Appendix I
Hydrogeological Assessment

Hydrogeological Assessment

Municipal Class Environmental Assessment
Phases 3 & 4 for Barton Street and Fifty Road Improvements
Stoney Creek and Winona, Hamilton, Ontario
TPB166053

Prepared for:

City of Hamilton
71 Main Street West,

September 2020

Hydrogeological Assessment

Municipal Class Environmental Assessment
Phases 3 & 4 for Barton Street and Fifty Road Improvements
Stoney Creek and Winona, Hamilton, Ontario
TPB166053

Prepared for:

City of Hamilton
71 Main Street West,

Prepared by:

Wood Environment & Infrastructure Solutions
50 Vogel Road, Units 3 & 4
Richmond Hill, ON, L4B 3K6
Canada
T: 905-415-2632

September 2020

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Appendices

1.0 INTRODUCTION

Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited ("Wood") was retained by the City of Hamilton to conduct a hydrogeological assessment in support of a Schedule C Municipal Class Environmental Assessment (EA) Phases 3 & 4 for Barton Street and Fifty Road Improvements in Hamilton, Ontario.

The purpose of this report was to provide a preliminary hydrogeological assessment of the local area and the impacts of the proposed construction on the surrounding groundwater users and local environment. This report summarizes the findings of the geotechnical investigation completed at the site, completed in-situ hydraulic conductivity testing and groundwater level measurements. The report also describes the local environment in the area of the proposed construction.

2.0 SOURCES OF INFORMATION

Information compiled as part of this report included a geotechnical investigation completed at the site by Wood, summarized in the following document:

- Geotechnical Investigation Report, Municipal Class Environmental Assessment Phases 3 & 4 for Barton Street and Fifty Road Improvements contract C3-01-16 – (Wood, 2016).

Additionally, Wood reviewed the following regional-scale map products:

- Orthophotography, ESRI ArcGIS Online, World Imagery, 2013.
- Ontario Ministry of Northern Development and Mines, Surficial Geology of Southern Ontario, 2003, Miscellaneous Release - Data 128.
- Ontario Geological Survey, Bedrock Geology of Ontario, 2011, Miscellaneous Release – Data 126, 1:250,000 scale.
- Chapman L.J. and Putnam, D.F. 1984 (digitized 2007). Physiography of Southern Ontario: Ontario Geological Survey, Miscellaneous Release – Data 228.

And the following additional studies that have been previously completed for this site or local area:

1. 2007 City of Hamilton Transportation Master Plan (TMP)
2. 2008 Stoney Creek Urban Boundary Expansion (SCUBE) TMP
3. 2013 Fifty Road and Canadian National Railway (CNR) Grade Separation Needs Assessment Study
4. 2014 Fruitland-Winona Secondary Plan.

3.0 SITE AND PROJECT DESCRIPTION

3.1 Site Description

The study area is roughly located along the Barton Street Right-of-Way, with the proposed width of 44 m (including a 4 m Wide Pedestrian Promenade), between the intersection with Fruitland Road and Fifty Road, and along Fifty Road – improvements to include widening between Queen Elizabeth Highway (QEW) and Highway 8, and Canadian National Rail crossing. Barton Street and Fifty Road are truck routes, which form exit and entrance points to the QEW and Highway 8 and are classified as major arterial roadways.

3.2 Project Description

As per the information provided in the RFP: *"[Hamilton TMP (2007)], The City of Hamilton is in the process of carrying out the Hamilton Transportation Master Plan (TMP) update of the 2007 document. Following the Municipal Class Environmental Assessment (EA) process, the TMP provides policies and strategies for Hamilton's transportation network over the next 30 years. The 2007 TMP recommended improvements to Barton Street and Fifty Road (see attached map). These road improvements were identified as a Schedule C Project. Phase 1 and 2 of the EA process were completed during the TMP work. [SCUBE TMP (2008)] In 2008, The Stoney Creek Urban Boundary Expansion (SCUBE) TMP was completed. The SCUBE TMP provided a transportation strategy that supported the addition of 223 hectares of land into the urban boundary. [Fifty Road and Canadian National Railway (CNR) Grade Separation Needs Assessment Study (2013)] The City completed a Grade Separation Needs Assessment (2013) for Fifty Road and CNR crossing. [Fruitland-Winona Secondary Plan (2014)] In May 2014, the City of Hamilton adopted the Fruitland Winona Secondary Plan (currently under appeal). The planning area included lands east of Fruitland Road, north of Highway No. 8, south of Barton Street (including Winona); and the lands east of Winona, north of Highway No. 8, south of the QEW, and west of the City limits. The purpose of the Fruitland-Winona Secondary Plan is to establish land uses, the transportation network, infrastructure requirements, and development standards to guide the development of lands located in the Fruitland-Winona Secondary Plan area for the next 20 years."*

With the above background and as the next step, the City required Phase 3 and 4 of the Municipal Class Environmental Assessment ("MCEA") for Barton Road and Fifty Road improvements (hereafter referred to as "project") to determine alternative design concepts for the preferred solution and to develop an Environmental Study Report and provide implementation strategies and phasing, the contract for which was awarded to Wood. This geotechnical investigation was carried out to obtain existing subsurface soil and pavement structure information to support the project.

In addition to widening of the road, installation of new underground utilities are planned, together with a grade separation for Fifty Road and CNR crossing, located on Fifty Road, about 420 m north of its intersection with Barton Street and just south of the ramp to South Service Road.

At the time of the investigation, both Barton Street and Fifty Road were 2-lane roads (one lane in each direction) with gravel shoulder (about 5.8 km total, i.e., 5.1 km of Barton Street and 0.7 km of Fifty Road) passing through residential / commercial / farmland areas. The road surface was similar to or slightly higher (less than 1 m) than surrounding ground surface.

