attachud Site plan.       - Mater Set attachments no larger than legal size (8.5° by 14°)       - Mater Set attachud with minerals         - Diackut Set attachund Site plan.       - Mater Set attachund with minerals       - Mater Set attachund with minerals         - Date Well Completed       Was the well owner's information package delivered?       - Due well Contractor and Well Technician Information       - Due the Well Record and Package Delivered to Well Contractor Si Locono No         - Well Contractor       - Well Contractor       - Well Contractor No.       - Muncipality         + Hoo Mut Province       - Postal Code       - Business E-rgail Address       O         - Hoo Mut Province       - Postal Code       O       O         - Business Rame of Well Contractor       - Well Contractor No.       O       O         - Hoo Mut Province       - Postal Code	Recharge Well Abandoned, other, s	pecify				30	30	
Prease provide a stroking.       - all property to influe below stroking.         - all property to influe below stroking.       - an arrow indicating the North direction         - an arrow indicating the North direction       - detailed drawings can be provided a statchments no larger than legal size (8.5° by 14°)         - widgital pictures of inside of well can also be provided       - Mater Details         Pluckse Set attachments no larger than legal size (8.5° by 14°)       - Water Details         - Water Details       - Water Details         Water found at Depth       Kind of Water         - Matres       - Gas         - Matres       - Gas         - Water found at Depth       Kind of Water         - Matres       - Gas         - Water found at Depth       Kind of Water         - Metres       - Gas         - Well Completed       Was the well owner's information         - Date Well Completed       Was the well owner's information         - Date Well Contractor       - Metres         - Well Contractor       - Metres         - Metres       - Gas         - Date Well Contractor       - Metres         - Metres       - Gas         - Date Well Contractor       - Metres         - Metres       - Gas         - Date Well Contractor <td></td> <td>n of Well</td> <td></td> <td>Recommended pu</td> <td></td> <td>40</td> <td>40</td> <td></td>		n of Well		Recommended pu		40	40	
- an arrow indicating the North direction - detailed drivings can be provided as attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments no larger than legal size (8.5° by 14°) - vidigital pictures of inside of well can also be provided Plucase see attachments information Date Well Completed was the well owner's information Business Name of Well Contractor and Well Technician Information Business (Skelet No.Namle, number, RB) + 10 Kue functional (Lagt Name, First Name) St. (44), 44, 44, 44, 44, 44, 44, 44, 44, 44,	- all property boundaries, and measurements suffici	ent to locate the well in relation t	to fixed points,	(Litres/min)		50	50	
- vidigital pictures of inside of well can also be provided       00       00         Plack Set attached Site plan.       Water Details         Water found at Depth       Kind of Water         Metres       Gas       Fresh       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Metres       Gas       Fresh       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Metres       Gas       Fresh       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Metres       Gas       Fresh       Sally       Sulphur       Minerals         Water found at Depth       Kind of Water       Depth of the Hole (Continetres)       Sulphur       Minerals         Water found at Depth       Kind of Water       Depth of the Hole (Continetres)       Sulphur       Minerals         Water found at Depth       Weil Contractor and Well Technician Information       Depth of the Hole (Metres)       Depth of the Hole (Metres)         Water found at Depth       Weil Contractor and Well Technician Information       No Casing and Screen Used       Depth of the Casing (Metres)         Business Address (Skeet No.Name, number, RB       Mutpicipality       Mutpicipality       Mutpicipality       Mutpicipal		s no larger than legal size (8.5" b	w 14")		20.00 T (58%)			
Pliable See attached Site plan.         Water found at Depth       Kind of Water         Metres       Gas         Metres       Gas         Water found at Depth       Kind of Water         Metres       Gas         Metres       Gas         Water found at Depth       Kind of Water         Metres       Gas         Metres			,			00	60	
Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Depth of the Hole (Contractor and Well Technician Information       Depth of the Hole (Metros)         Buginess Name of Well Contractor       Well Contractor's Licence No.         Charle Data Well Contractor       Well Contractor No.         Charle Data Well Contractor No.       Casa 88 43 <tr< td=""><td>01</td><td></td><td></td><td></td><td>the second second second second second</td><td></td><td></td><td></td></tr<>	01				the second second second second second			
Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Date Well Completed       Was the well owner's information       Date the Well Record and Package         Depth of the Hole (Contractor and Well Technician Information       Depth of the Hole (Metros)         Buginess Name of Well Contractor       Well Contractor's Licence No.         Charle Data Well Contractor       Well Contractor No.         Charle Data Well Contractor No.       Casa 88 43 <tr< td=""><td>Plinse see attached</td><td>Site plan.</td><td></td><td></td><td></td><td></td><td>Sulphur</td><td>Minerals</td></tr<>	Plinse see attached	Site plan.					Sulphur	Minerals
Date Well Completed (yyy/mm/dd)       Was the well owner's information package delivered?       Date the Well Record and Package package delivered?       Steel       Steel       Steel       Diameter of the Hole (Centimetres)         Date Well Completed (yyy/mm/dd)       Was the well owner's information package delivered?       Date the Well Record and Package package delivered?       Date the Well Record and Package package delivered?       Steel       Steel       Diameter of the Hole (Centimetres)         Value Toursctor and Well Technician Information Business Name of Well Contractor       Date the Well Record sub Package package delivered?       No Casing and Screen Used       Diameter of the Hole (Metros)         Well Contractor and Well Technician Information Business Address (Skoet No./Name, number, RB)       Municipality       Well Contractor's Licence No.         How Province       Postal Code       Business E-mail Address       Municipality       Well Contractor No.         How Province       Postal Code       Business E-mail Address       Municipality       Well Contractor No.         Bus Telephone No. (inc. area code) Name of Well Technician (Last Name, St. Well Y, Hug Y							Supria	minerais
Metres       Gas       Fresh       Salty       Sulphur       Minerals         Date Well Completed (yyy/mm/ddp Tock       Was the well owner's information pakage delivered?       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)       Galvanized Galvanized Steel       Steel       Galvanized Galvanized       Diameter of the Hole (Centimetres) Concrete         Well Contractor and Well Technician Information Business Address       Date the Well Contractor's Licence No.       Well Contractor of the Casing (Metres) Concrete       Well Contractor of the Casing (Metres) Concrete         HIO       Kuel Foreglass       Plact       Well Contractor (Kerres)       Well Contractor (Kerres)         HIO       Kuel Foreglass       Plact       Steel       Inside Diameter of the Casing (Metres)         Yeas       No Casing and Screen Used       Inside Diameter of the Casing (Metres)       Steel         Open Hole       Steel       Depth of the Casing (Metres)       Steel         Disinfected?       Depth of the Casing (Metres)       Steel       Inside Diameter of No.         Steel       Business E-mail Address       Municipality       Ministry Use Only       Metres         HIO       HIO       Business E-mail Address       Metres       Date Received (yyyy/mm/dd)       Date of Inspection (yyyy/mm/dd)         Business Address       Steel       Steel							Sulphur	Minerals
Date Well Completed (yyy/mm/dd)       Was the well owner's information package delivered?       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)       Steel       Casing Used       Casing and Well Details         Date Well Completed (yyy/mm/dd)       Was the well owner's information package delivered?       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)       Galvanized       Steel       Depth of the Hole (Continetres)         Well Contractor and Well Technician Information       Date the Well Contractor's Licence No.       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Address (Skeet No. Name, number, RB)       Well Contractor's Licence No.       Well Contractor No.       Inside Diameter of the Casing (Metres)         Province       Postal Code       Business E-mail Address       Municipality       Well Contractor No.         Bus. Telephone No, (inc. area code) Name of Well Technician (Last Name, First Name)       Steel       Date Received (yyy/mm/dd)       Date of Inspection (yyy/mm/dd)         Steel       Steel       Steel       Date of Inspection (yyy/mm/dd)       Date of Inspection (yyy/mm/dd)				Water found at D				
Date Well Completed (yyyymm/dd) TCCS DS IQ       Was the well owner's information package delivered? IVES DS IQ       Date the Well Record and Package Delivered to Well Owner (yyyymm/dd)       Fibreglass Plastic       Depth of the Hole (Centimetres) 30         Well Contractor and Well Technician Information Business Name of Well Contractor       Date the Well Contractor's Licence No. Concrete       No Casing and Screen Used Inside Diameter of the Casing (Metres) Concrete         Well Contractor       Well Contractor, RB       Municipality Well Contractor No. Concrete       No Casing and Screen Used Inside Diameter of the Casing (Metres) Concrete         Province       Postal Code       Business E-mail Address       Municipality Well Contractor No.       Well Contractor No.         Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, SULUY WHY WHY Downing, Srwee       Dor NY       Date of Inspection (yyyy/mm/dd)				Metres	Gas Fre	ish Salty	Sulphur	Minerals
Date Well Completed (yyy/mm/dd) TCCS DS IQ       Was the well owner's information package delivered? TYes       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)       Steel       Steel       Depth of the Hole (Metres)         Well Contractor and Well Technician Information Business Name of Well Contractor       Yes       No       Yes       No         Well Contractor and Well Technician Information CLOUPLE DATION       Well Contractor's Licence No.       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Address (Steef No./Name, number, RB)       Well Contractor's Licence No.       Open Hole       Image: Steel         Province       Postal Code       Business E-mail Address       Municipality       Municipality         Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name)       Date of Inspection (yyy/mm/dd)       Well Contractor No.         Start Hour Houle       Start Hour Houle       Start Hour Houle       Start Hour Houle       Image: No				Casing Used	Screen Used			
Date Well Completed (yyy/mm/dd)       Was the well owner's information package delivered?       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)       Fibreglass       Depth of the Hole (Metres)         Well Contractor and Well Technician Information       2008 09 10       No Casing and Screen Used       Wall Thickness (Metres)         Well Contractor and Well Contractor       Well Contractor's Licence No.       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Address (Steet No./Name, number, RB)       Well Contractor's Licence No.       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Province       Postal Code       Business E-mail Address       No Casing Ad 3       Well Contractor No.         Bus. Telephone No, (inc. area code) Name of Well Technician (Last Name, First Name)       St. How St. Last Name, First Name)       Well Contractor No.       Z 6 38 4 3       Well Contractor No.         St. H. 24 H. 44 H. 47 H. 44 H. 45 H. 4						Diameter of t	30	ntimetres)
Date Well Completed (yyy/mm/dd)       Was the well owner's information package delivered?       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)         Well Contractor and Well Technician Information       Date the Well Record and Package Delivered to Well Owner (yyy/mm/dd)       Wall Thickness (Metres)         Well Contractor and Well Technician Information       Well Contractor's Licence No.       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Name of Well Contractor       State Duiling       State Duiling       State Output       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Address (Skeet No./Name, number, RR)       Municipality       Yes       No       Depth of the Casing (Metres)         Province       Postal Code       Business E-mail Address       Depth of Well Contractor No.       State Output       Well Contractor No.         Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name)       State Received (yyy/mm/dd)       Date of Inspection (yyy/mm/dd)       Date of Inspection (yyy/mm/dd)         State Planet       State Planet       State Planet       Date of Inspection (yyy/mm/dd)					and the second second	Depth of the	jole (Metre	s)
Image: Tools DS 14       Yes       No       ZOUS 09 10         Well Contractor and Well Technician Information       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Name of Well Contractor       Well Contractor's Licence No.       No Casing and Screen Used       Inside Diameter of the Casing (Metres)         Business Address (Street No. Name, number, RB)       Municipality       A 14       Province       Postal Code       Business E-mail Address         Province       Postal Code       Business E-mail Address       Diffected?       Well Contractor No.         Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name)       Diffected?       Date of Inspection (yyyy/mm/dd)         St. [4/2] 4/4 [4] Downing, Sruce		mation Date the Well Record	d and Package				D.1	<u> Antonio (</u>
Well Contractor and Well Technician Information         No Casing and Screen Used         Business Name of Well Contractor       Well Contractor's Licence No.         OLOGE Dom No.       Cstate Dulling       Nunicipality         Business Address (Street No.Name, number, RB)       Municipality       Province       Open Hole       Inside Diameter of the Casing (Metres)         Province       Postal Code       Business E-mail Address       Municipality       Province       Vest Mode       Mell Contractor No.         Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name)       Diffected?       Date of Inspection (yyyy/mm/dd)       Date of Inspection (yyyy/mm/dd)         Step 13       Address       Step 13       Address       Mell Contractor No.	7.00% DS 19 package delivered?	No 2008 09	vner (yyyy/mm/dd)	Concrete	Concrete	Wall Thicknes	s (Metres)	10
Business Name of Well Contractor       Well Contractor's Licence No.         OLOYE       Open Hole         Business Address (Street No./Name, number, RB)       Municipality         H IO       Rue         Province       Postal Code         Business E-mail Address       Business E-mail Address         GC       JOVI BO         Bus. Telephone No, (inc. area code) Name of Well Technician (Last Name, First Name)         SI (4/2) 4/24/24/24/24/24/24/24/24/24/24/24/24/24			11.72	No Casing a	nd Screen Used	Inside Diame	ler of the Cr	asing (Metres)
OLOYE       OLOYE       OLOYE       OLOYE       Output       OLOYE       Depth of the Casing (Metres)         Business Address (Street No./Name, number, RB)       Municipality       Municipality <td< td=""><td>the second strends to second a second strends to the second strends to second strends to the second strends to the</td><td></td><td>the second s</td><td>Open Hole</td><td></td><td></td><td></td><td></td></td<>	the second strends to second a second strends to the second strends to second strends to the second strends to the		the second s	Open Hole				
HO       Rue       Principale       Grenning       Suitess       Frail       Address       Ministry Use Only         Province       Postal Code       Business E-mail Address       Business E-mail Address       Well Contractor No.         GC       DOVINBO       Doving C x DOT Net Com       Com       Z 63843       Well Contractor No.         Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name)       Date Received (1999/100/1000)       Date of Inspection (1999/100/1000)         SI       U/2/4/2/4/4/4/4       Dovining, Bruce       SEP 13 283       Date of Inspection (1999/100/100)	Ologe Unine Estate	e Unilling 1	8 44			Depth of the	Casing (Met	tres)
Province Postal Code Business E-mail Address CC DIVINBO DOWNOGCX DOT NOT COM Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name) SI (4/2) 4/2 6/4 6/9 DOWNOG, Bruce Struce Structure	Business Address (Street No./Name, number, RE		b Bauca	Yes Yo			10	
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		echnician (Last Name, First N	ame)	Date Received (1999)	//mm/dd)	Date of Inspection	(yyyy/mm/	(da)
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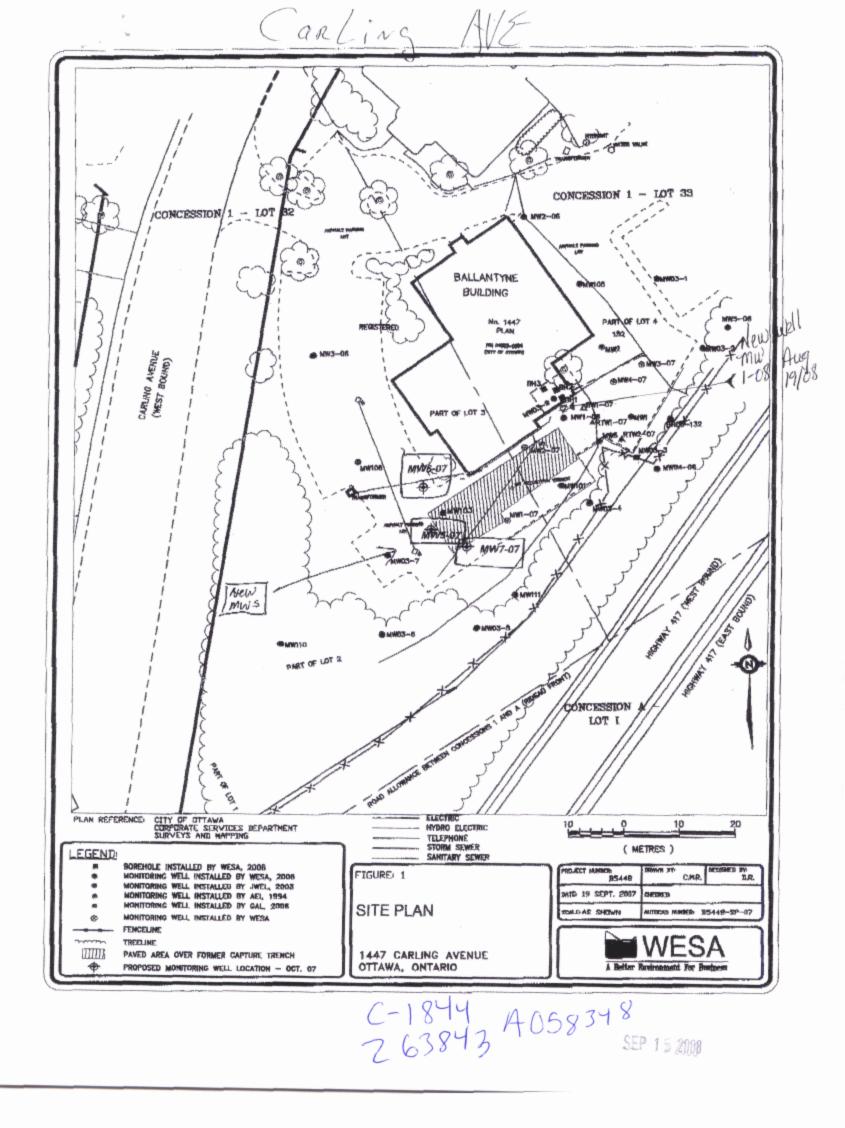
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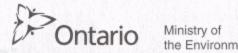
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County/Di	istrict/Munic	cipality	leton		City/To	wn/Villag						Provi	nce tario	Postal Code
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			Construction De	tails					Yes 1	Na	Sc	reen	M	letres
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				/				Cluster	Information	n (Pleas	se also i	fill out	t the additi	ional Cluster Well
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	10000								Sever			Infor	mation Log	Sheets Submitted
								l I otal We	Ils on this P	roperty			0	ne
													Cluster	
								Detailed (8.5" x 14	Map must b I"). Sketche	e provie s are pr	ted as a	an atta	chment no	larger than legal siz
						-							rovided as	per Section 11.1 (3
			- The Second					Consent	to release	additio	nal info	rmatio	on concerr	ning the cluster to
			A Mariatelli											
			actor and Well Tech	When I wanted in the set of the set of the										
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Province		Costal Code		Address	nyce	1. 000	Ca	Audit No.	w 06				Contractor N	lo.
1100	· · · · · · · · · · · · · · · · · · ·		Name of Well Technici	~			-	1212200000	NU5		1.000	Date o	f Inspection	n (yyyy//mm/dd)
4133	3544	767	Across	-,				100000000	IG 2 5					
		e No. Signa	ature of Technician		Date Subn			Remarks						
2 7	25		and the second division of the second divisio		A 10 P 1	1110								

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Well Tag No. for Master Well (Print Well Tag No.)

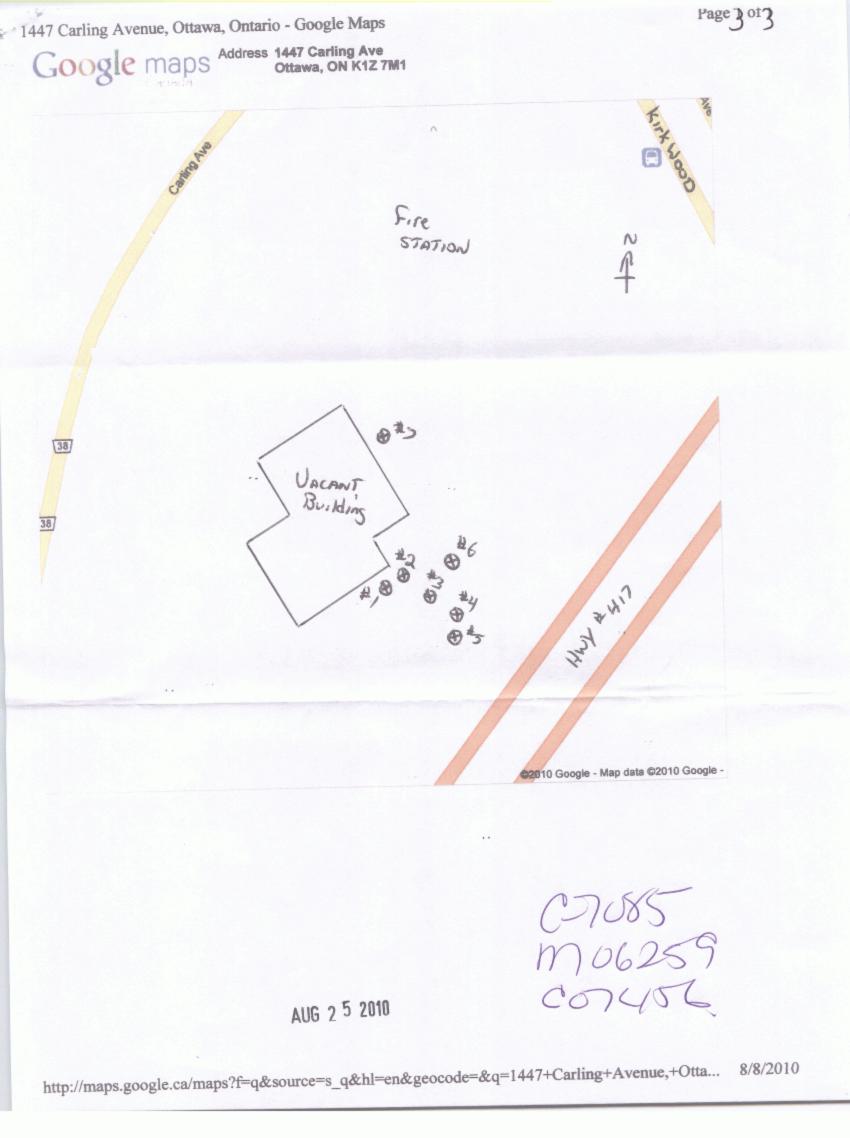
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**Cluster Well Information for Cluster Well Construction** 

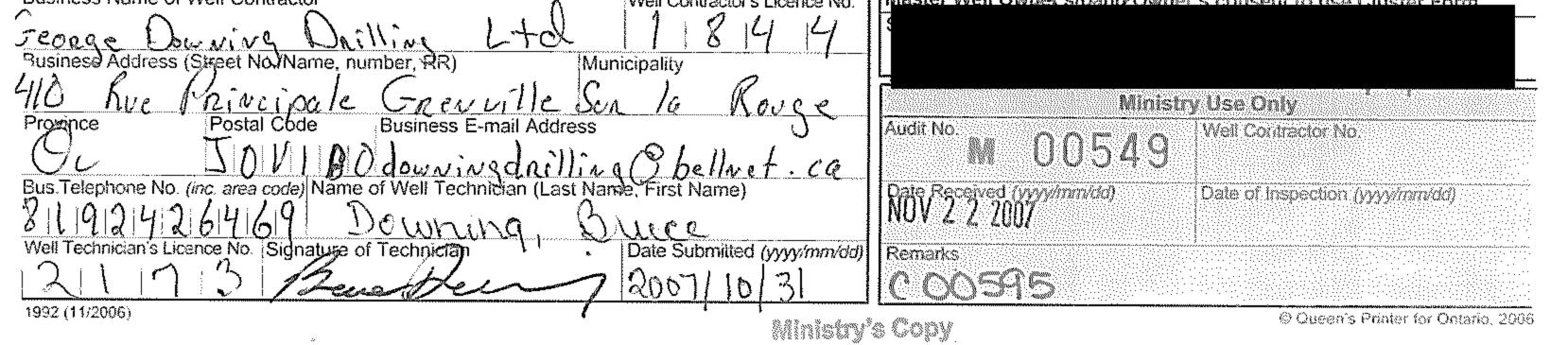
Regulation 903 Ontario Water Resources Act

Page 2 of 3

											58 S S S S S S S S S S S S S S S S S S S		
Property Owner's Information						199							
First Name	Last Name				ddress (Street N			1월 일 전 문 문의 전도 관계에	cipality	and the second second			
Province	Taw cr stal Code	E-mail	Address	INO La	urier Ave	e West	574 5	Telephone	No. (inc. are				
0N K	JIP JJ	1		-									
Cluster Well Information													
Address of Well Location (Street Number/Nam 1447 Conling AV	ne, RR) P	Lot	1		Township CITY OF			UT	ty/District/Mu	unicipality orlaton	Signature of Techni	ician/Contractor	Date (yyyy/mm/dd)
City/Town/Village	Province Po Ontario	ostal Code		-	Model		de of Opera rentiated, sp		ndifferentiated	Averaged	R		2010 06 30
Well # UTM Coordinates on Sketch Zone Easting Northing	Full Depth of Hole (metres)	f Hole Diameter ) (cm)	Method of Construction		ial Casing Length (metres)	h Screen Int From	terval (metres) To	Annular Space Sealant Used	Static Water Lével (metres)		Corr	nments	Date of Completion (yyy/mm/dd)
*2 1844199250258	22 8.54	-	-	PUC	5.48	3-48	58.54	-	2.94	Bentonite	AII DUC	Remove from Hole	2 2000 05 2
*3 1844199350256	20 5,18	-	~	Puc	2.13	2.13	3.18	-	292	11	۱۱	ı <sup>3</sup> 2	2010 03 27
1844199850258	18 4.57	-	~	11	1.52	1.52	4.57	-	3.12	15	11	τ,	-11 D
5 1844200250258	18 4.57	- 10	-	× 110	1.52	1.32	4.57	-	3-0	33	1	11	יו וי
*6 4844200350238	346.10	~	1-	n V	3.04	3.04	6.10	-	2.98	)ı 🤤	P	21	11 17
7 1844146850238	744.27	-	-	11	1.21	1.2)	4.27		3.16	11	Ŀ	1.,	31 20
				4									
			$\sim$										
<u> </u>													
Well Contractor and Well Technicia	an Information										Date 1st Well in Cluster (yyyy/mm/dd)	장애가 가슴 것이 가지 않는 것 같아요. 가지 않는 것 같아요. 가지 않는 것 같아요.	Cluster Constructed
G.E.T. Drilling hos				s (Street Number/N いを いへのり			Municipali	ponee		Province	Ministry Use O		
X1R341613	hone No. (inc. area ( 3 5 4 4	<sup>code)</sup> 767	Well Contract	ctor's Licence No. Bu	usiness E=mail Get dmi)	Address		ndo. ca			Date Received (yy) AUG 2 5		1 (yyyy/mm/dd)
Name of Well Technician (First Name, Last Na	ime)		a state of the sta	cian's Licence No. Da	ate Submitted ()		Signature	e of Technician			Audit No. 074	Remarks	259
1991 (11/2006)			이번화리험			Ministry's	s Copy					© Queen's Print	ter for Ontario, 2006



ବ୍ଚ Ontario	Ministry of the Environment	Well Tag No 👘 👘	a qş		d/or Print Below)	Cluster Well Construction
		<i>(</i>	<u>405</u>	834	8	Regulation 903 Ontario Water Resources Act
Master Well Owner's and First Name		nation Name				
Mailing Address (Street Number 110 Laurier a	Name, RR) Ve. 5th Floo		awa		Province I	Postal Code       Telephone No. (inc. area code)         KIPIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Location and Construction Address of Well Location (Stree		Towr	nship		· · · · · · · · · · · · · · · · · · ·	Lot Concession
County/District/Municipality UTM Coordinates Zone, East		Cîty/		ana		Province Postal Code Ontario
NAD   8   3   1   8 4 4 Overburden and Bedroc	196185012	518111 Ma			Mode of Op	iated, specify Hole Details
General Most Common Colour Material	Other Materials	General Description		(Metres) To	Depth (Metres) From To	Diameter \ (Centimetres)
Blown Sand	Gravel			1.22	0 5.1	20
Brown Sandy S	III Lill	······································	1.22	3.66		
		······································				Water Use
······						st Hole Cooling & Air Conditioning Method of Construction
				· · · · · · · · · · · · · · · · · · ·	Cable Tool	Air Percussion Digging  Diamond Boring  Jetting Grother, specify
					Rotary (Air)	Driving QuqeA
					PTest Hole	Abandoned, Insufficient Supply Abandoned, Poor Water Quality Other, specify
					Alteration (Construct	ion)  Abandoned, other, specify  Been Used Static Water Level Test
Inside Diameter	Construction Deta Material	iils Wall	Depth (	Metres)	Open Hole	Screen
(Centimetres) (steel, plastic,	fibreglass, concrete, gal		S From	То	Galvanized Ste	eel 🗍 Fibreglass 📋 Concrete 🔃 Plastic
		······································		· · · ·	しいしょうり Water found at Depth	Water Details Kind of Water
				······	Water found at Depth	Gas Fresh Salty Sulphur Minerals
Annular Depth Set at (Metres) From To	Space/Abandonment Type of Sealant Us (Material and Type	ed	Volume (Cubic I		Water found at Depth	
0.83 1.67 Ber	Honite	······································	······		· · · · · ·	No If no, provide reason: Date Master Well Completed (yyyy/mm/dd)
		······			Cluster Information (	2 2007/10/02. Please also fill out the additional Cluster Well Construction for each parcel of land and cluster.)
					Total Wells in Cluster	Please indicate Number of Cluster Well Information Log Sheets Submitted
					Unknow	Location of Well Cluster
					(8.5" x_14"). Sketches a	provided as an attachment no larger than legal size are not allowed. m detailed map is provided as per Section 11.1 (3)
					Consent to release ad the Director upon require Signature of Technician	
Well Contr Business Name of Well Contracto	actor and Well Techr		tractor's Lice	nce No	Master Well Owner's	ADD Juner's consent to use Cluster Form





Ministry of the Environment

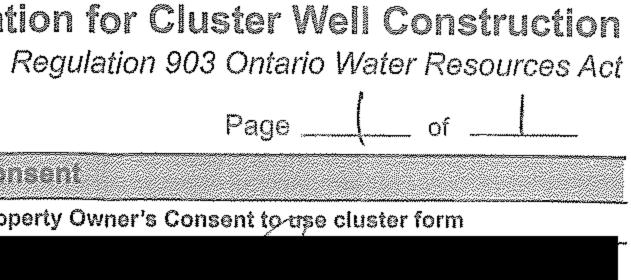
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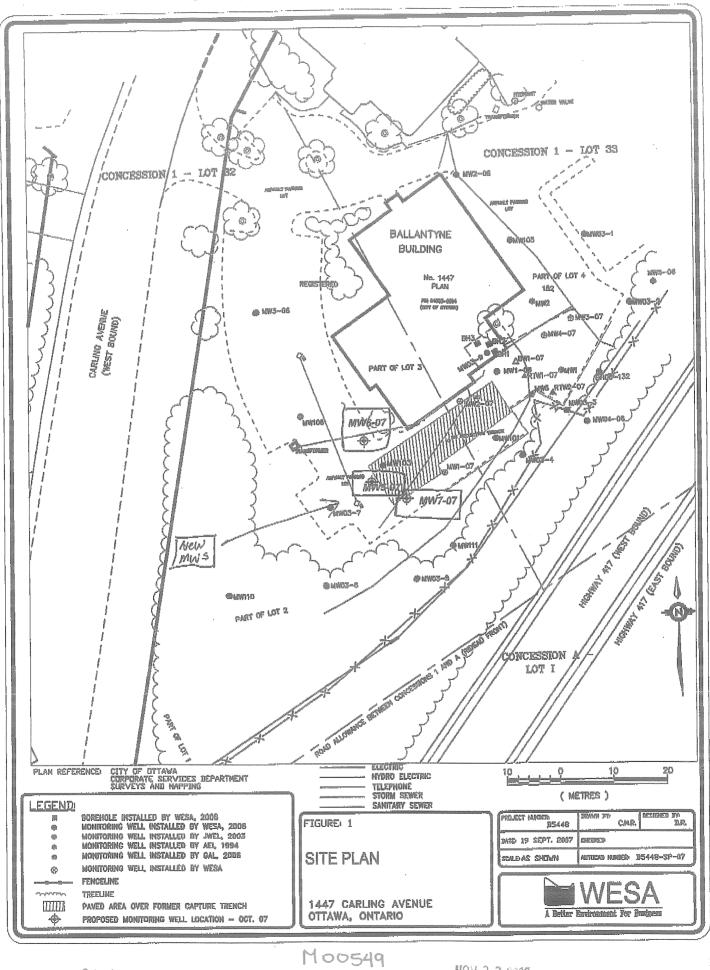
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Property Owner's Information	ist Name		Mailing Address	(Street No.	/Name, R	R)	Munici	ipality		Consent	
Province Postal	Code		s. <b>1</b>	-ier (	*	•		Offace No. (inc. area	code)	Property Owner's Consent to-tope cluster	rorm ~
ON KI	<u>                                     </u>							<u>3 5 8 </u>		Consent to release additional information	n to the Director
Address of Well Location (Street Number/Name, 1947 Carling Que.		Conces	ssion Town	ship		~~~~~~~~~	County	y/District/Mun	icipality	Signature of Technician/Contractor	Date (yyyy/mm/dd)
A second s	ovince Postal Code ntario	GPS UN Mage	nit Make   Mode Ilan Spc	ì	Unit Mode	-		lifferentiated	-Averaged	Bundania	2007/10/21
Well # UTM Coordinates on Sketch Zone Easting Northing	Full Depth of Hole Diameter Hole (metres) (cm)	Method of Ca Construction		sing Length (metres)	Screen Inter From	val (metres) To	Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
5-07 18441198155012518101 MWD 16144198155012518101	5 4.11 20	<u>HSA</u>	PVC	1.11	),/1	4.11	Bendmite	· · · · · ·			2007/10/02
7-07 18441972562580	15.1 20	1t	*1 2	2,06	2,06	5.1	<u>I</u>	3			2007/10/02
			······								• •
							······				
									*		······
		×									
Well Contractor and Well Technician I Business Name of Well Contractor, OLOT W. DOWNLING CSTATE D	Bus	iness Address (Street	Number/Name,	'A	will	Municipali	1)	Ronal	Province Quebec	Date 1st Well in Cluster Constructed Date Last Well (yyyy/mm/dd) 2001 10 02 (yyyy/mm/dd) 2000 000 000 000 000 000 000 000 000 0	lu los
Postal Code DV Business Telephone DV BUSINESS Telephone Postal Code Name of Well Technician (First Name, Last Name)	4 a a a a a a a a a a a a a a a a a a a	Well Contractor's Lice	nce No. Busines	s E-mail Ad کیکاک bmitted (پرہر)		Xol	moti	0	<u>yncerc</u>	Date Reprive2(2/2007/dd) Date Inspe	cted (yyyy/mm/dd)
1991 (11/2006)			13200	1	stry's Co	<u>/2</u> opy	u	San	~	© Queen's F	S99 Printer for Ontario, 2006

e	- RS	- 18/~11	nt Well	Tag No.)
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# Cluster Well Information for Cluster Well Construction





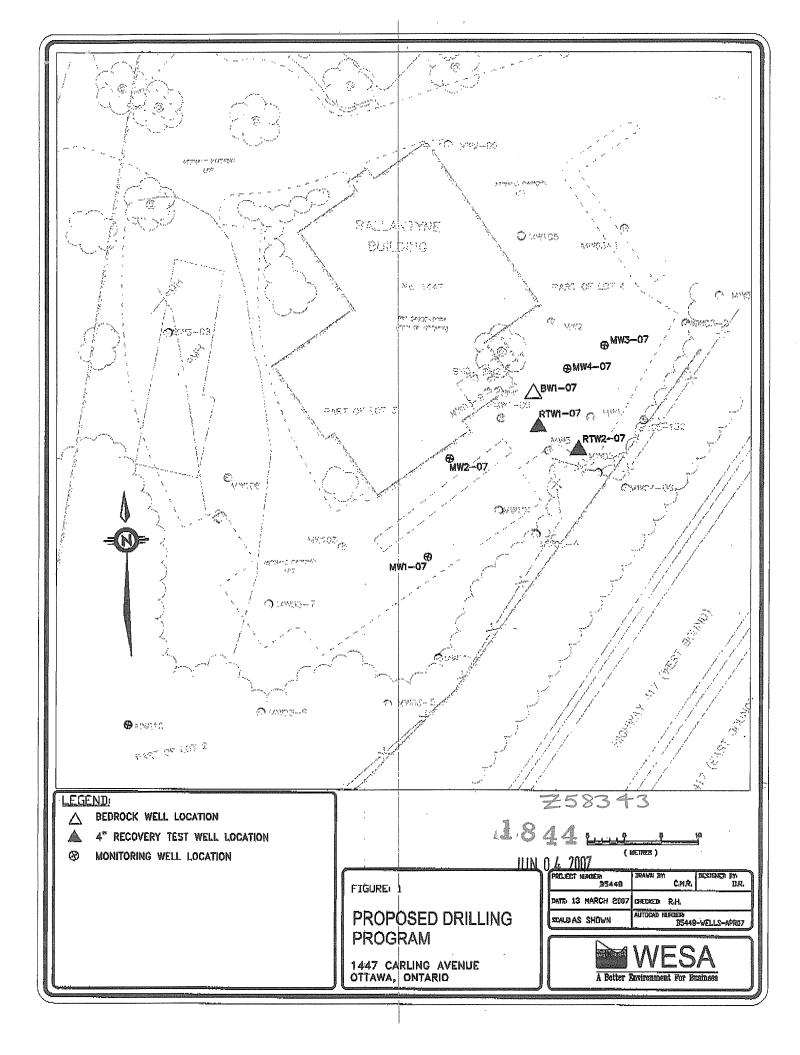
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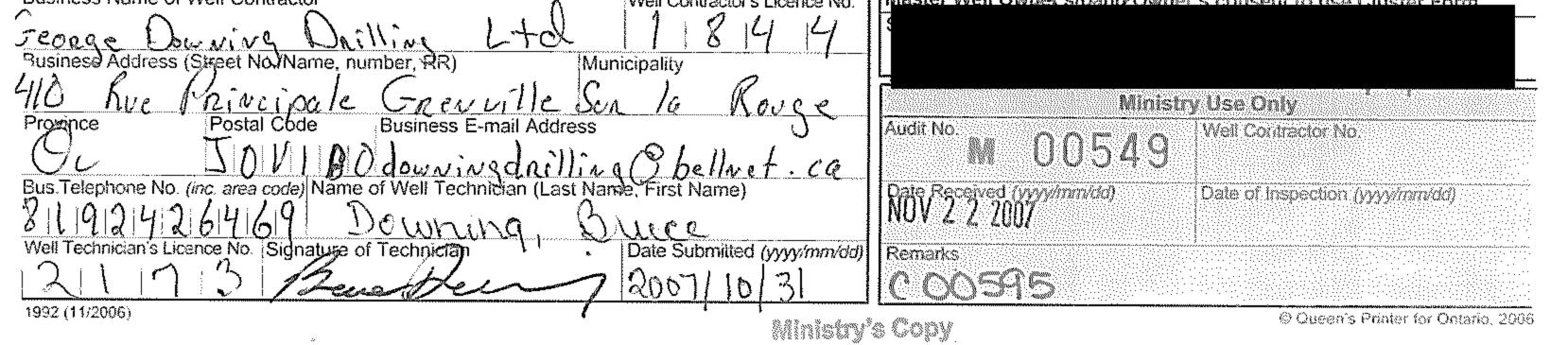
NOV 2 2 7007