The ground (road) elevations within the project limits (based on borehole locations) varied from about 87.0 m to 92.3 m, with undulating ground surface. Overall, the ground surface sloped down from west (Fruitland Road) to east (Fifty Road).

4.0 METHODOLOGY

In order to satisfy the requirements of the Municipal Class EA process (Schedule C), Wood has completed a hydrogeological assessment including the following tasks:

- Review available geological and hydrogeological information available for the site and surrounding area, including, but not limited to: geological and hydrogeological mapping, concurrent site investigations, existing reports, and local water well records to determine the local and regional geologic and hydrogeologic settings.
- Provide recommendations regarding dewatering effort, as well as a discussion of potential impacts to dewatering.
- Provide recommendations on mitigation measures to minimize the impacts identified, dewatering discharge options.
- Prepare a summary of the findings/recommendations of the hydrogeological assessment for inclusion in the Environmental Study Report (ESR).

5.0 GEOTECHNICAL INVESTIGATION

Wood conducted a geotechnical field investigation and based on the geological environment encountered, a formal hydrogeological field investigation was not completed. work has not been completed for this project. This includes any hydraulic conductivity tests, well development, and dewatering assessments. However, a geotechnical investigation was completed to provide soil and groundwater information for design of various components of the project (Geotechnical Investigation Report, Wood, 2020).

Based on the requirements set out in the City of Hamilton's Contract no. C3-01-16, the following tasks were carried out geotechnical investigation along Barton Road and Fifty Road:

- A total of 41 boreholes drilled, varying in depth from about 1.5 m to 10.7 m, including:
  - 32 boreholes (BH 01 to BH 41)
  - 8 boreholes along Fifty Road; and
  - 1 borehole (BH 49) for the grade separation (on Fifty Road).

5.1 Borehole Drilling and Monitoring Well Construction

The geotechnical boreholes were drilled during the Geotechnical Investigation (Wood 2020) between June 18 and 19, 2019. The borehole details are included in the geotechnical investigation report and the locations are shown in Figure 1a – 1d.

All boreholes were drilled using a truck-mounted drill rig, fitted with an automatic hammer, supplied and operated by Davis Drilling Ltd. of Milton, Ontario. The drilling activities were conducted under full-time

oversight Wood personnel, who also logged the soil types encountered during borehole advancement and collected soil samples. The borehole logs are shown in the Appendix A.

Groundwater depths in the boreholes, where encountered, were measured during drilling and upon completion of drilling. The measured groundwater depths, where applicable, are shown on the Record of Boreholes.

Upon completion of drilling, all boreholes were backfilled in accordance with the general requirements of Ministry of Environment (MOE) Ontario Regulation 903. The surficial asphaltic concrete at the borehole locations and core locations were repaired by cold patch asphalt.

No monitoring wells were installed during the geotechnical investigation.

5.1.1 Geotechnical Soils

The geotechnical investigation indicated that the soil profile for the Site comprised, topsoil and fill overlying glacial till of silty clay to sand and silt. The glacial till was underlain by the till/shale complex of clayey silt to silty sand containing extensive broken bedrock. In some areas, the glacial till is interbedded with cohesive silty clay to clayey silt and cohesionless silty sand, sand and silt, sandy silt and/or silt layers/seams. The Queenston Formation (mudstone shale interbedded with limestone/siltstone) was encountered at depths as shallow as 3.0 m to 6.1 m bgs in select borehole locations, but was not encountered during drilling across most of the site, with overburden extending to almost 15 m without encountering bedrock.

5.1.2 Groundwater Conditions

Groundwater was not encountered in any of the boreholes at the time of drilling or upon completion of drilling.

However, moist conditions were noted in the sand and gravel fill between 0 to 1 mbgs and in the weathered shale from 2.2 mbgs and deeper.

It should be noted that the groundwater at the site can fluctuate seasonally and can be expected to be somewhat higher during the spring months and in response to major weather events.

6.0 PHYSICAL SETTING

The Site is situated within the Stoney Creek Numbered Watercourses watershed within the south east part of the City of Hamilton (Figure 1a-1d) and is immediately north east of the Niagara Escarpment areas identified as Urban Areas and Protection Areas (Figure 4). The site includes an urban area and Lake Ontario situated to the north east.

The ground surface at the Site is relatively flat and slopes down to the north east, towards Lake Ontario. The proposed construction ranges at elevations between 100 to 80 masl (metres above sea level) between Fruitland Road and Fifty Road along Barton Street. The topography for the Site is shown in Figure 5.

6.2 Surface Water Features

Lake Ontario is located approximately 1000 metres to the northeast of the Site, Stoney Creek is located less than 50 metres northwest of the site, and Fifty Creek is located less than 50 metres southeast of the site. The surface water features are shown in Figure 6.

6.3 Physiography

The physiography for the Site is shown in Figure 7 as mapped by Chapman and Putnam (1984) and digitized by the Ontario Geological Survey (OGS). The site is situated within the Iroquois Plain physiographic region, surrounding Lake Ontario through the area and situated between Lake Ontario and the Niagara Escarpment. The Iroquois Plain physiographic region consists primarily of permeable sand to sand and gravel, with the slope smoothed. The Iroquois Plain can act as a shallow, or "upper aquifer", allowing precipitation to readily infiltrate the ground.

6.4 Surficial Geology

The surficial geology as mapped by the Ontario Geological Survey (OGS) for the Site is shown in Figure 8.

The surficial geology mapping shows the alignment of Barton Street as Paleozoic Bedrock between Fruitland Road and Glover Road and Lewis Road and Fifty Road, with Till between Glover Road and Lewis Road. The Site overall is covered by silt and clay, minor sand and gravel, to sandy silt to silty sand-textured till, commonly associated with fine-textured glaciolacustrine deposits.

6.5 Bedrock Geology

The bedrock geology for the Site is shown in Figure 9 as mapped by the OGS. The bedrock in this area consists of Paleozoic Upper Ordovician rocks of the Clinton Group. This consists of sandstone, shale, dolostone, siltstone of the Clinton Group.

According to the Preliminary Map P.240, "Bedrock Topography Series, Grimsby Area", bedrock is close to ground surface or exposed.

6.6 Stratigraphy and Hydrostratigraphy

Based on geotechnical borehole logs in Appendix A, the site appears to be covered by topsoil and fill material consisting of primarily of sand and gravel with silty clay soils. The fill extends up to 1.5 m below ground surface across the site. A cross section of the stratigraphy can be found in Figure 2a, 2b, and 3.

Below the fill soils, thick sequences of till or till-like soil were noted, primarily silty clay to sand and silt. The till-like soils were discontinuous, as they were not noted in every borehole. These soils were encountered from 0.2 to 1.5 mbgs to a bottom of 2.2 to 5.0 mgs and had a thickness of 0.8 to 4.0 m.

Weathered shale was encountered between 2.2 to 4.9 mbgs in a discontinuous fashion, depending on the depth of the borehole. The depth of the weathered shale cannot be determined due the depth reaching as far as the deepest borehole at 10.7 mbgs.

6.7 Groundwater Flow

It is noted that no groundwater was encountered in any of the boreholes at the time of completion of drilling and no groundwater measurements were recorded throughout the geotechnical investigation. Due to the topography of the site sloping towards the north-east and the Niagara Escarpment being situated to the southwest, groundwater is inferred to flow towards Lake Ontario to the north-east of the site, which serves as both the local and regional groundwater discharge zone.

7.0 DEWATERING AND IMPACTS ASSESSMENT

7.1 Dewatering Rates

No hydraulic conductivity testing was completed by Wood at the site. Generally, the soils described in the geotechnical investigation consist of relatively fine-grained soils that are not expected to be highly productive units for groundwater flow. A discussion of construction dewatering was included in the geotechnical investigation report and hydraulic conductivities based on published values for the described geologic materials is as follows (Groundwater, R. Allan Freeze and John A. Cherry, 1979):

- Fill Soils to Clean Sand and Gravel – 0.2 to 1.5 mbgs – 10^{-5} to 10^{-1} m/s
- Firm to stiff silty clay till – 0.5 to 5.2 mbgs - 10^{-9} to 10^{-6} m/s
- Very stiff to Hard silty clay till/weathered shale – 2.2 to 10.7 mbgs - 10^{-12} to 10^{-6} m/s

Once a design has been determined, dewatering rates should be calculated to determine whether any permitting is required to support construction (such as an EASR or a PTTW).

Ultimately if construction dewatering rates range between 50 m^3/day and 400 m^3/day, an Environmental Activity and Sector Registry (EASR) registration may be sufficient to support construction. For dewatering rates in excess of 400 m^3/day, a Permit To Take Water (PTTW) will be required. And both permitting options will require additional supporting documentation to be prepared.

7.2 Groundwater Quality & Dewatering Disposal

Investigations completed in the area of the site to date have not included groundwater chemistry sampling. The area of the proposed construction consists of urban developments with serviced facilities and no agricultural land use and is not predicted to have potential groundwater quality issues that may impact dewatering disposal options beyond those associated with urban development land use (nitrates, pesticides, fertilizers, etc.).

As no confirmation of the presence or absence of potential groundwater quality impacts has been completed at this time, the groundwater quality will need to be confirmed to establish disposal options for any water collected during dewatering efforts during construction.

Dewatering for the project is expected to remain within the immediate vicinity and dewatering these excavations is not expected to draw water from downgradient areas. The proposed dewatering effort has the potential to draw in contaminants originating from activities upgradient of the Site, but only if a contaminant plume already exists and is already migrating towards the Site.

Any water collected during dewatering would need to be tested and potentially treated prior to disposal to confirm the appropriate disposal location and method. Options for disposal would include release to the natural environment (requiring that the discharge meets the Ontario Provincial Water Quality Objectives), local sanitary or storm sewers, if not too far removed from the Site (requiring that the discharge meets the appropriate Peel Region Sewer Use Bylaw criteria), or it could be contained and trucked offsite for treatment.

7.3 Impacts to Private Wells

A water well record search via the Ministry of Environment, Conservation and Parks (MECP) Water Well Information System (WWIS) was conducted within a 1 km perimeter of the alignment of Barton Street between Fruitland Road and Fifty Road. The search returned a total of 165 wells located within this perimeter and were reviewed. Only records that included some geological or well information are shown in Figure 10 and included in Appendix B.

Upon closer examination of the information from these sources, Wood determined that most of these records contained no information and were assumed to have been abandoned, nine (9) were listed as observation wells or test holes, twenty-nine (29) were identified as water supply wells, and three (3) were listed as abandoned. The water supply wells that are located within the construction area are currently private wells that are expected to remain as private supplies during the construction. Other residential properties throughout the site are currently municipally serviced.

7.4 Surface Water Impacts

The planned construction area does not include any major creek crossings and will result in no direct impacts to the local surface water from installation of culverts or diversions (temporary or permanent). The locations of creeks and surface water features can be found in Figure 6.

Additionally, the planned construction will include a road rehabilitation/re-surfacing and widening along Barton Street from Fruitland Road to Fifty Road in Stoney Creek and Winona, Ontario. This work will not require any significant excavation. The subsurface infrastructure installation may require some dewatering, but due to the nature of the soils across the Site, the dewatering effort is expected to be small and localized, such that no impacts from dewatering would be expected. Nevertheless, a sump and pump system may be required to dewater any water seeping / flowing into the excavated area.