	Vinistry of he Environment	Well	1560	number below)	Regulation 903 Onta	Well Record
Instructions for Completin	a Form	AD	58560	$\mathbf{)}$		page of
For use in the Province	of Ontario only. Th	is document is a pe	rmanent leg	al document. F	ー Please retain for future refe	erence.
Questions regarding con	pleting this application	ation can be directe	d to the Wa	instructions an ter Well Help I	d explanations are available Desk (Toll Free) at 1-888-	on the back of this form. 396-9355.
<ul> <li>All metre measurement</li> <li>Please print clearly in blu</li> </ul>			re		Ministry Use Only	
			MUN	G	ON	IOT
F						
G						
Address of Weir Location (County,	и и и и и и и и и и и и и и и и и и и		ownship		LOI	Concession
RR#/Street Number/Name			City/Town/	0	Site/Compartmen	t/Block/Tract etc.
GPS Reading NAD Zon	LRNUL Easting	Northing	Unit Make/	Model d Mode	e of Operation: 🗍 Undifferentia	ated Averaged
8:3 ):2 Log of Overburden and Be	6 44191812	50,258 M	) Maget	the Garn	Differentiate	d, specify
General Colour Most common		Other Materials	-	Genera	al Description	Depth Metres From To
Brown Sand Fil	1-Asphalts	urface overlyi	ng crus	hed soci	< + sand fill	0 3
Grey Sand +	ill tra	ce clay	1 mo	ist la	wet	3 4,6
Grey Gravel		•				4.6 5.3
Cimesten	K					5.3 6.7
		· · · · · ·		k	1	
- Monito	ning well	installatio	mas	a clus	ter as per on	MOE Rag 903
Hole Diameter	al	Construction Re			Test of W	
Depth Metres Diameter	Inside	Wall	Depth	Metres	Pumping test method Drav	w Down Recovery
FromToCentimetres04.5720	diam Mate centimetres	centimetres	From	То	min	Vater Level Time Water Level Metres min Metres
H57 1.7 40		Casing			Pump intake set at - Static (metres) Level	
	51 Steel		0	5.8	Pumping rate - 1 (litres/min)	1
Water Record Water found at Metres / Kind of Water	mm Galvanize	ad TO		-3,0	Duration of pumping 2	2
at Metres / Kind of Water	Steel Plastic	Fibreglass Concrete			Final water level end 3	3
Gas Safty Minerals	Galvanize	~			Recommended pump 4	4
m Fresh Sulphur	L	]Fibreglass  Concrete			Shallow Deep	
Gas Safty Minerals	Galvanize	ed			depthmetres	5 7
m Fresh Sulphur Gas Salty Minerals	Outside	Fibreglass Slot No.			Recommended pump 10 rate. (litres/min) 15	10
After test of well yield, water was	diam Plastic	]Concrete	6	Le. 7	If flowing give rate - 20 (litres/min) 25	20 25
Clear and sediment free	58 Galvanize				If pumping discontin- 30	30
Other, specify	Open hole	No Casing or So	reen		40	40
Chlorinated Yes No					60	60
Plugging and Sea	aling Record e (bentonite slurry, neat ce	ment slurn) etc Volu	Abandonment	In diagram belov	Location of Well	
From To Benton	•	(cu	bic metres) 20 Kg	Indicate north by $\Omega$		t- D
				V lase !	see attached si	Leplan.
	ethod of Constructi					
Cable Tool Rotary (a	ussion	Diamond Jetting	Digging Other			
Rotary (reverse) Boring	Water Use	Driving (	iop			
Domestic Industria		Public Supply	TOther			
		Cooling & air conditioning		Audit No.	58343 Date Well C	Completed
Water Supply Recharge we			doned, (Other)		ner's information Date Delive	red YYYY MM DD
Observation well     Abandoned, i     Test Hole     Abandoned, p		Dewatering		package delivere	d? Yes LAG	
	ractor/Technician Ir	nformation	Licence No.	Data Source	Ministry Use Only Contractor	1844
Name of Well Centractor <u>PEOTGE</u> OUI) NUNO ES: Busingss Aldress (street name, inumbe	tate Drilling	9 184	111		Data of loss	- · · · · · · · · · · · · · · · · · · ·
HOUM ain SLADDE Gre	nville sur La	Rouge Qc J	OVIBO	Date Received		ection <sub>ҮҮҮҮ</sub> мм DD
Name of Well Technician (last name, fir	rst name)	Well Technician's	2173 1	Remarks	Well Record	d Number
Signature of technician/Contractor	en	Date Submitted yrv	TOB PD			
0506E (08/2006)	I		stry's Copy	μ	Cette formule	est disponible en français

Ministry's Copy



ବ୍ଚ Ontario	Ministry of the Environment	Well Tag No 👘 👘	a qş		d/or Print Below)	Cluster Well Construction
		<i>(</i>	<u>405</u>	834	8	Regulation 903 Ontario Water Resources Act
Master Well Owner's and First Name		nation Name				
Mailing Address (Street Number 110 Laurier a	Name, RR) Ve. 5th Floo		awa		Province I	Postal Code       Telephone No. (inc. area code)         KIPIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Location and Construction Address of Well Location (Stree		Towr	nship		· · · · · · · · · · · · · · · · · · ·	Lot Concession
County/District/Municipality UTM Coordinates Zone, East		Cîty/		ana		Province Postal Code Ontario
NAD   8   3   1   8 4 4 Overburden and Bedroc	196185012	518111 Ma			Mode of Op	iated, specify Hole Details
General Most Common Colour Material	Other Materials	General Description		(Metres) To	Depth (Metres) From To	Diameter \ (Centimetres)
Blown Sand	Gravel		<u> </u>	1.22	0 5.1	20
Brown Sandy S	III Lill	······································	1.22	3.66		
		······································				Water Use
······						st Hole Cooling & Air Conditioning Method of Construction
				· · · · · · · · · · · · · · · · · · ·	Cable Tool	Air Percussion Digging  Diamond Boring  Jetting Grother, specify
					Rotary (Air)	Driving QuqeA
					PTest Hole	Abandoned, Insufficient Supply Abandoned, Poor Water Quality Other, specify
					Alteration (Construct	ion) 🗌 Abandoned, other, specify neen Used   Static Water Level Test
Inside Diameter	Construction Deta Material	iils Wall	Depth (	Metres)	Open Hole	Screen
(Centimetres) (steel, plastic,	fibreglass, concrete, gal		S From	То	Galvanized Ste	eel 🗍 Fibreglass 📋 Concrete 🔃 Plastic
				· · · ·	しいしょうり Water found at Depth	Water Details Kind of Water
				······	Water found at Depth	Gas Fresh Salty Sulphur Minerals
Annular Depth Set at (Metres) From To	Space/Abandonment Type of Sealant Us (Material and Type	ed	Volume (Cubic I		Water found at Depth	
0.83 1.67 Ber	Honite	······································	······		· · · · · ·	No If no, provide reason: Date Master Well Completed (yyyy/mm/dd)
		······			Cluster Information (	2 2007/10/02. Please also fill out the additional Cluster Well Construction for each parcel of land and cluster.)
					Total Wells in Cluster	Please indicate Number of Cluster Well Information Log Sheets Submitted
					Unknow	Location of Well Cluster
					(8.5" x_14"). Sketches a	provided as an attachment no larger than legal size are not allowed. m detailed map is provided as per Section 11.1 (3)
					Consent to release ad the Director upon require Signature of Technician	
Well Contr Business Name of Well Contracto	actor and Well Techr		tractor's Lice	nce No	Master Well Owner's	ADD Juner's consent to use Cluster Form





Ministry of the Environment

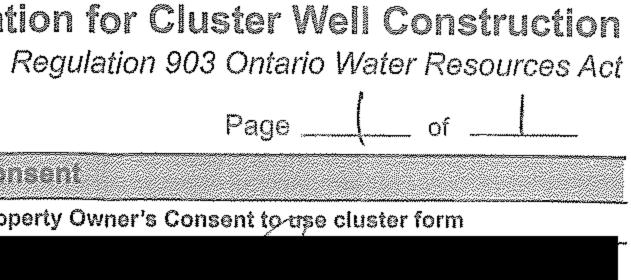
1			
Well	Teres (	•	•

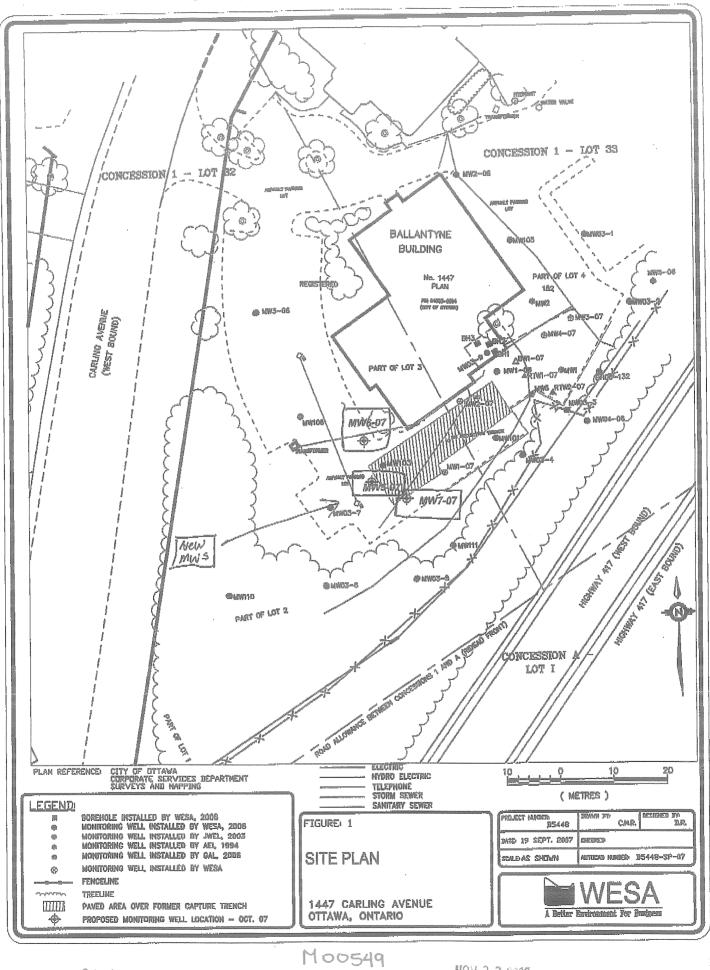
a 058348 A058348 -

Property Owner's Information	ist Name		Mailing Address	(Street No.	/Name, R	R)	Munici	ipality		Consent	
Province Postal	Code		s. <b>1</b>	-ier (	*	•		Offace No. (inc. area	code)	Property Owner's Consent to-tope cluster	rorm ~
ON KI	<u>                                     </u>							<u>3 5 8 </u>		Consent to release additional information	n to the Director
Address of Well Location (Street Number/Name, 1947 Carling Que.		Conces	ssion Town	ship		~~~~~~~~~	County	y/District/Mun	icipality	Signature of Technician/Contractor	Date (yyyy/mm/dd)
A second s	ovince Postal Code ntario	GPS UN Mage	nit Make   Mode Ilan Spc	ì	Unit Mode	-		lifferentiated	-Averaged	Bundania	2007/10/21
Well # UTM Coordinates on Sketch Zone Easting Northing	Full Depth of Hole Diameter Hole (metres) (cm)	Method of Ca Construction		sing Length (metres)	Screen Inter From	val (metres) To	Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
5-07 18441198155012518101 MWD 16144198155012518101	5 4.11 20	<u>HSA</u>	PVC	1.11	),/1	4.11	Bendmite	· · · · · ·			2007/10/02
7-07 18441972562580	15.1 20	1t	*1 2	2,06	2,06	5.1	<u>I</u>	3			2007/10/02
			······								• •
							······				
									*		······
		×									
Well Contractor and Well Technician I Business Name of Well Contractor, OLOT W. DOWNLING CSTATE D	Bus	iness Address (Street	Number/Name,	'A	will	Municipali	1)	Ronac	Province Quebec	Date 1st Well in Cluster Constructed Date Last Well (yyyy/mm/dd) 2001 10 02 (yyyy/mm/dd) 2000 000 000 000 000 000 000 000 000 0	lu los
Postal Code DV Business Telephone DV BUSINESS Telephone Postal Code Name of Well Technician (First Name, Last Name)	4 a a a a a a a a a a a a a a a a a a a	Well Contractor's Lice	nce No. Busines	s E-mail Ad کیکاک bmitted (ہرہم		Xol	moti	0	<u>yncerc</u>	Date Reprive2(2/2007/dd) Date Inspe	cted (yyyy/mm/dd)
1991 (11/2006)			13200	1	stry's Co	<u>/2</u> opy	u	San	~	© Queen's F	S99 Printer for Ontario, 2006