Measures should be used during construction to limit the potential for sediment to wash overland into surface water features.

7.5 Dewatering Induced Settlement

As the site currently consists of agricultural land and there are no major creek crossings (i.e. does not cross Stoney Creek and Fifty Creek, in particular), there are no existing structures to be impacted by settlement from dewatering.

Additionally, excavations, where required, will be of short duration and are expected to require minimal dewatering partially due to the relatively fine-grained nature of the material to be excavated.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Considering the information provided by the City in the RFP, the City understands that the Barton Street and Fifty Road has been identified as requiring improvements in In accordance to the 2007 City-Wide Transportation Master Plan (TMP), Stoney Creek Urban Boundary Expansion (SCUBE) Transportation Management Plan (2009).

From the soil conditions encountered at the borehole locations, the soil profile at the south site generally comprised topsoil and fill overlying glacial till of silty clay to sand and silt. The glacial till was underlain by the till/shale complex of clayey silt to silty sand containing extensive broken bedrock. At the time of drilling or upon completion of drilling, groundwater was not encountered in any of the boreholes at the time of drilling or upon completion of drilling.

There are no major creek crossings or surface water features that are in the immediate vicinity of the Site or alignment. No impacts to surface water would be expected during the completion of construction activities.

No active water supply wells were found through a detailed inspection of water well records through the WWIS. Most local properties are connected to municipal water and sewer services, and remaining wells that may be private supplies are located upgradient and are not expected to be impacted by the construction activities.

Groundwater was not encountered in the boreholes drilled as part of Wood's geotechnical investigation. No monitoring wells were installed to conduct groundwater level monitoring. If groundwater is encountered during excavations, the dewatering effort may be expected to be low.

Once a design has been determined, dewatering rates should be calculated to determine whether any permitting is required to support construction (such as an EASR or a PTTW).

Ultimately if construction dewatering rates range between 50 m^3/day and 400 m^3/day, an Environmental Activity and Sector Registry (EASR) registration may be sufficient to support construction. For dewatering rates in excess of 400 m^3/day, a Permit To Take Water (PTTW) will be required. And both permitting options will require additional supporting documentation to be prepared.

No groundwater chemistry sampling has been performed for this site. If water was to be disposed of to the sewer system, the discharge would be required to comply with the requirements outlined under the City of Hamilton Sewer Use By law (Bylaw 14-090). Should dewatering activities consist of discharge towards a water body, the discharge would be required to comply with Provincial Water Quality Objectives. A Sewer discharge permit or related permissions may be required should dewatering activities be required to discharge into a sewer system.

9.0 CLOSURE

The information and recommendations contained in this report should be used solely for the purpose of a hydrogeological investigation of the subject site. Should you have any questions about this report, please do not hesitate to contact the undersigned.

This report has been prepared by Bryan Fung, B. Sc., P.Geo. and reviewed by Kimberly Gilder, B. Sc., P.Geo.

The Report Limitations included in Appendix C.

Sincerely,

Wood Environment & Infrastructure,
a Division of Wood Canada Limited

Bryan Fung, B.Sc., P.Geo.
Hydrogeologist

Kimberly Gilder, B.Sc., P.Geo
Senior Hydrogeologist

10.0 REFERENCES

Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario*. Ontario Geological Survey Special Volume 2, 270 pp.

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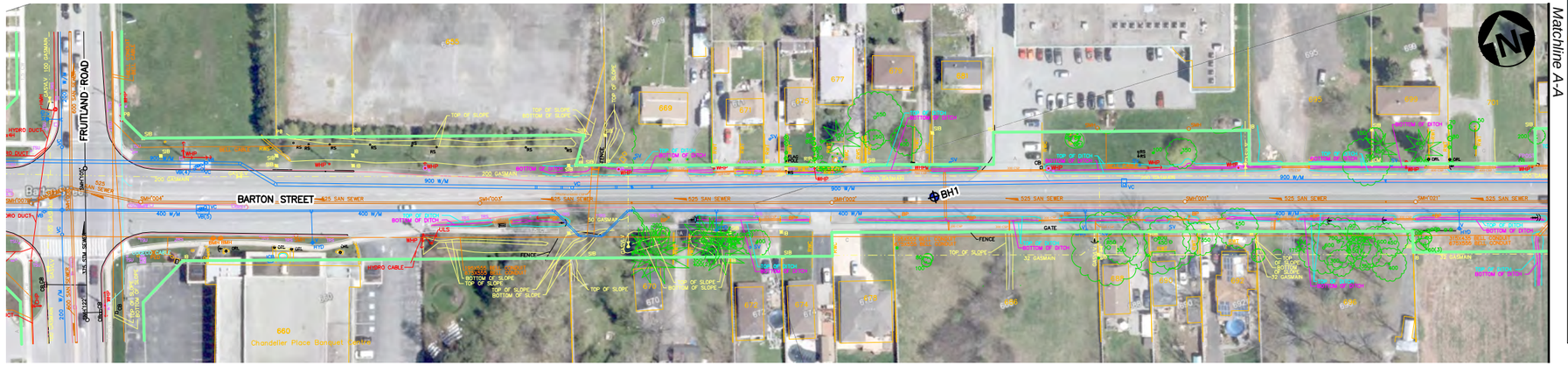
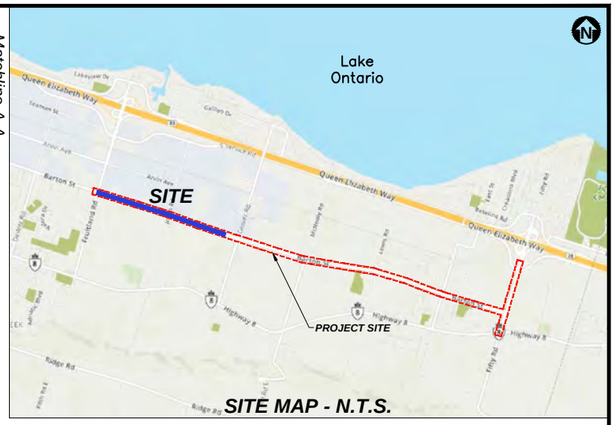
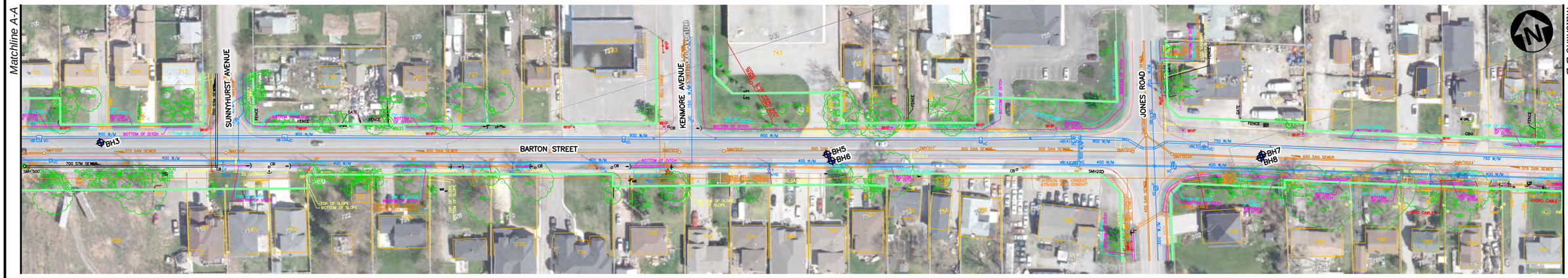
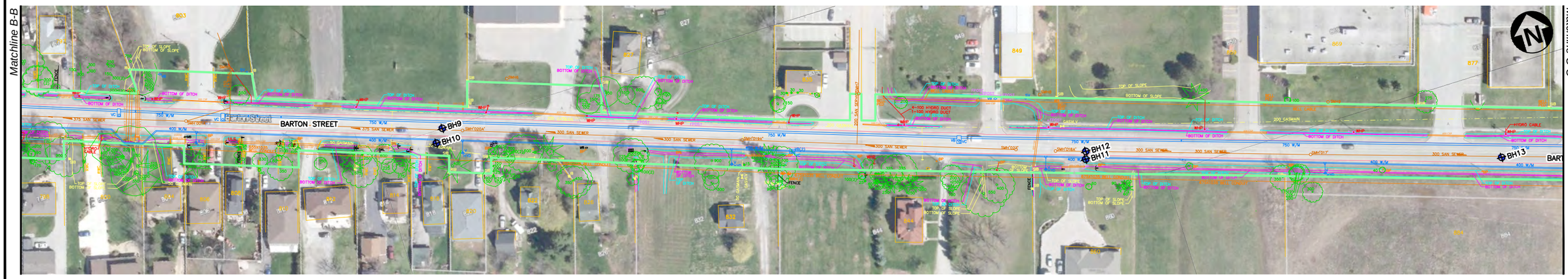
Figures









LEGEND

BOREHOLE LOCATION

0 25 50 75m

APPROXIMATE SCALE

CLIENT LOGO

Hamilton

CLIENT:

CITY OF HAMILTON

Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited
50 Vogell Road, Units 3 & 4, Richmond Hill, Ontario, L4B 3K6

wood.

DWN BY:	KW
CHK'D BY:	HS
DATUM:	NAD83
PROJECTION:	UTM Zone 17T
SCALE:	AS SHOWN

TITLE

SITE AND BOREHOLE LOCATION PLAN

PROJECT

HYDROGEOLOGICAL ASSESSMENT
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
PHASES 3 AND 4 FOR BARTON STREET AND FIFTY ROAD IMPROVEMENTS
CITY OF HAMILTON, ONTARIO

DATE:	APRIL 2020
PROJECT NO:	TPB166053
RFSQ NO:	-
CONTRACT NO.:	C3-01-16
FIGURE No.	1A

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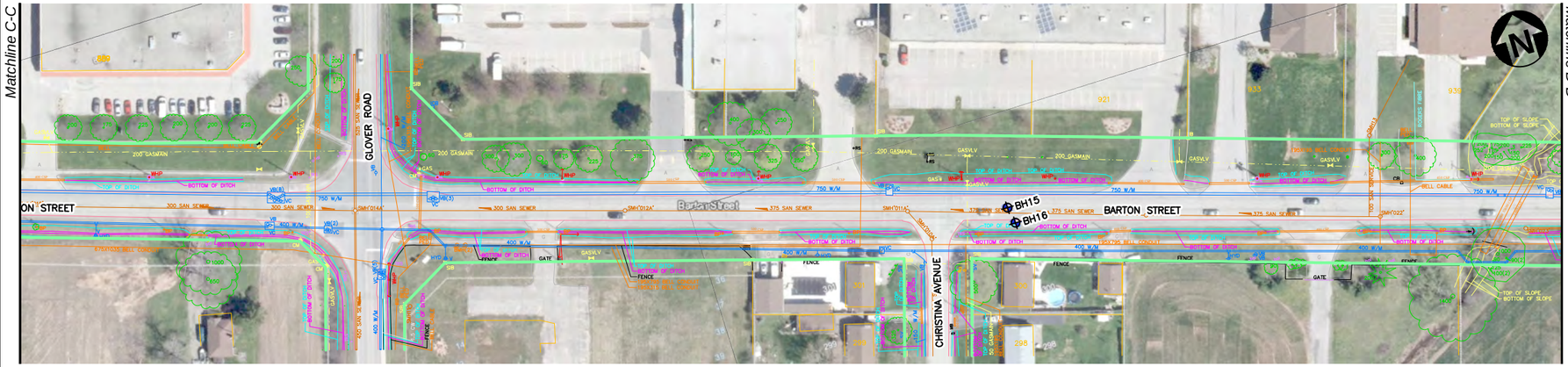