e	- RS	- 18/~11	nt Well	Tag No.)
l í	hrp:	1.10		

# Cluster Well Information for Cluster Well Construction



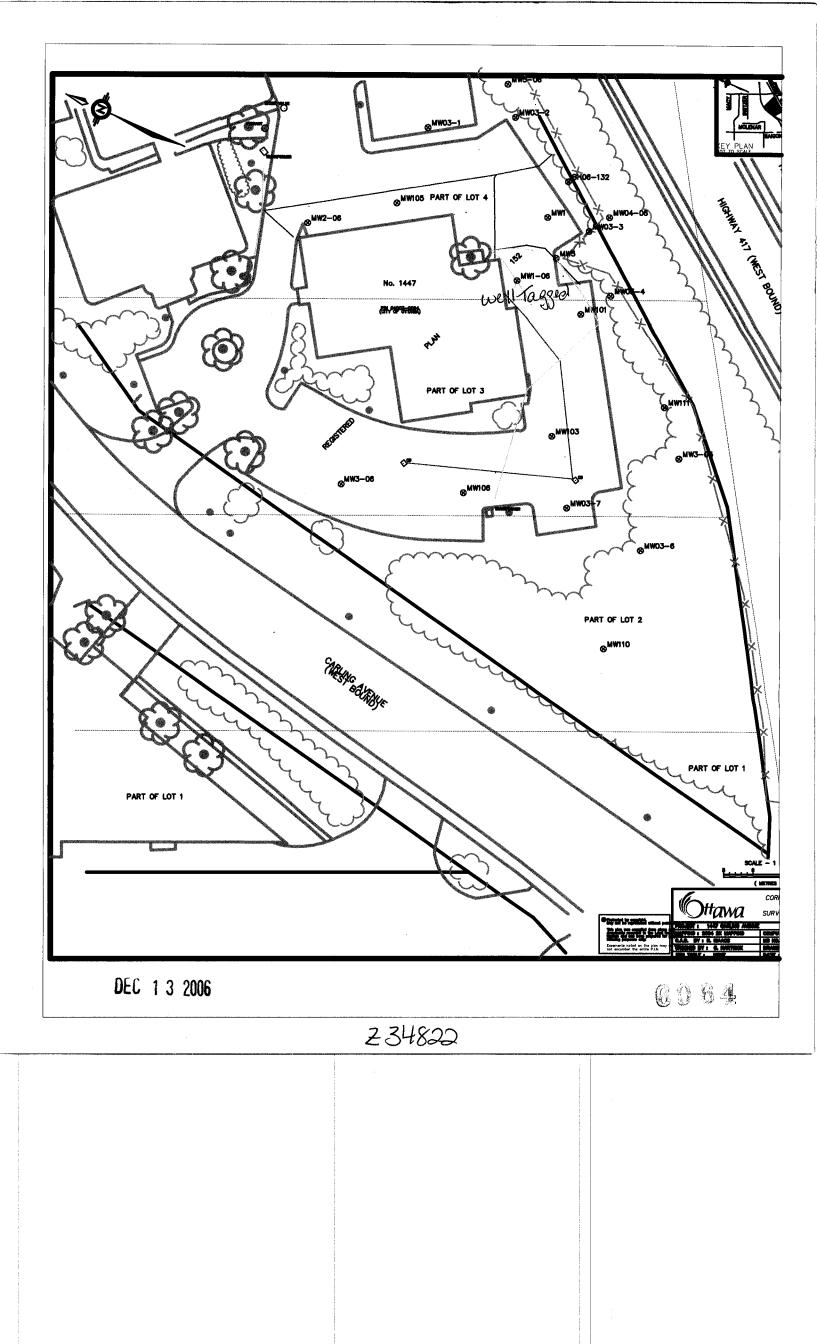


C-1844

C00595

NOV 2 2 7007

Instructions for Completing from         A 032134         AU/-01         page 1 et 1           ••••••••••••••••••••••••••••••••••••	🕅 Ontario	Ministry of the Environment	Well Tag Humber (Place sticker and c	int number below)	Regulation 903 Ontai	Well Record
Portuge in the Province of Outprior only. The social is a permanent legal document Presence and for future reference.     All Sections metal for future reference.     All Sectins metal for future reference.     All Sections metal for future	Instructions for Complete	ng Form	A 032134	MW1-06		
Address must be comparison and seven and	• For use in the Province	of Ontario only. Thi	is document is a permanent <b>leg</b>	al document. P	∟ lease retain for future refe	rence
Alignment of Basel develops and be reported to UNE* of a matrix     View View View View View View View View	<ul> <li>All Sections must be co</li> </ul>	mpleted in full to avo	oid delavs in processing. Further	instructions and	d explanations are available.	on the back of this form
Well Owner's information and Location of Well Information     Mail     i.cov     i.cov       144 / Calling     AVE     Cov     i.cov       Releficient Mutroenhame     700     Stretcompotiniset/BECUTation       Cop Overvicent and Bedrock Miderials (see instructions)     Method of Operation:     i.cov       General Column     General Decretion:     i.cov     i.cov       Multi-Ode     Coperation:     i.cov     i.cov       General Column     Cov     Cov     Cov       Multi-Ode     Cov     Cov     Cov <tr< td=""><td><ul> <li>All metre measurement</li> </ul></td><td>its shall be reported</td><td>d to 1/10<sup>th</sup> of a metre.</td><td></td><td></td><td></td></tr<>	<ul> <li>All metre measurement</li> </ul>	its shall be reported	d to 1/10 <sup>th</sup> of a metre.			
1447     Caling AVE       RBRSTINM NumberName 2     Control of the second seco			Well Information MUN	C		LOT
GPS Reading       WG       Early Hear Different Production       Modes of Operations with the interventions         Log of Overhunds and Bachdool, Materials (see interventions)       Other Materials       Modes of Operations       Intervention         General Corrent With and Statuto Charles       Other Materials       Other Materials       Servention       Modes of Operations       Modes of Operations         Mixed Corrent With and Statuto Charles       Other Materials       Other Materials       Other Materials       Other Materials         Mixed Corrent With and Statuto Charles       Other Materials       Other Materials       Other Materials       Other Materials         Mixed Corrent With Charles       Mixed Charles       The Charles       Other Materials       Other Materials         Mixed Corrent Corrent       Mixed Charles       Mixed Charles       Other Materials       Other Materials       Other Materials         Mixed Corrent       Mixed Corrent       Mixed Charles       Depart       Mixed Charles       Other Materials         Mixed Corrent       Mixed Corrent       Mixed Corrent       Mixed Corrent       Other Materials       Other Materials         Mixed Corrent       Mixed Corrent       Mixed Corrent       Mixed Corrent       Other Mixed Mixed       Other Mixed Mi		Ave				
Log of Overviewan and Bedrock Miderials     Date Private Base     Difference Upon     Difference Upon     Difference Upon       General Description     Other Materials     Other Materials     Ceneral Description     Dott       MW 2 - bit     Difference Upon     Other Materials     Other Materials     Other Materials       MW 3 - Cit     Dorom 11     Other Materials     Other Materials     Other Materials       MW 3 - Cit     Dorom 12     Other Materials     Other Materials     Other Materials       MW 3 - Cit     Dorom 12     Difference     Other Materials     Other Materials       MW 3 - Cit     Dorom 12     Difference     Other Materials     Other Materials       MW 3 - Cit     Difference     Difference     Other Materials     Other Materials       Multich     Difference     Difference     Difference     Other Materials       Difference     Difference     Difference     Difference     Difference					Site/Compartment/	/Block/Tract etc.
Log of Overburden and Bedrock Mildraid (see instruction)       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 1 - Od       Order Mildraid (see instruction)       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 2 - Od       Order Mildraid (see instruction)       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 3 - Od       Data Mildraid (see instruction)       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 4 - Od       Hold Dameter       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 4 - Od       Hold Dameter       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 4 - Od       Hold Dameter       Order Mildraid (see instruction)       Order Mildraid (see instruction)         MUD 4 - Od       Hold Dameter       Construction Record       Profile State of Web Yold         Doyon Mildraid (see instruction)       Profile State of Web Yold       Order Mildraid (see instruction)       Doyon Mildraid (see instruction)         Doyon Mildraid (see instruction)       Ede Mildraid (see instruction)       Doyon Mildraid (see instruction)       Doyon Mildraid (see instruction)         Mildraid (see instruction)       Ede Mildraid (see instruction)       Doyon Mildraid (see instruction)       Doyon Mildraid (see instruction)	Ū I I I	Easting			· · · ·	
Multi-old     gradiely light form sained outerlying or till     0     4.8       multi-old     gradiely light form sained outerlying or till     0     4.8       multi-old     gradiely light form sained outerlying or till     0     4.8       multi-old     gradiely light form sained outerlying or till     0     4.8       multi-old     gradiely light form sained outerlying	Log of Overburden and B	the second s	see instructions) J			
Image: A set of a					Il Description	
mW3-0     bown to grun during during the field       mW3-0     to grun during during the field       mW4-0     total       mW4-0     total       mW5-00     total       mW5-00     total       mW5-00     total       mW5-00     total       mW5-00     total       mW5-00     total       page     total   <				till		
MWL DW. My ACL     MUL DW. My AC		on the start	dense fill			
MW24-2c       All       Datable       diaminit       drafting       memotion with S       5.7.2         MW35-96       Full       Tail on       Put added       diaminit       drafting       Sisse         Promi       Too       Put added       Desph       Metrics       From       Too       Desph       Metrics         Promi       Too       Desph       Metrics       From       Too       Desph       Metrics         Promi       Too       Desph       Metrics       From       Too       Desph       Metrics         Promi       Too       Desph       Metrics       From       Too       Desph       Metrics         Purpletais set at - too       Metrics       Correst       -       All       Desph       Metrics         Ower addition       Correst       -       -       All       Desph       Metrics       Desph       Desph       Metrics       Desph		57				4.0
MWU-1-bc       full       Detable       diameter       Original       Original       S. Z.         MWD 5-00       full       S. Computed and the second and the se	monitoring we	clls.				
M W 5 - DG       Will       3.1 cm       PVL       Screen       add Ntar         Bergin Motes       Darader       Inside       Material       Wall       Depth       Moree         Construction Record       Construction Record       Final       To       Purping text method       Draw Down       Recovery         D       4.8       20       Construction Record       To       Purping text method       Tower text minimater       Image: text method       Tower t	2 3 .			-1.11.		
Hole Biameter       Construction Record       To       S.S.         Prom       To       Construction Record       Medra       Purping text method       Develop       Medra         0       4.8       2.0       Construction Record       To       The West Level       The West Level       The West Record         Water Record       Construction Record       Construction Record       To       The West Record       1       Construction Record         Water Record       Construction Record       Construction Record       4.9       0       4.9       2       2       1		UII & Po		arclin	monitory wells	
Depth         Metres         Dimmetrie         Inside         Material         Wall         Depth         Metres           0         4/3         Zoo         Inside         Material         Wall         Depth         Metres           0         4/3         Zoo         Inside         Material         Wall         Depth         Metres           0         4/3         Zoo         Casing         Inside         Metres         Inside           0         Metres         Cinementer         A         Depth         Metres         Inside           0         Metres         Cinementer         Casing         Inside         Metres         Inside         Metres           0         Metres         Cinementer         A         D         A         D         Depth         Metres         Dimenter         Inside         Metres         Dimenter         Inside         Metres         Dimenter         Inside         Inside <td< td=""><td></td><td></td><td>s.Icm pre scree</td><td>n and Mis</td><td>en la la</td><td>6 3.5</td></td<>			s.Icm pre scree	n and Mis	en la	6 3.5
Dupth         Metes         Diameter         India         Material         Wall         Depth         Metes         Damping test method         The Construction           D         4/8         2.00         Casing         To         To         To         To         To         To         The Metes         The Metes <td< td=""><td>Hole Diameter</td><td>1</td><td>Construction Record</td><td></td><td>Test of We</td><td></td></td<>	Hole Diameter	1	Construction Record		Test of We	
O       4.8       200       intermetes       Caring         Water Record       Casing       Current of the set at - State of the State of the set at - St		La L		Metres	Pumping test method Draw	Down Recovery
Casing       Comparing rate- memory rate- rate- memory rate- memory rate- rate- memory rate- memory rate- memory rate- me	×	ulain	1110411035	То	min	
Water Facord Meter Gold Meter Gold Gase       Science Service       -4       0       4       0         Water Cold Meter Gold Gase       Science       Scien		· · · · · · · · · · · · · · · · · · ·	Casing			
Water KeeCord         Cashenized         Image: State KeeCord				1.8		1
at       Meters       CMU or Wates       Steel       Free degates         im       Free degates       Steel       Free degates       Steel       Free degates         im       Free degates       Steel       Free degates       Steel       Free degates       Steel       Free degates         im       Free degates       Steel       Steel       Steel       Steel       St	Maton formed					2
Image:       Contract:	atMetres / Kind of Water					3
Image: State       Presides       Image: State       Ima	Gas Salty Minerals				of pumpingmetres	
Best       Calify       Inverses       Pleate       Concrete         In       Free       Suphing       Screen         Chior       Steel       Fibreglass       Sick       Fibreglass       Sick         Chior       Pleate       Concrete       Inverses       Steel       Fibreglass       Sick         Chior       Pleate       Concrete       Inverses       Steel       Fibreglass       Sick	······································				type.	4
Image: Support       Screen         Image: Support       Outside         Image: Support       Open Fole         Image: Support       Open Fole         Image: Support       Image: Support         Image: Support       Method of Construction					I donth	5
One:       Outor       Stor No.       18       4.8         After test of well yield, water was			Screen	· · · · · · · · · · · · · · · · · · ·	Recommended pump 10	10
□ Clear and sediment free       □ Cle		diam	Fibreglass Slot No.	00	(litres/min) 15	
Other, specify214       No Casing or Screen       ued give reason, wedge data and type (benches early and sealing Record (and the second sealing record (and the second se			d 10 1.8	4.0	(litres/min) 25	25
Chlorinated       Yes       No       Open Hote         Plugging and Sealing Record       Annular space       Abandomment, (cubic metres)       In diagram balow show distances of well from road, lot line, and building. Indicate north by arrow.         Poth sett			No Casing or Screen		ued, give reason.	
Plugging and Sealing Record Annular space Abandonment         Depth set at - Metres       Material and type (bentonite slumy, neat cement slumy) etc.       Volume Placed (cubic metres)         I:O       1.5       Devt. grawel       Volume Placed (cubic metres)         I:O       1.5       Devt. grawel       Will form road, lot line, and building. Indicate north by arrow.         I:O       1.5       Devt. grawel       Water supply       Prove Transport         Cable Tool       Rotary (air)       Diamond       Digging         Rotary (reverse)       Boring       Diriving       Other         Image of Water Supply       Recharge well       Public Supply       Ophererit         Observation well       Abandoned, insufficient supply       Dewatering       Date Delivered       Date Delivered       Water Use         Water Supply       Recharge number of contractor/Technician Information       Well Contractor's Licence No.       Ministry Use Only         Business-Adplices Greet Ingring number, insplane       Well Record Number       Well Record Number       Well Record Number         Signatury of echnician splane       Well Centractor's Deb Submitted       Location of Well       Method of Construction         Name of Wall Contractor/Technician Information       Well Centractor's Licence No.       Date Recerd Number       Date of Inspection	Chlorinated 🗌 Yes 🖌 No	Open hole	•			
Degite set at - Metres       Material and type (bentonite slurry, next comment slurry) etc.       (cubic metres)         From       1.5       Dark, Standl         I:O       I:O       I:O         I:O       I:O       Dark, Standl         I:O       I:O       I:O         I:O       I:O       I:O       I:O         I:O       I:O       I:O       I:O         I:O       I:O       I:O       I:O       I:O         I:O       I:O       I:O       I:O       I:O         I:O       I:O       I:O       I	Plugging and Se	aling Record	Annular space Abandonment	] 		60
I:O       1.5       Dent. Strewel       Inducted in Symptotic Symptot Symptoti	Depth set at - Metres Material and ty		ment slumy) etc Volume Placed		show distances of well from road,	
Method of Construction       Image: Construction       Image: Construction       Image: Construction         Cable Tool       Rotary (air)       Image: Construction       Image: Construction       Image: Construction         Cable Tool       Rotary (conventional)       Air percussion       Image: Construction       Image: Construction         Consensitic       Industrial       Diving       Other       Image: Construction       Image: Construction         Irrigation       Municipal       Cooling & air conditioning       Image: Construction       Image: Construction       Image: Construction         Irrigation       Municipal       Cooling & air conditioning       Image: Construction       Image: Construction       Image: Construction         Irrigation       Municipal       Cooling & air conditioning       Audit No.       Z       34.8.2.2       Date Well Completed       Image: Constructor       Image: Constructor       Ministry Use Only         Irrigation       Municipal       Indifinished       Abandoned, (Other)       Date Delivered       Image: Constructor       Ministry Use Only         Irrigation       Well Contractor/Technician Information       Mell Contractor's Licence No.       Indifinition       Date of Inspection       Image: Contractor & Good		gravel	3	MU3-66		JAMUZ-06
□ Cable Tool       □ Rotary (carr)       □ Diamond       □ Digging         □ Rotary (conventional)       □ Air percussion       □ Jetting       □ Other         □ Rotary (reverse)       □ Boring       □ Driving       □ Other         □ Domestic       □ Industrial       □ Public Supply       □ Other         □ Stock       □ Commercial       □ Not used       □ Diving         □ Irigation       □ Municipal       □ Cooling & air conditioning       □ Audit No.       Z       34.8.8.2.2       □ Date Well Completed         □ Water Supply       □ Recharge well       □ Unfinished       □ Abandoned, (Other)       □ Dewatering       □ Date Delivered       YYYY       MM       DD         □ Observation well       □ Abandoned, poor quality       □ Replacement well       □ Well Contractor/Technician Information       □ Date Only       □ Date only         Name of Well Contractor/Technician Information       Name of Well Technician Supply       □ Date of Inspection       YYYY       MM       DD         Name of Well Technician Supply       □ Date Submitted       YYYY       MM       DD       Date of Inspection       YYYY       MM       DD         Name of Well Technician Supply       □ Date Submitted       □ Date of Inspection       YYYY       MM       DD         Nam	· · · · · · · · · · · · · · · · · · ·	J		<b>₽</b>		
□ Cable Tool       □ Rotary (carr)       □ Diamond       □ Digging         □ Rotary (conventional)       □ Air percussion       □ Jetting       □ Other         □ Rotary (reverse)       □ Boring       □ Driving       □ Other         □ Domestic       □ Industrial       □ Public Supply       □ Other         □ Stock       □ Commercial       □ Not used       □ Diving         □ Irigation       □ Municipal       □ Cooling & air conditioning       □ Audit No.       Z       34.8.8.2.2       □ Date Well Completed         □ Water Supply       □ Recharge well       □ Unfinished       □ Abandoned, (Other)       □ Dewatering       □ Date Delivered       YYYY       MM       DD         □ Observation well       □ Abandoned, poor quality       □ Replacement well       □ Well Contractor/Technician Information       □ Date Only       □ Date only         Name of Well Contractor/Technician Information       Name of Well Technician Supply       □ Date of Inspection       YYYY       MM       DD         Name of Well Technician Supply       □ Date Submitted       YYYY       MM       DD       Date of Inspection       YYYY       MM       DD         Name of Well Technician Supply       □ Date Submitted       □ Date of Inspection       YYYY       MM       DD         Nam					1447	
□ Cable Tool       □ Rotary (carr)       □ Diamond       □ Digging         □ Rotary (conventional)       □ Air percussion       □ Jetting       □ Other         □ Rotary (reverse)       □ Boring       □ Driving       □ Other         □ Domestic       □ Industrial       □ Public Supply       □ Other         □ Stock       □ Commercial       □ Not used       □ Diving         □ Irigation       □ Municipal       □ Cooling & air conditioning       □ Audit No.       Z       34.8.8.2.2       □ Date Well Completed         □ Water Supply       □ Recharge well       □ Unfinished       □ Abandoned, (Other)       □ Dewatering       □ Date Delivered       YYYY       MM       DD         □ Observation well       □ Abandoned, poor quality       □ Replacement well       □ Well Contractor/Technician Information       □ Date Only       □ Date only         Name of Well Contractor/Technician Information       Name of Well Technician Supply       □ Date of Inspection       YYYY       MM       DD         Name of Well Technician Supply       □ Date Submitted       YYYY       MM       DD       Date of Inspection       YYYY       MM       DD         Name of Well Technician Supply       □ Date Submitted       □ Date of Inspection       YYYY       MM       DD         Nam				4	- Carling	
Rotary (conventional)       Air percussion       Jetting       Other         Rotary (reverse)       Borring       Driving       Image: Conventional)       Air percussion       Image: Conventional)       Image: Conven					Ave F	
Irrigation       Irrigation       Cooling & air conditioning         Final Status of Well       Infinished       Addit No.       Z       34822       Date Well Completed         Water Supply       Recharge well       Infinished       Abandoned, (Other)       Date Delivered       YYYY       MM       DD         Observation well       Abandoned, insufficient supply       Dewatering       Date Delivered       YYYY       MM       DD         YTest Hole       Abandoned, poor quality       Replacement well       Ministry Use Only       Date Supply       Date Supply       Date of Inspection       YYYY       MM       DD         Name of Well Contractor       Well Contractor's Licence No.       Well Contractor for for for for for for for for for f				N		
Irrigation       Municipal       Cooling & air conditioning         Final Status of Well       Image: Cooling & air conditioning       Audit No.       Z       34822       Date Well Completed         Water Supply       Recharge well       Image:	Rotary (reverse) Boring		Driving	please .	refer mui-	06 mw5-
Irrigation       Irrigation       Cooling & air conditioning         Final Status of Well       Infinished       Addit No.       Z       34822       Date Well Completed         Water Supply       Recharge well       Infinished       Abandoned, (Other)       Date Delivered       YYYY       MM       DD         Observation well       Abandoned, insufficient supply       Dewatering       Date Delivered       YYYY       MM       DD         YTest Hole       Abandoned, poor quality       Replacement well       Ministry Use Only       Date Supply       Date Supply       Date of Inspection       YYYY       MM       DD         Name of Well Contractor       Well Contractor's Licence No.       Well Contractor for for for for for for for for for f		ial <u> </u>	Public Supply	It atta	head dan . b	1.06
Final Status of Well       L       J 4 0 2 2         Water Supply       Recharge well       Unfinished       Abandoned, (Other)         Observation well       Abandoned, insufficient supply       Dewatering         Test Hole       Abandoned, poor quality       Replacement well         Well Contractor/Technician Information       Ministry Use Only         Name of Well Contractor.       Well Contractor's Licence No.         Business Address (street name/ number, cityctc.)       Well Contractor's Licence No.         Name of Well Technician (last name)       Well Definician's Licence No.         Name of Well Technician (last name)       Well Definician's Licence No.         Signature of echnician (last name)       Well Definician's Licence No.         Signature of echnician (last name, first hame)       Well Definician's Licence No.         Signature of echnician/factor       Date Submitted YYYY MM DD         Signature of echnician/factor       Date Submitted YYYY MM DD         X       Technician (last name, first hame)         Well Technician (last name, first hame)       YYYY MM DD         Technician (last name)       YYYY MM DD						ompleted
Image: Street name/inductor	Water Supply Recharge w			Ζ	34822	
Well Contractor/Technician Information       Ministry Use Only         Name of Well Contractor       Well Contractor's Licence No.       Data Source       Contractor 6 9 6 4         Business Additions (street name/ number, cityate,)       Contractor Place       Date of Inspection YYYY MM DD       Date of Inspection YYYY MM DD         Name of Well Technician (last name, first name)       Well Technician's Licence No.       Well Technician's Licence No.         Signature of echnician (contractor       Date Submitted YYYY MM DD       Date of Inspection YYYY MM DD         Signature of echnician (contractor       Date Submitted YYYY MM DD       Date of Inspection YYYY MM DD         X       Date Submitted YYYY MM DD       Date of Inspection YYYY MM DD	Observation well Abandoned,	, insufficient supply 🛛 🗌 D	Dewatering			
Business Additiess (street name/ number, cityretc.) Name of Well Technician's Lifence No. Signature of Jechnician Contractor X Mandraman X Mandraman Signature of Jechnician Contractor X Signature of Jechnician Contract	Well Con	· · · · · · · · · · · · · · · · · · ·	nformation			
Signature     Date Submitted Well Technician Conference     UEL 1 3 2006       Name of Well Technician (last name)     Well Technician (strenge) No.       Signature of Echnician Conference     Date Submitted YYYY       X     Date Submitted YYYY	Name of Wall Contractor		Well Contractor's Licence No.	Data Source	Contractor	6964
Name of Weil Jechnician (last name)     Weil Letinician's Legres to.     Remarks     Weil Record Number       Signature of echnician contractor     Date Submitted YYYY MM DD,     V/YYY MM DD,     V/YYY MM DD,       X     X     V/YYY MM DD,     V/YYY MM DD,	Business Address (street name/ numt	g, cityetc.)	letry Place AM		YYYY MM DD Date of Inspe	ection YYYY MM DD
x Chadrohin 2006 12 06	Name of Well Technician (last name,				U LUNU Well Record	Number
x Wordbahlm 200 1200	Signature of echnicity Confirmation					
	X (Madlahlm 0506E (09/03)	Contractor's Co	2000 12 06		Cette formule e	est disponible en français



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Ministry of the Environment Well Tag Number (Place sticker and print number below)

Well Record

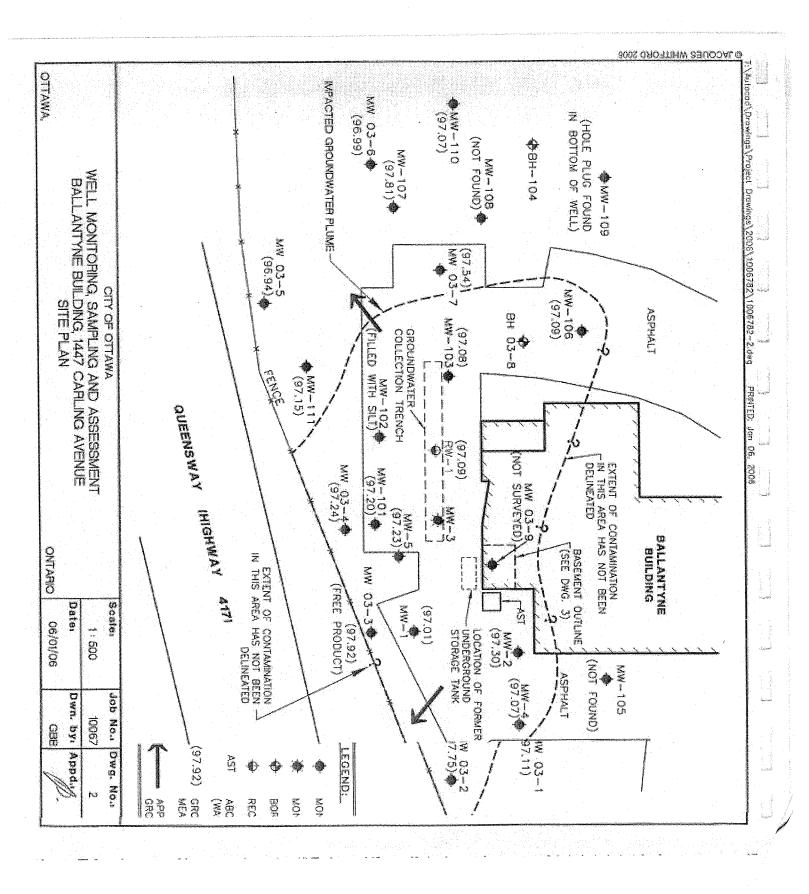
Regulation 903 Ontario Water Resources Act

## page \_\_\_\_ of \_\_\_

Instructions	for	Completing F	orm

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference. All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form. Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203. **All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.** Please print clearly in blue or black ink only. **Ministry Use Only** •
- 0

Address of Well Location (Count 1447 Cortune	//District/M	unicipality)	Te	wnship	e miseren ginnage. Line (overen omber	Lot	Con	cession	-
RR#/Street Number/Name		in the second	en prinsipalitation de la companya de la companya En esta de la companya	City/Town/		Site/Comp	partment/Block/	Tract etc	
GPS Reading NAD Zo	ne Easti	ing Nor	thing	Offau Unit Make/		e of Operation: 🗍 Un		Avera	
8 3  ‡  Log of Overburden and B	D 44	(1971 50	PIZI5792	Magell		www.chaptone.com	fferentiated, specify	tream l	geu
General Colour Most common		Other M		21 a.c.	Gener	al Description		epth	Metres
Albandoned we	its		<u></u>	2			F	rom	То
MW10Z rennoved	172	(2.29m) of	rise and	tecreer	150mm	added benton	talt	- Ciar	fuice
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mw 109 removed	1 10'(	3m) of 50	man rise	ands	creen, ad	ded benchinks of	seal, drust	1,44	neilt
mwiot removed	15 (4)	Sm) of 50m	in the c	nid sc	rem adde	at beactamit +	2501-64		
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Hole Diameter		Conc	struction Reco			1			
Depth Metres Diameter	Inside	Cons	Wall	Depth	Metres	Pumping test method	of Well Yield		covery
From To Centimetres	diam centimetres	Material	thickness centimetres	From	То	in the second	Time Water Leve min Metres	el Time \	Water Level
			Casing			Pump intake set at -	Static	min	Metres
		Steel Fibreglass				(metres) Pumping rate -	Level 1	1	
Water Record		Plastic Concrete	ele El 19	and the statements		(litres/min) Duration of pumping	2		······································
Water found Kind of Water		Steel Fibreglass	2000	1. (. 1997) 1	23.77	hrs + min	and the second se	2	
Gas Salty Minerals		Plastic Concrete	Balan yer i			Final water level end of pumping	3	3	
Other:		Galvanized	iene) -		Letter again	Recommended pump	4	4	
m Fresh Sulphur Gas Salty Minerals					n an	Shallow Deep Recommended pump	5	5	
Other:	· .	Galvanized		2 <sup>11</sup>	× 161	depthmetres		5	
m Fresh Sulphur Gas Salty Minerals	Outside	Steel Fibreglass	Screen			Recommended pump rate. (litres/min)	10	10 15	
Other: After test of well yield, water was	diam	Plastic Concrete	Slot No.		an de la seconda de la seco Seconda de la seconda de la	If flowing give rate -	20	20	
Clear and sediment free	्र <del>,</del> , , , , , , , , , , , , , , , , , ,	Galvanized	n an			(litres/min) If pumping discontin- ued, give reason.	25 30	25 30	
Other, specify		No C	asing or Scre	en		ued, give reason.	40	40	
Chlorinated Yes No		Open hole				and a second	50 60	50 60	استعمل و
Plugging and Sea	ling Reco	rd 🗌 Annular	space 🗌 Aba	andonment	· /	Location o			
Depth set at - Metres Material and type	(bentonite sl	urry, neat cement slurry)	etc. Volume (cubic	Placed metres)	In diagram below Indicate north by	show distances of well fro	om road, lot line,	and byildi	ng.
i (1997) (1997) Anno 1997 - Anno 1997) Anno 1997 - Anno 1997	gal e como de	and the second sec	e esta entre	40 - A				$\langle \rangle$	A.
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		- ter in the integra			and a second	F 1447		1	$\langle \lambda  $
		onstruction				L L	1		N
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Stock Commerc		☐ Not used ☐ Cooling & air	conditioning	·····			Well Completed		
Water Supply	Final Statu	us of Well			Audit No.	04003	2 36	Y M	N Z
Observation well DAbandoned, in	sufficient sup		Abandone	ed, (Other)	Was the well own package delivered		Delivered y	(YY M)	M DD
Test Hole Abandoned, po Well Contra		Replacement	well			Ministry Use			·
lame of Well Contractor			Contractor's Lice	ence No.	Data Source		tractor	4	
Business Address (street name, number		l	6964		Date Received	YYYY MM DD Date	of Inspection m		A DD
ssis A coldar state lame of Well Technician (last name, firs	<u>s⊲ da A</u> t name)	Well	Technician's Lice	i A o ence No	FEB 2 1 20	107			
Ohlmann Jilf	n te fast si set	1					Record Number		а 
( Lill Ollinson			Submitted yyyy	02 09					~
506E (09/03)	Contra	actor's Copy 📋 Mini	istry's Copy 📝	Well Owne	ər's Copy	Cette for	mule est dispor	ible en	francais



2 04 563

FEB 2 1 2007

6964

## Well ID

Well ID Number: 7229260 Well Audit Number: *C20661* Well Tag Number: *A146409* 

This table contains information from the original well record and any subsequent updates.

## Well Location

Address of Well Location	
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
	NAD83 — Zone 18
UTM Coordinates	Easting: 441956.00
	Northing: 5025796.00
Municipal Plan and Sublot Number	
Other	

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

General Colour Most Common Material	Other Materials	General Description	Depth From	Depth To	
-------------------------------------	-----------------	---------------------	---------------	-------------	--

#### Annular Space/Abandonment Sealing Record

DepthDepthType of Sealant UsedVolumeFromTo(Material and Type)Placed

## Method of Construction & Well Use

Method of Construction Well Use

#### **Status of Well**

#### **Construction Record - Casing**

Inside Diameter Open Hole or material Depth Depth From To

#### **Construction Record - Screen**

Outside Diameter<sup>Material</sup> Depth Depth From To

## Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7085

## **Results of Well Yield Testing**

After test of well yield, water wa	s
If pumping discontinued, give re	ason
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	

#### Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	<b>Recovery Water level</b>
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

#### Water Details

Water Found at Depth Kind

#### **Hole Diameter**

Depth Depth From To Diameter

Audit Number: C20661

Date Well Completed: August 14, 2014

Date Well Record Received by MOE: October 10, 2014

Updated: February 8, 2016 Rate<u>Rate</u> Share<u>facebook twitter Print</u> Tags

- Environment and energy,
- Drinking water,

## Well ID

Well ID Number: 1507987 Well Audit Number: Well Tag Number:

This table contains information from the original well record and any subsequent updates.

## Well Location

Address of Well Location	
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	-
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441960.70 Northing: 5025862.00
Municipal Plan and Sublot Number	-
Other	

## **Overburden and Bedrock Materials Interval**

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
	CLAY			0 ft	4 ft
	LMSN			4 ft	96 ft

## Annular Space/Abandonment Sealing Record

Depth	Depth	Type of Sealant Used	Volume	
From	То	(Material and Type)	Placed	

## Method of Construction & Well Use

Method of Construction	Well Use
Cable Tool	Commercial

## **Status of Well**

Water Supply

## **Construction Record - Casing**

Inside	Open Hole or material	Depth	Depth
Diameter		From	To
5 inch	STEEL		20 ft
5 inch	OPEN HOLE		96 ft

## **Construction Record - Screen**

Outside Depth Depth Depth Diameter Material From To

## Well Contractor and Well Technician Information

Well Contractor's Licence Number: 4833

## **Results of Well Yield Testing**

After test of well yield, water was	CLEAR
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	83 GPM
Duration of Pumping	0 h:30 m
Final water level	6 ft
If flowing give rate	
Recommended pump depth	_
Recommended pump rate	_
Well Production	PUMP
Disinfected?	

#### Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	<b>Recovery Water level</b>
SWL	6 ft		
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

#### Water Details

Water Found at Depth	Kind
20 ft	Fresh

#### **Hole Diameter**

Depth Depth From To Diameter

Audit Number:

Date Well Completed: January 03, 1952

Date Well Record Received by MOE: April 01, 1952

Updated: February 8, 2016 Rate<u>Rate</u> Share<u>facebook twitter Print</u> Tags

- Environment and energy,
- Drinking water,

Ontario Ministry of the Environment		Well Tag No. of A 0 5ዮን <i>ψ</i> ጵ				0.)			(Only f	Record for Well Clus or Multiple Test Holes or De tion 903 Ontario Water Resou	watering	
All measurements recorded in: Metric Imperial Follow instructions on the front and back of this form. Print or Type		Well # on Drawir							Ū.	Page	í	of
Well Cluster Location Information		L								/andatory Attachments/Additio		nde se tamante d'éce de sourcement d'actave d'instance
Address of Well Location (Street Number(s)/Name(s), RR, if available)	Lot(s) Parts	Concession(s) Between	Geographic To	•		<u> </u> c	county/E	District/Upper		Land Owner Consent Form must	sevent deservation and the	
1447 CARLING AUE.	2,3,4	A (Rideovers	HCTTY of	FOTTA	MA		CIT	YOF		Detailed Drawing of All Well Loca		
City, Town, Village or Hamlet	Province	GPS Unit Make	Model			Operation		Undifferentlat		, the person constructing the well, will p Director, on request, any additional infor		
OTTAWA	Ontario	Garmin	map 76	Прі	ifferentia	ated, speci				control related to any well in the well clu		
Well Details										Signature of Technician/Contractor	a <u>na</u> Date (yy	03 22 yy/mm/dd)
Well # UTM Coordinates Hole on Depth		ethod of Struction Casing		Screen la		Annular	Space (m/ft)	Material		urden/Bedrock or ling Material Intervals (m/ft)	Static Water	Date of Completion
Drawing Zone Easting Northing (m/ft)	(cm/in)	Diameter (cm/in)	From   To	From	То	From	To	Material:		toh/stonel 0 - 0.45m	Level (m/ft)	
1 18 44 1944 502 58 38 3.65	16.51 Bo	Dir 6,08			-	-		-	Bentonite Cl	10195 0.45m- 3.65m		2012 031
2 1844195150258184.57	16.52 Bos	Puc		-	-	-	*	-		tch/gravel 0-0145m		2012 03 12
3 18441955 50258013.96	16.51 Bor	PUC			-	-		•		195 0145 - 3.96		2012 03,12
	16.51 Bor	PUC 11 5.08		_	<b>a</b> 7	<u>د</u>	-	*		atch/greel 0-0.45	3.42	9012 03 1
51844196450258124.87	16.51 Bor	Air			-					hips 0.45m - 4.87m	00	2012031
	16.51 Bor	PVr					-		TOP Soil Fill	0.45m - 4.57m		20120312
71844195350257864.57		Duc		-	-				Topsoil fill	0- 0-00.45m 05 0.45m - 4-57m	4.32	2012 03 1
\$ 18441978 50257924.26				-	-		-	<u>س</u>	Topsoil Sin "	0 - 0.45m	4-25	2012 031
91844199250258084.57		<b>N</b>			-		-	_	Top501 Yill	0 ~ 0.45m 05 0.45m ~ 4.57m	3.24	20)203)
61844200850258223.96	16.51 Bor	ing 3.08		-			-	-	Topsoil Fill	0-0,45m 5 0.45m-4.57m	Þ	3012 03 ).
Well Contractor and Well Technician Information						Date First	t Well in	Cluster Cons	tructed Date Last Well in Cl Completed (yyyy/mi	uster Ministry Use Only		
Business Name of Well Contractor Business Address (S Business Address (S Business Address (S Business Address (S Business Address (S			y vnee	Prov				312		n/dd) Date Received (yyy/mm/dd)		16378
G、天、T、Dnilling hTD 名78 DRIVe Postal Code Bus. Telephone No. Well Contractor's Lic		[ <b>1</b>				Well Ab			<u> </u>	Comments:	<u> </u>	10010
K7 R3 L1 613 354 4767 7085		to filling om	Accugo.c	ŝ				ning the Wells	<u>s:</u>			
Name of Well Technician (First Name, Last Name) Well Technician's Lic	ence No. Signatu	ure of Well Technician		nitted (yyyy/i		Name				_		
Tim Harrison 2251		5	2012	03 2	2	(Pi	rint or Ty	/pe) - See instri	uction 11 on the back of this for	m		

	Ontario Ministry of the Environment surements recorded in: K Metric	Imperial			A	Tag No. of 10 5を3	48	+ A	0383	560	0.)			(Only	for Multiple Te	or Well Clus est Holes or Dev rio Water Resour	watering \ rces Act	Wells)
Follow ir	nstructions on the front and back of this for	rm. Print or Ty	pe		Well #	t on Drawin	g of Dee	epest W	ell:				-			Page	<u></u>	of <u>A</u>
Well C	luster Location Information										0005.0042				Mandatory Atta	achments/Additio	nal Inform	ation
Address	of Well Location (Street Number(s)/Name	e(s), RR, if available	e) Lot(s	) rt lot	Conce		Geograp	hic Towr	nship			County/[	District/Upper	Tier Municipality	Land Owner	Consent Form must	be attached	
	447 Coding AUR		2,3		1.	H .eau front	CIT	y of e	OTAW	A		CIT	Y 57 57	Tawa	Detailed Dra	wing of All Well Loca	itions must b	e attached.
City, Tov	447 Carling AUE		Prov		GPSI		Model		Unit	Mode of	Operatio	n []	Lindifferentia	ted Averaged	I, the person const	tructing the well, will p st, any additional infor	romptly subm	it to the
	OTTAWA		On	tario	GAG	min	MAP ;	26		Differentia	-		onalicientad			any well in the well clus		
an da ganta da segui tema						<u> </u>		· •							·		2013	33 27 y/mm/dd)
Well D			1	1		Casing			0	1	8		Matadal			nician/Contractor	1	
Well # on	UTM Coordinates	Hole			ethod of struction	Material; Diameter	Cas (m.			Interval a/ft)	Annula	ar Space (m/ft)	Material		rburden/Bedrock or Filing Material Inter		Static Water	Date of Completion
Drawing	Zone Easting Northing	(m/ft	(cm/in	)		(cm/in)	From	То	From	То	From	То	Material:		-	``·	Level (m/ft)	(yyyy/mm/dd
)	184420145025	835 4.57	m 16.5	) Be	) Druns	PV2 5.08	-		-	_	-		-	TODSON/FIL Bentonite	0.45~ 5		0.80	2012 03 1
· · ·		· · · · · · · · · · · · · · · · · · ·		<u> </u>		DVC .	-							TOPSOIL/ F.1	0-0.4	)5m		
12-	184420195025				r sh	5.08 PVC								Bundenite	0.45~ 1 0 - 0.1	1	-	2012 0312
13	183642553027	334 5.18	r 5.08	-		3.81	-	_	-	-		_	~	Topsoil ( Sul Bentonite	0.45~-		3.13	1, Eo GIOG
14	184420075025					Puc		~	L	_	-		-	Powemint/e	ronel 0.		470 .	2012 0313
		· · · · · · · · · · · · · · · · · · ·				5.08 Puc								Bentonite Parpining 1970	0.45.	<u>m-6.09m</u> D,45m		
15	184419935025	8474.51	<u>, 16.5</u> 1	2 330	ring	5.08							-	Bentonite	0,45m-	- 6 4,57m	Ø	2012 0313
16	184419705025	800 5.00	16.51	Bo	ring	0vc 5.08				-				Topsoil/Sill Benjonite	0- 0 0-45 m	145~	3705	150 ac
						PVC								Topsoil / Fill	0,0,	45m		
17_	184419773025					5.06		<u>ں</u>				-		Bentonite	0.45 - 0.	4.57m		150 2021
18	184419875025	8/15.18	m 16.51	ייטל א	'ns	२०८ २.७६		-		-	-		-	Joossil/ Jil Bentonite	0.45m -	5.18 m	3.78 :	002 03 1
19	184419925025	8174.21	11.51	Bo	nne (	Puc		_	~	1			L.	Topsoil / S	N 0-0	1.45m	8	2012 03 12
<u> </u>					)	5.08								Bentonite	0.45m-	4.26m		
						river and												
SA SA SECO	ontractor and Well Technician	EDMERICAN DER CONSERVICIÓN S									Date Fi	rst Well in idoned (v	n <sup>*</sup> Cluster Cons yyy/mm/dd)	structed Date Last Well in Completed (yyyy	A second s	Use Only	A. PLAL	
	s Name of Well Contractor	Business Addres			ie, RR)	Municipality				vince	_	20				APR 2 2 201		16379
 ム 穴 Postal C	.T. Dailling KTD. ode Bus. Telephone No.	ふつる Dr Well Contractor's		-	es E moil		ocnee		0	<u>~</u>		-	-	<u> </u>	Commen		<u> </u>	L0010
k 7	R314116133544767	7085	LICENCE NO			ing en	Vren		(a		9453434G	Abandor	ning the Well	<u>e.</u>			$i \supset O$	
Name of	Well Technician (First Name, Last Name)		Licence No							//mm/dd)						(16]	510	
Tim	Harrison	2251		TE	≯-	-	20	12 (	23 a	2	Name (	Print or Ty	ype) - See instr	ruction 11 on the back of this	form			

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Ministry of the Environment

This form is to be completed by the person who constructs or abandons test holes or dewatering wells that form all or part of a well cluster. If this form is being used to report any well abandonment, these wells must have been previously reported as part of a single well cluster.

Note: For well cluster records, only the owners of the land on which the wells are situated are to give written consent. If the well purchaser (e.g. a consultant who hires the driller) is not the owner of the land, then the well purchaser cannot sign the consent form.

By signing this form, land owners are providing consent to use one well record to report a well cluster of test holes or dewatering wells in accordance with section 16.4 of Regulation 903 made under the Ontario Water Resources Act.

This completed Well Record for Well Cluster Part 2 - Land Owner Consent must be attached to Parts 1 and 3.

\* Please PRINT if completing by hand.