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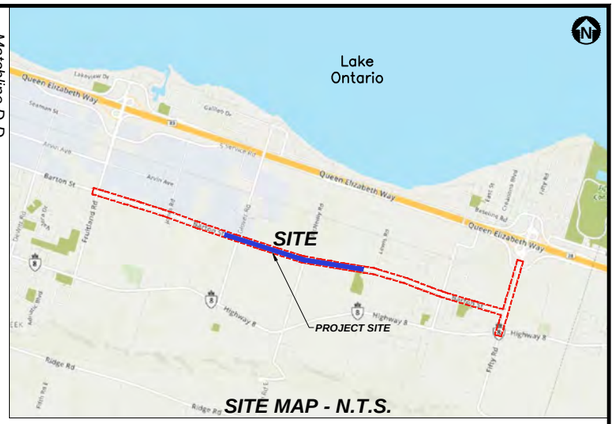

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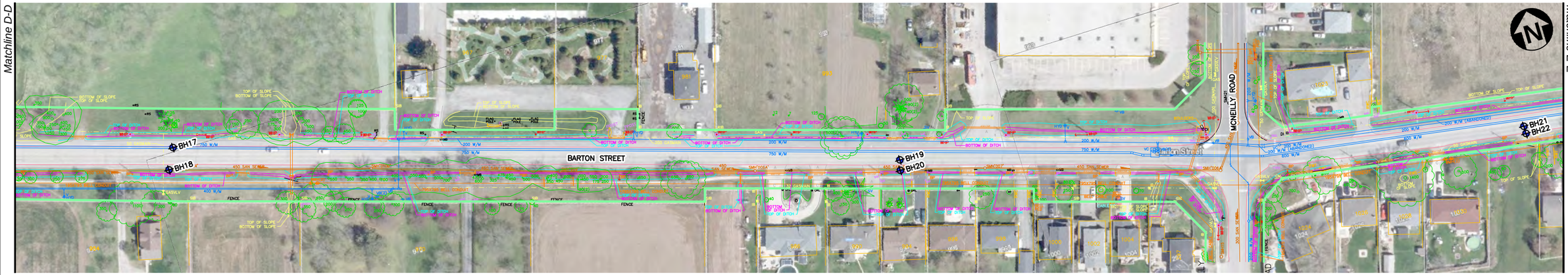

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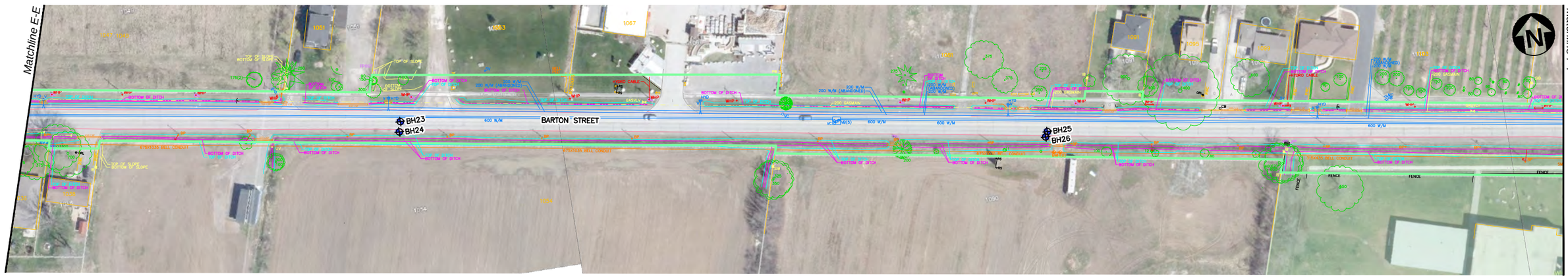

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LEGEND

BOREHOLE LOCATION

0 25 50 75m

APPROXIMATE SCALE

CLIENT LOGO

Hamilton

CLIENT:

CITY OF HAMILTON

Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited
50 Vogell Road, Units 3 & 4, Richmond Hill, Ontario, L4B 3K6

wood.