Well Tag Number: # A 0 58 348 + A 038 560

"Well Record for Well Cluster" Audit Number: # <u>C16376 ン16379</u>

Well # on Detailed Drawing	Property Location Description	Land Owner's Name	Signature of Land Owner	Date Signed (yyyy/mm/dd)
# 1~19	1447 Carling Ave OTTAWA ON KIZ 7MI	CITY OF OTTAWA 110 Laurier Ave W OTTAWA ON KIP IJI	Not available	
	ĩ			
	•			
	C-7085 C16378.			
<u> </u>	PR 2 3 2012	Part 1 - Ministry's Copy	·	1

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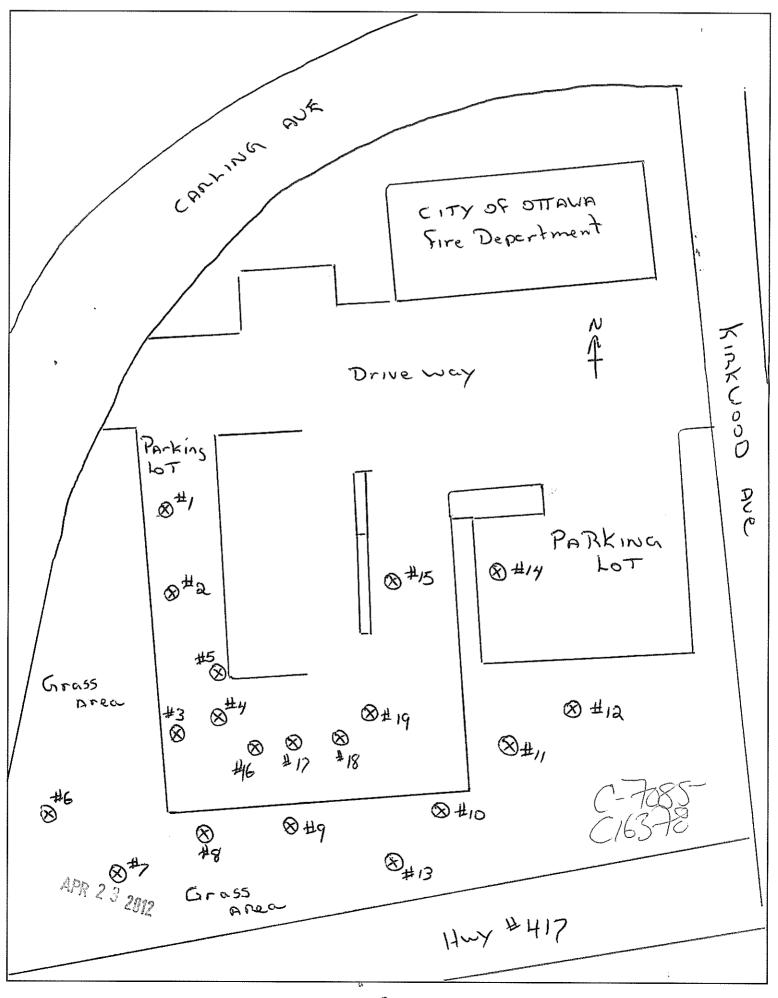
Ministry of the Environment

## Well Record for Well Cluster - Part 3 of 3 Detailed Drawing of All Well Locations

Note: This Well Record for Well Cluster Part 3 - Detailed Drawing of all Well Locations, must be attached to Parts 1 and 2. The drawing must include all property boundaries, an arrow indicating the North direction, all named roads and sufficient measurements to locate all wells in the cluster in relation to fixed points. The drawing must show the location of each well and each well must be numbered on the drawing to match number used for that well on the Well Record for Well Cluster Parts 1 and 2. The well with the well tag must be clearly identified on the Drawing.

UTM coordinates should appear beside each well, if space permits. Additional comments on wells can be included on the drawing Well Tag Number: # <u>AO56346 + AO38560</u>

"Well Record for Well Cluster" Form Audit Number: # CI6378 + CI6379



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UTIM 118 Z 4141181915 E				15 Nº	7983
9 R 50121516110 N	<b>K</b>				X
	ONTARIO		DEPARTMEN	A CHART	
Elev. $ \frac{g}{R} $ $0 2 5 0 $ The	Well Drillers	Act	OF NOV 3	2 1951	
Basin 25 Department of			1 TO		
			A Start		
Water V	vv en	Reco			11
Country or Torritorial District SALE OD	Township, Vil	lage, Town o	r City.	the stand	hawa
		! 5. <b>2. 6</b>	- 12.	J.C.	
Date Completed	or wen (exclud)	ing pump)		me	• • • • • • • • •
Pipe and Casing Record		Pı	umping Test		
Casing diameter (s)	. Date	July	12/5/		
Length(s) of casing(s)		/ / //		•••••	•••••
Type of screen			1	•••••	
Length of sereen Distance from top of screen to ground level/			harro.		
Is well a gravel-wall type?		-	bowls to ground		
	Vater Record				
		· · · · · · · · · · · · · · · · · · ·			1
Kind (fresh or mineral)Quality (hard, soft, contains iron, sulphur, etc.)		• • • • • • • • • • • •	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Appearance (clear, cloudy, coloured)	<u> </u>		65	Sec. L	59
For what purpose(s) is the water to be used?	use	•••••		fun	
	Q	······································		····	
How far is well from possible source of contamination?. What is the source of contamination?		nb;			
Enclose a copy of any mineral analysis that has been ma	-	·····		<del></del>	
Well Log	·····				·
Overburden and Bedrock Record	From	То	Loca	tion of Well	
- 9 gravel	0 ft.	<u>.4ft.</u>	-	elow show dista	
Junima		. 67	dicate north	ad and lot lin by arrow.	e. In-
		· · · · · · · · ·	5	1 2	M
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	······································		<b>X</b>		¥ ^/
	0 2			./	<u>v</u>
Situation: Is well on upland, in valley, or on hillside?.		uy		••••••••••	
Address			• • • • • • • • • • • • • • • • •	<b>,</b>	•••••
Name of Driller. M. R.O.J.		.Address	• • • • • • • • • • • • • • • • • • •	•••••••••••	• • • • • • • • • •
Date		.Licence Nu		S	
FORM 5			Signature of	Licensee	
		V			
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	23				
UTM 18 z 4441181810E G RECEIVED ELEV.9 R 0,250 OCT 28 1948	A A	SE 306	- - -	15 Nº	3967
Basin 2,5 GEOLOGICAL BRANCH The	Well Drillers A f Mines, Provir		ario	•	(
Water	Well ]	Rece	ord "		
Date Completed	Lue	g ave	7. Lot. 2 4 4 	Pt. Lot	•••••
Pipe and Casing Record			Pumping Test	· • • • • • • • • • • • • • • • • • • •	····
Casing diameter(s) 6"	Date 7	hay 21			
Length(s) of casing(s) 32'	Developed C	apacity 🗸	500 G.P.	<i>H</i> .	
Length of screen	Duration of Bumping Ra	Test	30 MIN -00 G.A.	 Н·	••••
Type of screen       Type of pump         Capacity of pump       Type of pump	Drawdown .		6'		
Capacity of pump	Static level of	of completed	well		· · · · · · · · ·
Depth of pump setting	Is well a gra	vel-wall type	e?		••••
	Water Record				
Kind (fresh or mineral) fresh			Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur etc.).	-070		35 <sup>1</sup>	Presh	15-1
Appearance (clear, cloudy, coloured)	· · · · · · · · · · · · · · · · · · ·			11	12'
Appearance (clear, cloudy, coloured)	usehold	·			
How far is well from possible source of contamination			•		
What is source of contamination'?	taup				
Enclose a copy of any mineral analysis that has bee			·		
Weil Log					
Drift and Bedrock Record	From	To		ation of Well	
Jill C.	O ft.	. <b>3L</b> .ft.	In diagram belo from road and le		nces of well
Limestone	32	96		1	Л
		-			K
				100	vd S
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				·2012/201	
		-	#17 Huy		- Kar
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· · · · · · · · · · · · · · · · · · ·				· · · · ·	
Situation: Is well on upland, in valley, or on hill Drilling Firm. 7. A. M. Kean & A Address	side?lef Lon Ellaeva	land Address. Licence N			· · · · · · · · · · · · · · · · · · ·
				· · · · · · · · · · · · · · · · · · ·	

## Well ID

Well ID Number: 7242902 Well Audit Number: *C20563* Well Tag Number: *A130168* 

This table contains information from the original well record and any subsequent updates.

## Well Location

NEPEAN TOWNSHIP
OTTAWA-CARLETON
ON
n/a
NAD83 — Zone 18
Easting: 441979.00
Northing: 5025980.00

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

General Colour Most Common Material	Other Materials	General Description	Depth From	Depth To	
-------------------------------------	-----------------	---------------------	---------------	-------------	--

#### Annular Space/Abandonment Sealing Record

DepthDepthType of Sealant UsedVolumeFromTo(Material and Type)Placed

## Method of Construction & Well Use

Method of Construction Well Use

#### **Status of Well**

#### **Construction Record - Casing**

Inside Diameter Open Hole or material Depth Depth From To

#### **Construction Record - Screen**

Outside Diameter<sup>Material</sup> Depth Depth From To

## Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

## **Results of Well Yield Testing**

After test of well yield, water wa	s
If pumping discontinued, give re	ason
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	

#### Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	<b>Recovery Water level</b>
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

#### Water Details

Water Found at Depth Kind

#### **Hole Diameter**

Depth Depth From To Diameter

Audit Number: C20563

Date Well Completed: October 05, 2012

Date Well Record Received by MOE: June 11, 2015

Updated: February 8, 2016 Rate<u>Rate</u> Share<u>facebook twitter Print</u> Tags

- Environment and energy,
- Drinking water,

## Well ID

Well ID Number: 7217444 Well Audit Number: *Z179979* Well Tag Number: *A157824* 

This table contains information from the original well record and any subsequent updates.

## Well Location

Address of Well Location	848 MERIVALE RD
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 442649.00 Northing: 5026012.00
Municipal Plan and Sublot Number	
Other	

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

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	.61 m
GREY	SILT	CLAY	SOFT	.61 m	3.1 m
GREY	SAND	SILT	SOFT	3.1 m	6.1 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE / FLUSHMOUNT	,
.31 m	2.74 m	BENSEAL	
2.74 m	6.1 m	SAND	

## Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

#### **Status of Well**

Test Hole

## **Construction Record - Casing**

Inside	Open Hole or material	Depth	Depth
Diameter		From	To
4.03 cm	PLASTIC	0 m	3.1 m

#### **Construction Record - Screen**

Outside Material Depth Depth Diameter Material From To 4.82 cm PLASTIC 3.1 m 6.1 m

## Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## **Results of Well Yield Testing**

After test of well yield, water was If pumping discontinued, give reason Pump intake set at Pumping Rate Duration of Pumping Final water level If flowing give rate Recommended pump depth Recommended pump rate Well Production Disinfected?

#### Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	<b>Recovery Water level</b>
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

#### Water Details

Water Found at Depth Kind

#### **Hole Diameter**

Depth From		Diameter
0 m	6.1 m	8.25 cm

Audit Number: Z179979

Date Well Completed: February 14, 2014

Date Well Record Received by MOE: March 13, 2014

Updated: February 8, 2016 Rate<u>Rate</u>

## Well ID

Well ID Number: 7217443 Well Audit Number: *Z179980* Well Tag Number: *A157825* 

This table contains information from the original well record and any subsequent updates.

## Well Location

Address of Well Location	848 MERIVALE AVE
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 442655.00 Northing: 5026008.00
Municipal Plan and Sublot Number	
Other	

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

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	GRVL	SAND	SOFT	0 m	.61 m
GREY	SILT	CLAY	SOFT	.61 m	3.1 m
GREY	SAND	CLAY	SOFT	3.1 m	6.1 m

## Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE / FLUSHMOUN	Г
.31 m	2.74 m	BENSEAL	
2.74 m	6.1 m		

## Method of Construction & Well Use

Method of Construction	Well Use
Direct Push	Monitoring and Test Hole

#### **Status of Well**

Test Hole

## **Construction Record - Casing**

Inside	Open Hole or material	Depth	Depth
Diameter		From	To
4.03 cm	PLASTIC	0 m	3.1 m

#### **Construction Record - Screen**

Outside Material Depth Depth Diameter Material From To 4.82 cm PLASTIC 3.1 m 6.1 m

## Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

## **Results of Well Yield Testing**

After test of well yield, water was If pumping discontinued, give reason Pump intake set at Pumping Rate Duration of Pumping Final water level If flowing give rate Recommended pump depth Recommended pump rate Well Production Disinfected?

#### Draw Down & Recovery

y Water level

#### Water Details

Water Found at Depth Kind

#### **Hole Diameter**

Depth From		Diameter
0 m	6.1 m	8.25 cm

Audit Number: Z179980

Date Well Completed: February 14, 2014

Date Well Record Received by MOE: March 13, 2014

Updated: February 8, 2016 Rate<u>Rate</u>

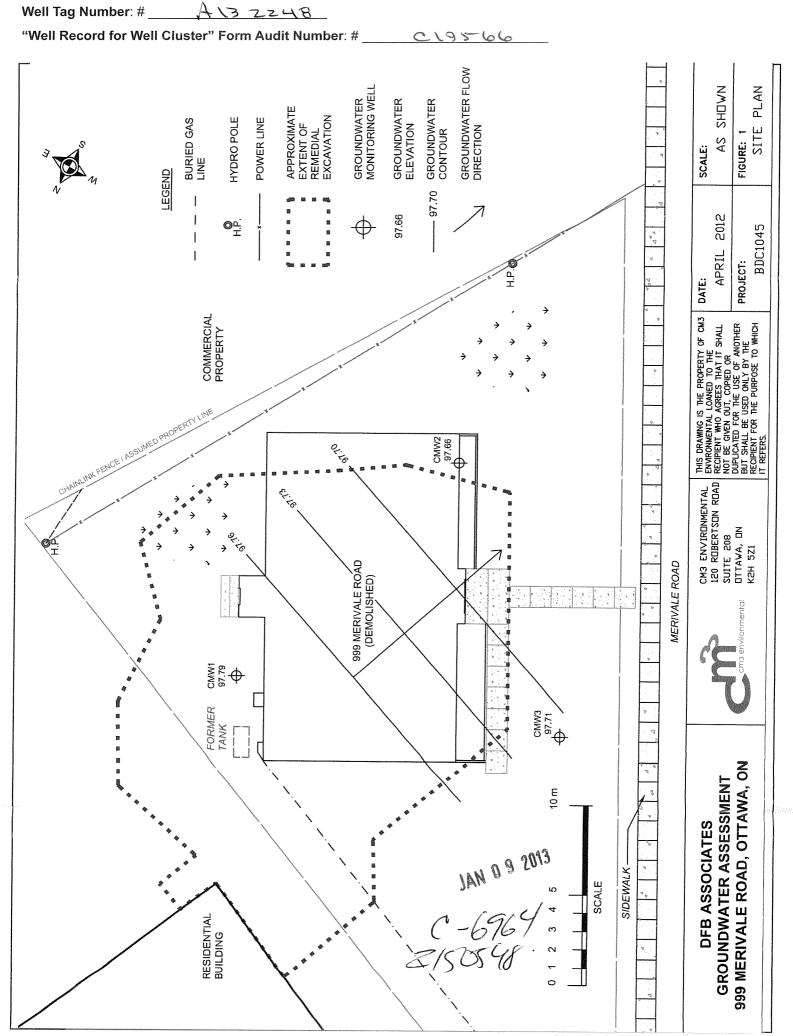
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~~~	B Ass	mints	5	5								by W	ell Owner
Mailing Ad	dress (Street N			0	\ \	Municipalit	y K	Province	Postal Code	1	•		area code)
	2350	<u>-Ster</u>	renac	FPI	nue	+	tawa	ONT	KIG3	$w_{\geq}$	0110	191	67776
Well Loc Address of	f Well Location (	Street Num	ber/Name)			Township			Lot		Concess	ion	
99	9 Mei	rival	(° )	oad			tawa					D+-	L Co do
County/Dis	strict/Municipalit	$\Lambda$ $\downarrow$			0	City/Town/	1.			Provin Ont		Posta	I Code
UTM Coord	tawa tinates Zone E	Lasting	eton, No	orthing	r	Municipal I	Plan and Sub	lot Number		Other			
	83184						2792						
HATTER AND A REPORT OF A REPOR	The second se			nment Se				e back of this form)	General Description	-		Dep	oth ( <i>m/ft</i> )
General C	Colour N	Aost Commo	on Material		Otr	ner Materia						From	To
grey									ind gras			0	3:65
<u> </u>									ilt and c	pai	rel	3.65	
								Siltyc	lay			4.27	4.60
								•	9				
				C.h	AUD ?	3 (	eas.	tagged					
				~			-						
		an maani	Annular	Space	The second second				Results of W	ell Yiel	d Testir	8 <u> </u>	
Depth Se From	et at ( <i>m/ft)</i> To		Type of Sea (Material and		÷.	1	me Placed /m³/ft³)	After test of well	l yield, water was: sand free	Dr.	aw Down Water Le	·····	Recovery Water Level
<u> </u>	1			<u>u ()po</u>			bags	Other, spe		(min)	(m/ft)	(min)	(m/ft)
0		<u>nole</u>	plug	4		16	i sugs	If pumping disco	ontinued, give reason:	Static Level			
0.85	4.60 f	ilter	Sanc	<u>x</u>			bags	n.		1		1	
								Pump intake se	et at (m/ft)	2		2	
						-				3	ni andra di Ni finanzi a	3	
Taparente contraction of	hod of Constr	0.0000000000000000000000000000000000000			Well Us	en gestalder zugen bei gesteler		Pumping rate (i	(/min / GPM)	4		4	
Cable To		Diamond	Pub		Comme		Not used	Duration of pur	nping	-			
Rotary (F	Reverse)	Driving			Test Ho	le [	Monitoring	hrs +	min	5		5	
Boring	ieelon .	Digging	Irrig		Cooling	& Air Cond	itioning	Final water level	l end of pumping (m/ft)	10		10	1
Other, sp	pecify HS A	wger_	Oth	er, specify				If flowing give ra	ate (I/min / GPM)	15		15	
1		uction Re			h ( <i>m/ft</i> )		is of Well			20		20	
Inside Diameter <i>(cm/in</i> )	Open Hole OR (Galvanized, Fi Concrete, Plas	ibreglass,	Wall Thickness	From	To	Wate	r Supply acement Well	Recommended	pump depth (m/ft)	25		25	
			(cm/in)			- C Test I	Hole arge Well	Recommended	pump rate	30		30	
5.2	plastic	n	0.4	0	1.50	- 🗌 Dewa	itering Well	(I/min / GPM)		40		40	
							rvation and/or oring Hole	Well production	(I/min / GPM)				<u> </u>
							ation struction)	Disinfected?		50		50	·
		-				Aban	doned,	Yes N	lo	60		60	
	Const	ruction Red	cord - Scree		1	🗌 🗌 Aban	icient Supply doned, Poor		Map of W	A Provident Section and sect	ومربح ويحفره ببعو برباست مت		
Outside Diameter	Materia (Plastic, Galvania		Slot No.	Depti From	n ( <i>m/ft)</i> To	1	r Quality doned, other,	Please provide a	a map below following	Instructi	ons on the	е раск.	
(cm/in)	7 in		10			specil	fy						
6.0	plastic		10	1-50	4.60	Other	, specify						
		Vater Deta				ole Diam		$\parallel$	Site plan nap au	r	CIL (	lar	ea
	d at Depth Kind			Untested	From	h ( <i>m/ft)</i>   To	Diameter (cm/in)						
	d at Depth Kind			Untested	0	4.60	) 22	N 1	nap av	Ŀ	enc	1050	d.
	n/ft) 🗌 Gas 🔲 🤇												
	d at Depth Kind		time the second	Untested									
	u/ft) □ Gas   □ (		-	Fechnicia	n Informat	ion							
Business Na	ame of Well Cor			recimicia	semperi a a construction a surviva	and the day of the state of the state of the	's Licence No.						
0@	55 IN	C.				09	64						
Business Ac	ddress (Street N	i) ~		Ra		nicipality	alo	Comments:					
Province,	Postal	Code	Business	E-mail Add			onk						
Ont.		ALAC	) ogs	inca	bella	et. Co	U	Well owner's D	Date Package Delivere			stry Use	Only
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Well Technici	an's Licence No.	<b>00</b> Signature o	f Technician	n and/or Co	ontractor Dat	BNa e Submitter		Yes	Date Work Completed			N 0 9	
25	N 9 3.	Su	<u>_ 0l</u>	Lc	24	013	30 N 62	□ No	201204	67	JA Received	N U J	201J
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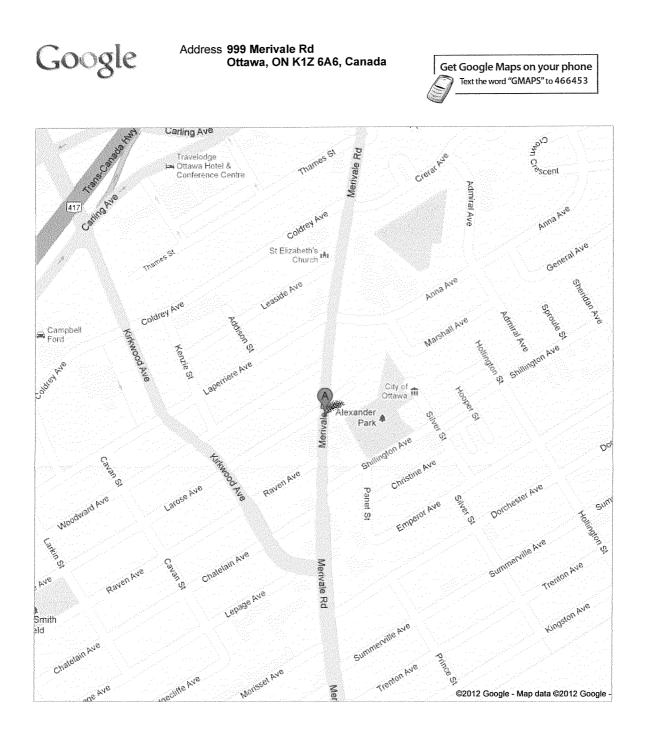


# Well Record for Well Cluster - Part 3 of 3 Detailed Drawing of All Well Locations

**Note**: This **Well Record for Well Cluster Part 3 - Detailed Drawing of all Well Locations,** must be attached to Parts 1 and 2. The drawing must include all property boundaries, an arrow indicating the North direction, all named roads and sufficient measurements to locate all wells in the cluster in relation to fixed points. The drawing must show the location of each well and each well must be numbered on the drawing to match number used for that well on the **Well Record for Well Cluster Parts 1 and 2.** The well with the well tag must be clearly identified on the Drawing.

UTM coordinates should appear beside each well, if space permits. Additional comments on wells can be included on the drawing





C-6964 2150548

IAN 0 9 2013

# $http://maps.google.com/maps?f=q\&source=s_q\&hl=en\&geocode=\&q=999+Merivale+Ro...\ 22/11/2012$

Ontario Ministry of the Environment	Well Tag No. (Place Sticker al	Ind/or Print Below)	W	/ell R	lecord
	AIBZZUS	Regulatio	n 903 Ontario Wa		
Measurements recorded in: Wetric Imperial Well Owner's Information		<u>)</u>	Page		of
First Name Associates DFB Associates Mailing Address (Street Number/Name) 22-2350 Sevenage Drive	Municipality Ottawa	E-mail Address Province Postal Code		by We	Constructed ell Owner area code) 7 7 7 6
Well Location       Address of Well Location (Street Number/Name)       999       Menuall       Koap	Township	Lot 😽	Concessio	n	
County/District/Municipality	City/Town/Village		Province Ontario	Postal	Code
UTM Coordinates Zone Easting Northing	Municipal Plan and Suble	A.	Official IO		
NAD 8 3 18 4426 21 50 250 Overburden and Bedrock Materials/Abandonment Sea					
General Colour Most Common Material	Other Materials	General Description	1	Dep From	th ( <i>m/ft)</i>
		· · · · · · · · · · · · · · · · · · ·			
W	ell tag was	missing.			
		3			
Annular Space		Results of W	ell Yield Testing		
Depth Set at (m/ft)         Type of Sealant Used           From         To         (Material and Type)	Volume Placed (m³/ft³)	After test of well yield, water was:	Draw Down Time Water Leve		ecovery Water Level
O 0.50 hole plug	1/3 bag	Other, specify	(min) (m/ft)	(min)	(m/ft)
0.50 4.60 bentonite cement		If pumping discontinued, give reason:	Level 1	1	
	0	Pump intake set at <i>(m/ft)</i>	2	2	
			3	3	
Method of Construction           Cable Tool         Diamond         Public	Well Use	Pumping rate (I/min / GPM)	4	4	
Rotary (Conventional)	Municipal     Test Hole     Monitoring	Duration of pumping hrs + min	5	5	
Boring Digging Irrigation	Cooling & Air Conditioning	Final water level end of pumping (m/ft)	10	10	
Air percussion     Industrial       Other, specify     Other, specify		If flowing give rate (I/min / GPM)	15	15	
Construction Record - Casing Inside Open Hole OR Material Wall Depth	(m/ft) Uster Supply	Recommended pump depth (m/ft)	20	20	
Diameter (Galvanized, Fibreglass, Thickness ( <i>cm/in</i> ) Concrete, Plastic, Steel) ( <i>cm/in</i> ) From	To Replacement Well	,	25	25	
	Recharge Well     Dewatering Well	Recommended pump rate ( <i>I/min / GPM</i> )	30	30	
	Observation and/or     Monitoring Hole	Well production ( <i>i/min / GPM</i> )	40	40	
	Alteration     (Construction)	Disinfected?	50	50	·····,
	Abandoned, Insufficient Supply	Yes No	60	60	
Construction Record - Screen Outside Material Depth		Please provide a map below following	ell Location instructions on the b	ack.	
Diameter ( <i>cm/in</i> ) (Plastic, Galvanized, Steel) Slot No. From	To Abandoned, other, specify				
	Other, specify				
Water Details           Water found at Depth         Kind of Water: Fresh         Untested	Hole Diameter Depth ( <i>m/ft</i> ) Diameter	Site plan Mgp are	n and	are	a
( <i>m/ft</i> ) Gas Other, specify Water found at Depth Kind of Water: Fresh Untested	From To (cm/in)	Mgs are	enclos	sed.	1995 1997 - 1997 1997 - 1997
( <i>m/ft</i> ) Gas Other, <i>specify</i>					
Water found at Depth Kind of Water: Fresh Untested ( <i>m/ft</i> ) Gas Other, <i>specify</i>					
Well Contractor and Well Technician Business Name of Well Contractor	Information Well Contractor's Licence No.				
OGS INC	6964				
Business Address (Street Number/Name) 5518 Appleton Side Road	Municipality	Comments:			
Province Postal Code Business E-mail Addre	ess				<u></u>
Bus. Telephone No. (inc. area code) Name of Well Technician (a	ast Name, First Name)	Well owner's Date Package Delivered information package	Audit No.	try Use	
6 13 8 56 7 6 6 5 5 1 Cle Well Technician's Licence No. Signature of Technician and/or Con	Jason tractor Date Submitted	delivered Y Y Y M M L Date Work Completed			552
3634 200546	20130102	- NO 201206	11 BRECENJAN	10	<u>2013</u>
0506E (2007/12) © Queen's Printer for Ontario, 2007	Ministry's Copy				

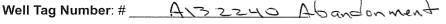
(V->										
Ontario Ministry of the Environment		An	andan	ment			Wel	I Record for Well Cl	uster - P	art 1 of 3
	Well Ta	g No. of De	eepest Well:	(Print Well Tag N	0.)			r for Multiple Test Holes or D		Wells)
All measurements recorded in: 🔽 Metric 🔲 Imperial		A133	<b>२२५०</b> of Deepest We				Regu	lation 903 Ontario Water Res	ources Act	
Follow instructions on the front and back of this form. Print or Type	Well # o	on Drawing	of Deepest We	ell: Cn	nwi	4.60m		Pa	ge	of
Well Cluster Location Information								Mandatory Attachments/Addi	ional Inform	ation
Address of Well Location (Street Number(s)/Name(s), RR, if available)	Lot(s) Conces	sion(s) G	Geographic Town	ship	County/I	District/Upper Tier	Municipality	Land Owner Consent Form m	ist be attached	
999 Merivale Road	8		Ottaw	0	OH	awa Ca	rleton	Detailed Drawing of All Well Lo	cations must b	e attached.
City, Town, Village or Hamlet	Province GPS Ur	iit Make 🛛 N	lodel	Unit Mode of	Operation	Undifferentlated	Averaged	I, the person constructing the well, wind Director, on request, any additional ir		
Ottawa	Ontario Maa	ellan		Differentia	have not the			control related to any well in the well		
Well Details	<u>                                      </u>							Signature of Technician/Contractor	Date (van	vy/mm/dd)
Well # UTM Coordinates Hole	Hole Method of	Casing	Casing	Screen Interval	Annular Space	Material	<u>∩v</u>	erburden/Bedrock or	Static	Date of
on Depth	Diameter Construction (cm/in)	Material; Diameter	(m/ft)	(m/ft)	(m/ft)			Filing Material Intervals (m/ft)	Water Level (m/ft)	Completion
		(cm/in)	From To	From To	From To	Material:				(yyyy/mm/dd)
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2 1844260450254344.60	ય				92.0 0	hole plug		V	2.60	N
CMW 1844262150254314.60	Ň				0 030	hole plug	cement qu cement qu		2.49	И
					0317 0210	bentonite	cement qr	70.0	Q.17	
										· · · · ·
				2.						
				······································						
Well Contractor and Well Technician Information				*	Date First Well in or Abandoned (y	n Cluster Construct vvv/mm/dd)	ed Date Last Well ir Completed (yyyy		1. (A. 171.8.)	
	treet Number/Name, RR)	Municipality	1	Province	2012/0	r. hi	2012/06			19569
Postal Code Bus. Telephone No. Well Contractor Cic	eton Didle KCL.	ddress	monte	Ont	Well Abando	nment	0010/00	/// JAN 1 0 2013 Comments:	· · ·	
KOAI A0613-256-7666 6964	asinca	obella	int. ca		Person Abando			$\neg K$	755	()
Name of Well Technician (First Name, Last Name) Well Technician's Lic	ence No. Signature of Woll	Technician	Date Submit	ted (yyyy/mm/dd)	Name			$  \leq 1 \times$	ノン	
Jason Stryde 3634	Jose St		201310	201/02		ype) - See instructio	n 11 on the back of this	form		



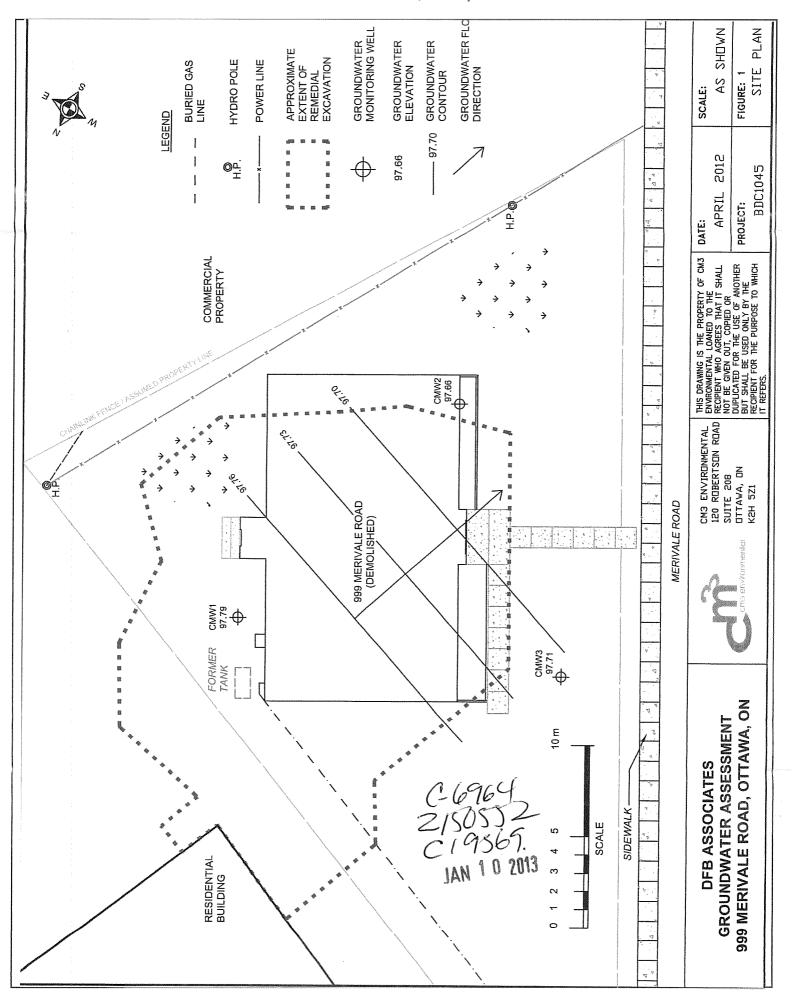
# Well Record for Well Cluster - Part 3 of 3 Detailed Drawing of All Well Locations

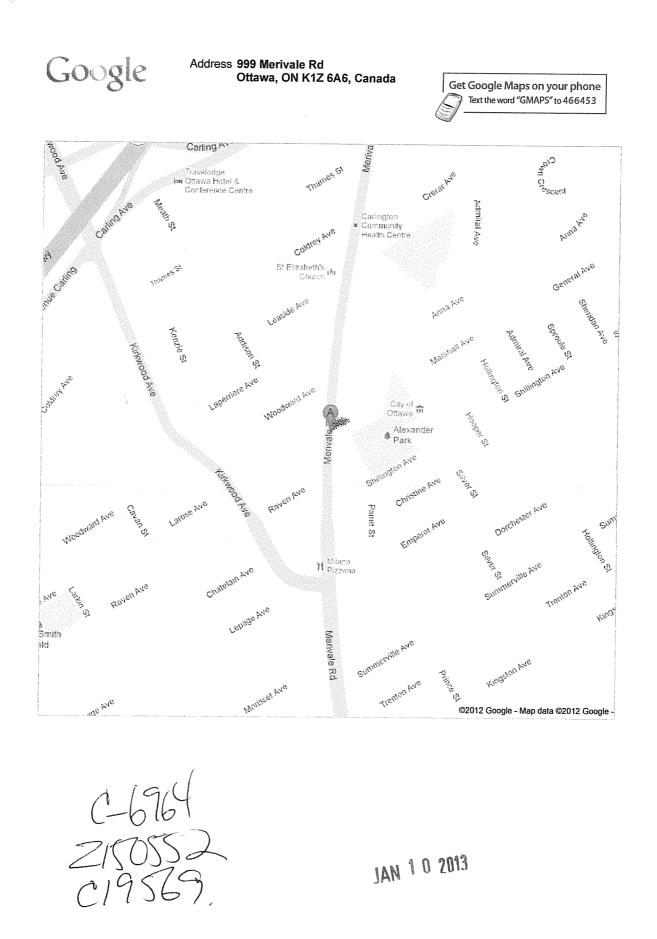
**Note**: This **Well Record for Well Cluster Part 3 - Detailed Drawing of all Well Locations**, must be attached to Parts 1 and 2. The drawing must include all property boundaries, an arrow indicating the North direction, all named roads and sufficient measurements to locate all wells in the cluster in relation to fixed points. The drawing must show the location of each well and each well must be numbered on the drawing to match number used for that well on the **Well Record for Well Cluster Parts 1 and 2.** The well with the well tag must be clearly identified on the Drawing.

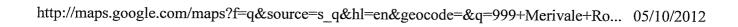
UTM coordinates should appear beside each well, if space permits. Additional comments on wells can be included on the drawing



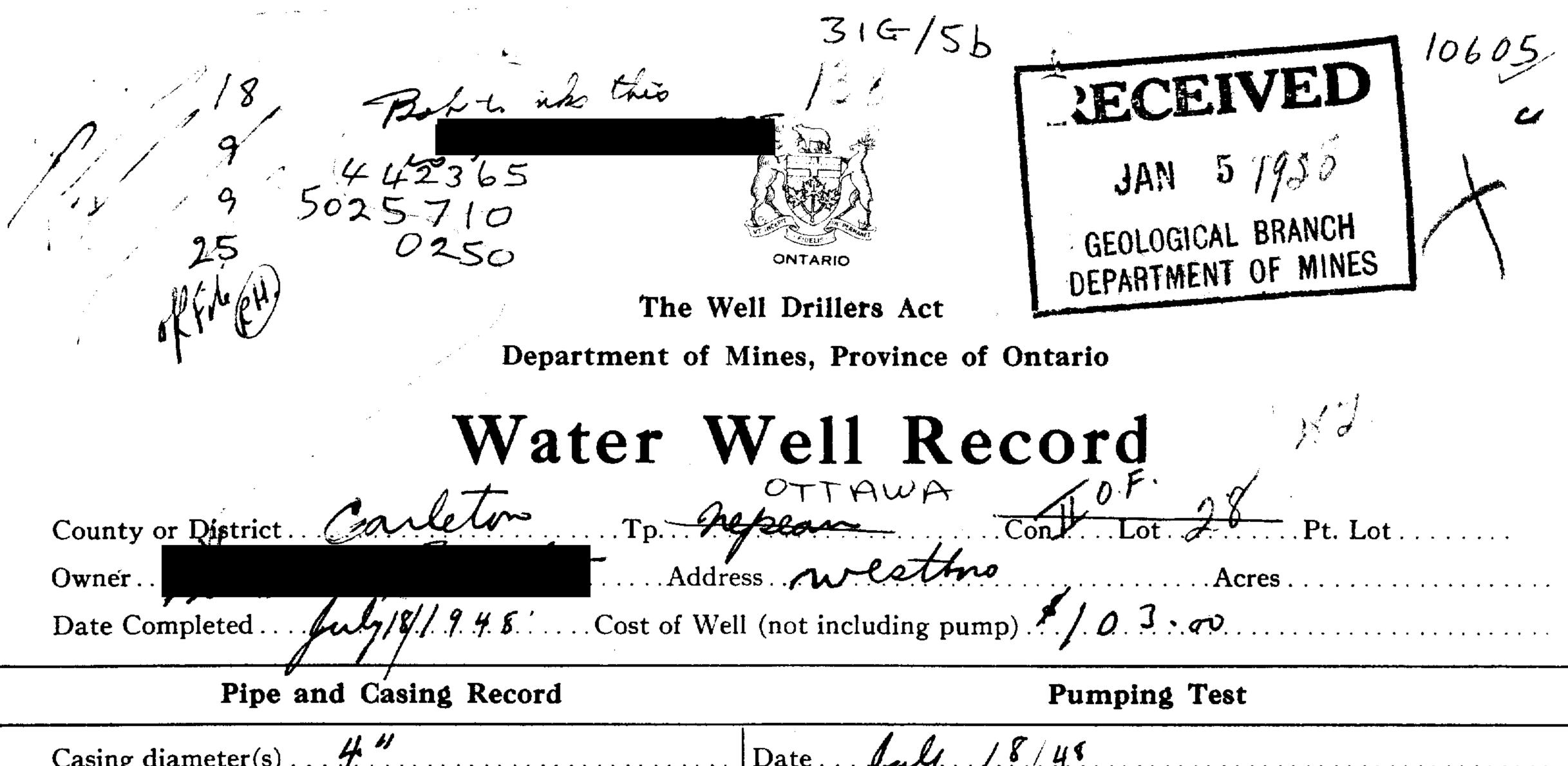
"Well Record for Well Cluster" Form Audit Number: # \_\_\_\_\_\_