DWN BY:	KW
CHK'D BY:	HS
DATUM:	NAD83
PROJECTION:	UTM Zone 17T
SCALE:	AS SHOWN

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FIGURE No.	1B

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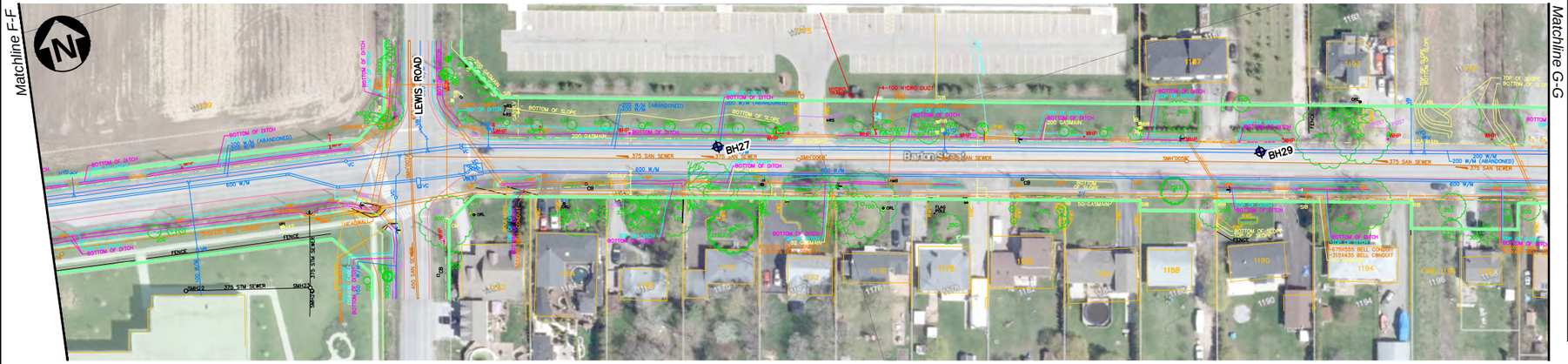

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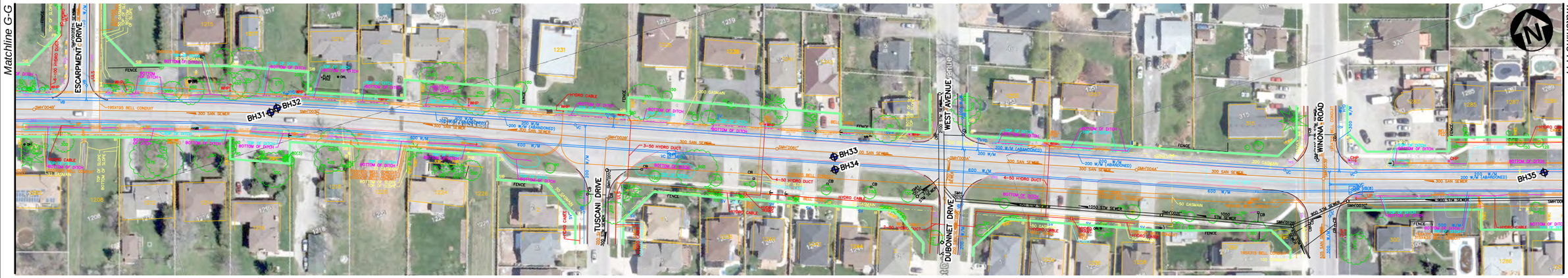

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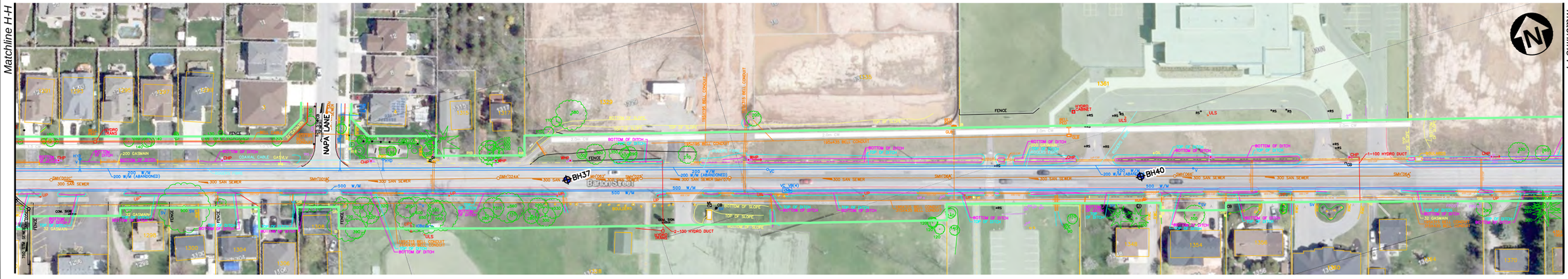

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LEGEND

BOREHOLE LOCATION

0 25 50 75m

APPROXIMATE SCALE

CLIENT LOGO

Hamilton

CLIENT:

CITY OF HAMILTON

Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited
50 Vogell Road, Units 3 & 4, Richmond Hill, Ontario, L4B 3K6

wood.

DWN BY:	KW
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CONTRACT NO.:	C3-01-16
FIGURE No.	1C