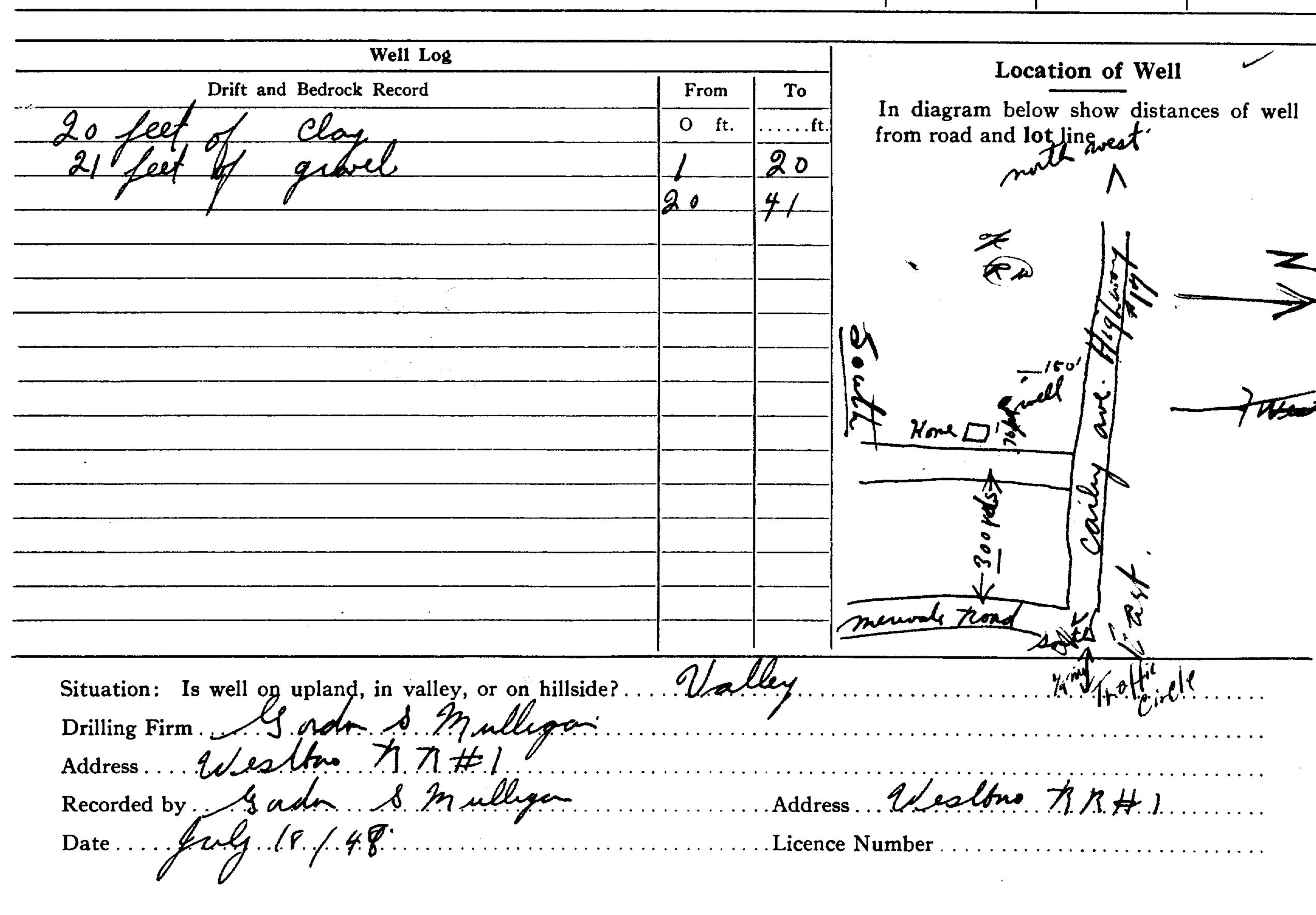




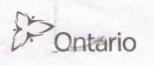
106 31G/5b 442565 5025580 0250 JUL 24 1951 ONTARIO The Well Drillers Act GEOLOD, AL STANDH Department of Mines, Province of Ontario DEPARTMENT OF MINES Well Water **Kecord** 123 TAWA Village, Town of City. ..... own or City). hermeli. Rong Cost of Well (excluding pump)..... Date Completed. (vear) (month) **Pumping Test** Pipe and Casing Record Date..... Static level .... H. J Length(s) of casing(s)..... Pumping level: 4.5 feel and any pour Type of screen..... Pumping rate..... Length of screen..... . . . . . . . . . . . Duration of test. Distance from top of screen to ground level..... Is well a gravel-wall type?..... Distance from cylinder or bowls to ground level..... Water Record Kind of Water Depth(s) to Water Horizon(s) No. of Feet Water Rises Kind (fresh or mineral)..... an Quality (hard, soft, contains iron, sulphur, etc.)... Appearance (clear, cloudy, coloured)...... .5 For what purpose(s) is the water to be used?... hold use **570** How far is well from possible source of contamination?... What is the source of contamination?..... Enclose a copy of any mineral analysis that has been made of water... Well Log Location of Well Overburden and Bedrock Record То From 0 ft. ....ft. In diagram below show distances of Clay colder Sand well from road and lot line. In-(1 dicate north by arrow. 18 Joslens Stine gue 20C Rock 65 over. Carli Rell s Situation: Is well on upland, in valley, or on hillside? my S- Mulligan Drilling Firm. ıll 6.....Address. J. am. aa is A Name of Driller.... .....Licence Number..... Date... Signature of Licensee FORM 5



Casing diameter(s)	Date July 1.8. /. 4.	<b>«</b>	•••••			
Length(s) of casing(s) 2. ford length	Developed Capacity	300 gal	a h			
Casing diameter(s) 4. Length(s) of casing(s) 2.0 ford length Length of screen	Duration of Test /	hr				
Type of screen						
Type of pump	Drawdown	• • • • • • • • • • • • • • • • • • •				
Type of pump	Static level of completed v	vell Outro	in rel	<b>4</b>		
Depth of pump setting						
		-0				
Water Record						
Kind (fresh or mineral) Jush		Depth(s)	Kind of	No. of Feet		
Quality (hard, soft, contains iron, sulphur etc.)	and.	Water Horizon(s)	Water	Water Rises		
		HI Jort	Tuch	41 Jeet		
Appearance (clear, cloudy, coloured).		17				
Appearance (clear, cloudy, coloured) Clear For what purpose(s) is the water to be used?	mester					
How far is well from possible source of contamination?.	30 feet					







MW#1

A090600

Master Well Record for

Cluster Well Construction Regulation 903 Ontario Water Resources Act Page \_\_\_\_\_ of \_\_\_\_\_

Thames Street County/District/Municipality City/Town/Village Province Postal Code								Destal Orde				
County/District/Municipality City/Town/Village										Province Ontario	Postal Code	
UTM Coord		UHU	2461502		it Make	Model			Operation:	Undifferentiated	Averaged	
NAD Overb		Bedroc	Materials (see instr	And and an other dates in the second s	Contraction of the local division of the loc	the other same to a second	ex			e Details		
General Colour	Most Co Mate		Other Materials	General Description	Depth From	( <i>Metres</i> )	Depth From	( <i>Metres</i> ) To	5-5	Diame (Centime		
	Asph	alr			0	0.1	0	6.1	20			
Brown	Sand	1+qu	avel De	nse to compa	0,1	0.9						
Grey		clay	compact	nse to compa	0.9	1.5			1.65			
Grey	A 1	Sill	,	Stiff to firm	1.5	3.6						
Grey	Clay	1 Sal	nd silly se	megravel loss	036	6.1			Wa	nter Use		
							Public Domes Livesto Inrigatio	stic 🔲	Commercial [ Municipal 두	Not used Dewatering Monitoring Cooling & Air Co	Other, specify	V
1.24.00						1000			and the second second	of Construction		
						1.5.5	Cable	Tool (Convention			igging	
			- Andrews					(Reverse)		ng 🗹	ther, specily SA	
							-1.			us of Well		
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							_	ering Well tion (Constr		r, specify idoned, other, spec	ifv	
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Inside Dia	meter		Construction De Material	tails Wall	Depth	(Metres)		1.00 1.0	5	Screen		
(Centime			fibreglass, concrete, g	alvanized) Thickness		To (o.)	Galvar		Steel Steel Steel	Slot No.	crete Plastic	
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							Water for	und at De	Water D	Details of Water		
							Water io	Metres	Same and the second second	resh Salty	Sulphur 🗌 Mine	rals
				with the second			Water for	und at De Metres	- 00	of Water resh Salty	Sulphur 🗌 Mine	rals
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							Detailed (8.5" x 14	Map must 4"). Sketch	Location be provided as es are not allow	wed.	larger than legal s	
							L				s per Section 11.1 ( ning the cluster to	-
							the Direc	tor upon	request	officiation control	ang the orderer to	5
	V	Vell Cont	ractor and Well Tec	nnician Information	1							
Business N	lame of We			and an a start of the start of	tractor's Lic	ence No.						
Business A	ddress/Str		state DUN	Municipality	8 4	1						
HOLL	u Pr	incit	sale Grenvi	11e dur La	Roug	je.	Audit No.			Well Contractor	Ne	
Province Postal Code Business E-mail Address								м 05	5542	Well Contractor	vo.	
Bus.Telepho	one No. (inc	area code	Name of Well Technic	ian (Last Name, First I	Name) 7		Date Rep	eived (874	20100	Date of Inspectio	n (yyyy/mm/dd)	
Well Technician's Licence No. Signature of Technician Date Submitted (yyyy/mm/dd/) Remarks												
0	cian's Liceno	e No. Sign	ature of Technician		and the second se		Hemarks					
1992 (11/200	1	3 Sign	ature of Technician	~ 2009	Ministry	H				e 0	n's Printer for Ontario,	2000



Ministry of the Environment Well Tag No. for Master Well (Print Well Tag No.)

A090600

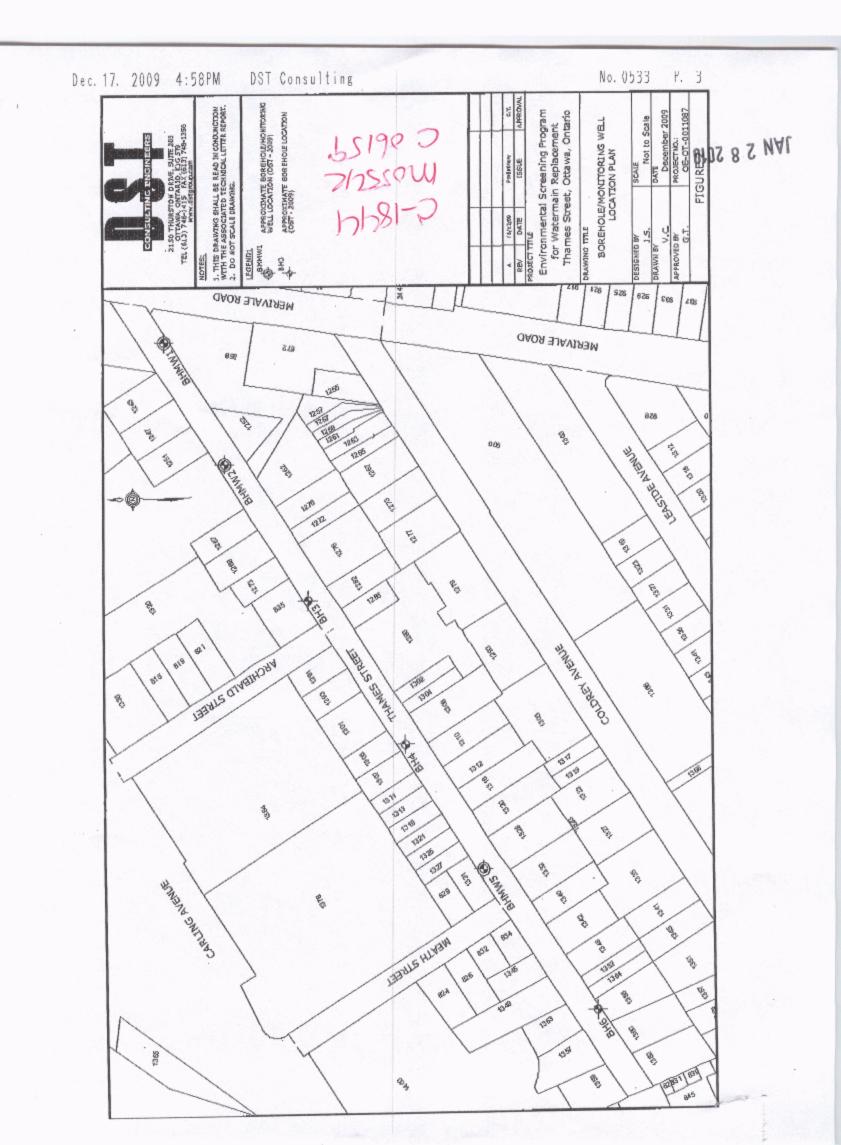
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**Cluster Well Information for Cluster Well Construction** 

Regulation 903 Ontario Water Resources Act

Page 2 of 2

	ss of Well Location (Street Number/Name, RR	)	Lot	C	Concession	Township	1.1		Count	y/District/Mur	nicipality	Signature of Technician/Contractor	Date (yyyy/mm/dd)
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_0	Jawa Onta			(	SARMin	Etrex		entiated, s	specity:			- Bure Aur	2009/12/21
Well # on Sketch	UTM Coordinates Zone Easting Northing	Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Materia	al Casing Length (metres)	Screen Int From	erval (metres)   To	Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
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				<u>San an I</u>									
												<u> </u>	
81	dunnun												
	hunn												
12	ulinnin								11-11				
	hundhunn							C ASH					
	hlundinne												
	Contractor and Well Technician Inf	formation	Rusi	anna Addrosa	(Street Number/N	(ama RR)		Municipa	litte		Province	Date 1st Well in Cluster Constructed Date Las	st Well in Cluster Constructed
SI	All Demino Ecole Duilling	1 lal	HI	A ()	· · · · ·	1	16 5	0	Dava		QC	Ministry Use Only	· · ·
Postal	Code Business Telephone N	0. (inc. area.c	U 6 9	Well Contracto	or's Licence No. Bi	usiness E-mail.	Address	hawk	plache	r_			spected (yyyy/mm/dd)
1	of Well Technician (First Name, Last Name)			Well Technicia	n's Licence No. D	ate Submitted ()	yyyimmidd,	Signatur	of Technician	1	1	Audit No. c 06159	10554L
1991 (1				<u></u>	1 1 - 13	CONSTRUCTION OF A DESCRIPTION OF A DESCR	Ministry's	s Copy	and the		/		n's Printer for Ontario, 2006



Basin Z Department of I Water V	Vell Drillers Act Wines, Province of Ont Vell Rec Vell Rec	aric Ordenation or City. City:	:ot. 61.	tow J.
Pipe and Casing Record		Pumping Test		
Casing diameter (s)	Pumping level	f.t.		· · · · · · · · · · · · · · · · · · ·
W	ater Record	·	····	
Kind (fresh or mineral)	s.s. [	to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Appearance (clear, cloudy, coloured) For what purpose(s) is the water to be used?	p. Chee.	22_	Areck	20
How far is well from possible source of contamination? What is the source of contamination? Enclose a copy of any mineral analysis that has been mac Well Log	de of water	· · ·	tion of Well	
Overburden and Bedrock Record	From         To           0 ft.        ft.		fow show dista	
Situation: Is well on voland in volume or or hilloide?		well from ros dicate north	diand lot lin by arrow.	e. In-
Situation: Is well on upland, in valley, or on hillside? Drilling Firm		in the second second	·····	• • • • • • • • •
Form 5	····	Signature of	Licensce	
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County or Territorial District.	Township Vi	llago Tor	vn or City. City	ot ot	AWD.
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Type of screen.					
Length of screen			• • • • • • • • • • • • • • • • • • •		
Is well a gravel-wall type?					
	ater Record				
Kind (fresh or mineral)	sta		Depth(s)	Kind of	No. of Feet
Quality (hard, soft, contains iron, sulphur, etc.)			to Water	Water	Water Rises
Appearance (clear, cloudy, coloured)			• • •	Relt	
For what purpose(s) is the water to be used?	· · · · · · · · · · · · · · · · · · ·	••••	32	<u>_</u>	27
How far is well from possible source of contamination?	100 14	• • • • • • • • •			
What is the source of contamination?					
Enclose a copy of any mineral analysis that has been made	de of water	••••••	•••		
Weil Log	· · · · · · · · · · · · · · · · · · ·		I aar	tion of Well	~
Overburden and Bedrock Record	From 0 ft.	To ft.			
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Drilling Firm				•••••	· · · · · · · · · · ·
Address.					
Name of Driller					
	••••••	. Licence	Number		• • • • • • • • • • •
Form 5			Signature of	Licensee	
	ŕ				

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# **APPENDIX 3**

**QUALIFICATIONS OF ASSESSORS** 

# **KARYN MUNCH, P.ENG.**

# patersongroup

## POSITION

Intermediate Environmental Engineer

## **EDUCATION**

Carleton University, B.Eng. 2002 Environmental Engineering

## **MEMBERSHIPS AND AWARDS**

Professional Engineers of Ontario Ottawa Geotechnical Society

## **EXPERIENCE**

2011-present Paterson Group Inc. **Consulting Engineers** Geotechnical and Environmental Division Intermediate Engineer

2009-2010 **Department of Indian and Northern Affairs** Contaminated Sites Division Environment Officer (PC-02)

2003 to 2009 Paterson Group Inc. **Consulting Engineers** Geotechnical and Environmental Division Intermediate Engineer

2002 to 2003 Dessau Soprin Inc. **Consulting Engineers** Environmental Division Junior Engineer

## SELECT LIST OF PROJECTS

Building Sciences	Billings-Hurdman Interconnect Watermain - Ottawa Telus Building Remediation - Ottawa Block D Lands Remediation and Redevelopment – Kingston Alcan Plant Redevelopment - Kingston Gladstone Avenue Reconstruction - Ottawa Lees Avenue Coal Tar Site - City of Ottawa Nortel Networks Environmental Monitoring Program
Hydrogeology	3W Zone Feedermain – Ottawa Bank Street Reconstruction – Ottawa Lees Avenue Remediation Program – Ottawa Colonnade Road North Development – Ottawa Montreal Road Reconstruction – Ottawa Designated Substance Surveys – Residential and Commercial Sites - Ottawa Phase I & II Environmental Site Assessments – Residential, Commercial and Industrial Sites – Ottawa (CSA Z768-01 and O.Reg 269/11)
Archeological Services	Brownfields Applications and Records of Site Condition – Residential and Commercial Redevelopment

**Environmental** Engineering

Geotechnical Engineering

**Materials Testing Quality Control** 

# Mark S. D'Arcy, P. Eng.

# patersongroup

## POSITION

Associate and Supervisor of the Environmental Division Senior Environmental/Geotechnical Engineer

Associate and Senior Environmental/Geotechnical Engineer

## EDUCATION

Queen's University, B.A.Sc.Eng, 1991 Geotechnical / Geological Engineering

## **MEMBERSHIPS**

Environmental Engineering

Ottawa Geotechnical Group Professional Engineers of Ontario Consulting Engineers of Ontario

## **EXPERIENCE**

1991 to Present Paterson Group Inc.

Geotechnical Engineering

Materials Testing Quality Control

## SELECT LIST OF PROJECTS

Environmental and Geotechnical Division Supervisor of the Environmental Division

Mary River Exploration Mine Site - Northern Baffin Island Rideau Centre Expansion project - Ottawa Agricultural Supply Facilities - Eastern Ontario Laboratory Facility – Edmonton (Alberta) **Building Science** Ottawa International Airport - Contaminant Migration Study - Ottawa Investigation and Remediation - Cotton Mill Redevelopment, Cornwall Billings Hurdman Interconnect - Ottawa Bank Street Reconstruction - Ottawa Environmental Review - Various Laboratories across Canada - CFIA Dwyer Hill Training Centre - Ottawa Nortel Networks Environmental Monitoring - Carling Campus - Ottawa Hydrogeology Remediation Program - Block D Lands - Kingston Investigation of former landfill sites - City of Ottawa Record of Site Condition for Railway Lands - North Bay Assessment and Remediation - North Bay Airport Commercial Properties - Guelph and Brampton Brownfields Remediation - Alcan Site - Kingston Archaeological PWGSC Building - 90 Elgin Street - Ottawa Services Remediation Program - Ottawa Train Yards MHLH Facility - CFB Petawawa Ottawa Congress Centre Lansdowne Park Redevelopment - Ottawa