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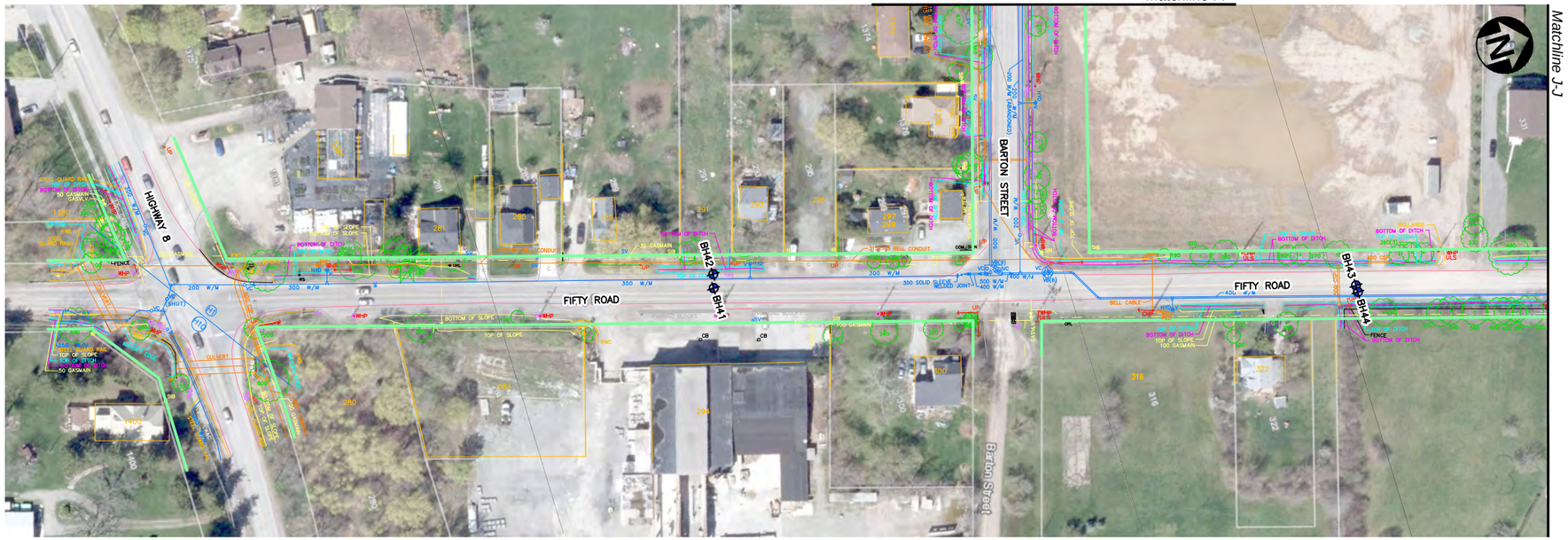

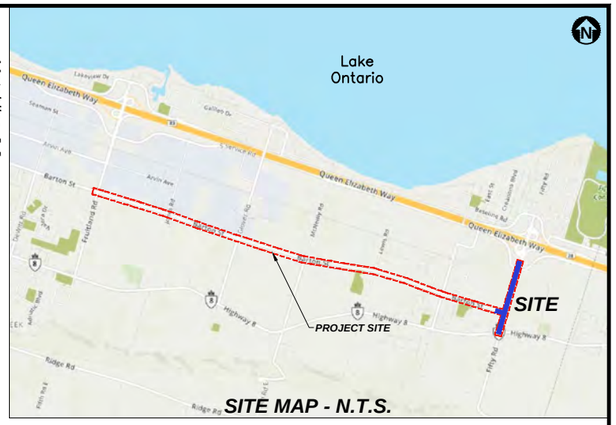

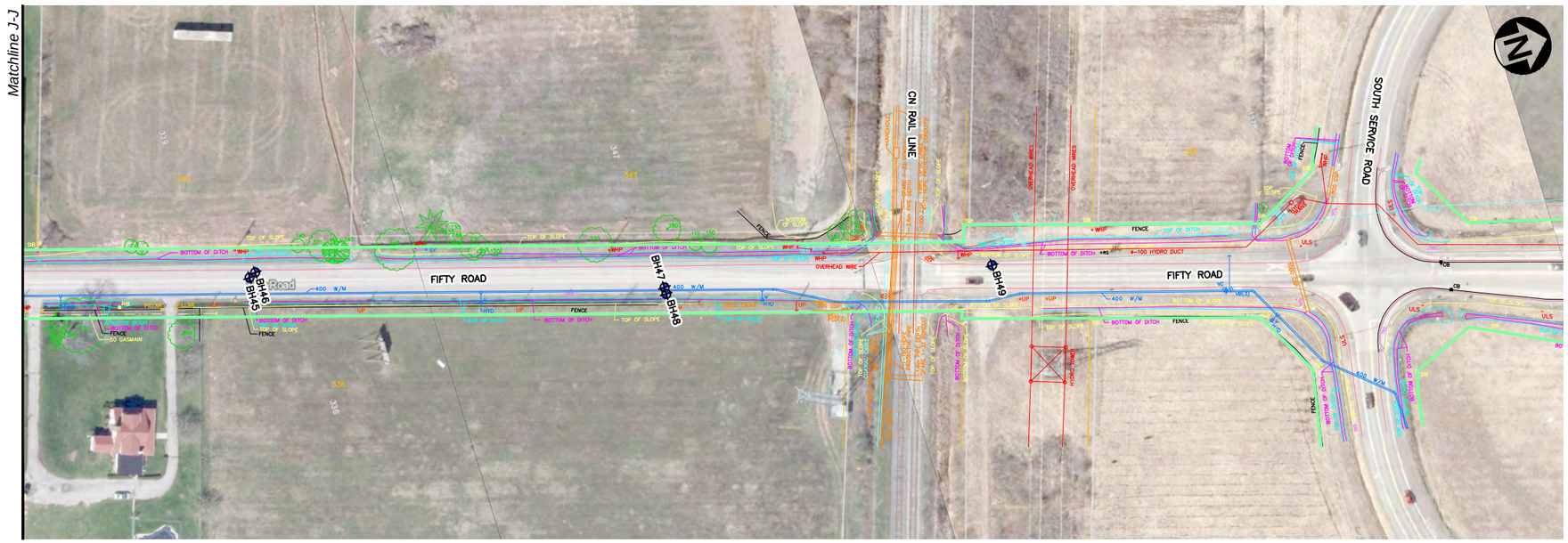

LEGEND

BOREHOLE LOCATION

0 25 50 75m

APPROXIMATE SCALE

CLIENT LOGO

Hamilton

CLIENT:

CITY OF HAMILTON

Wood Environment & Infrastructure Solutions,
a Division of Wood Canada Limited
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wood.

DWN BY:	KW
CHK'D BY:	HS
DATUM:	NAD83
PROJECTION:	UTM Zone 17T
SCALE:	AS SHOWN

TITLE

SITE AND BOREHOLE LOCATION PLAN

PROJECT

HYDROGEOLOGICAL ASSESSMENT

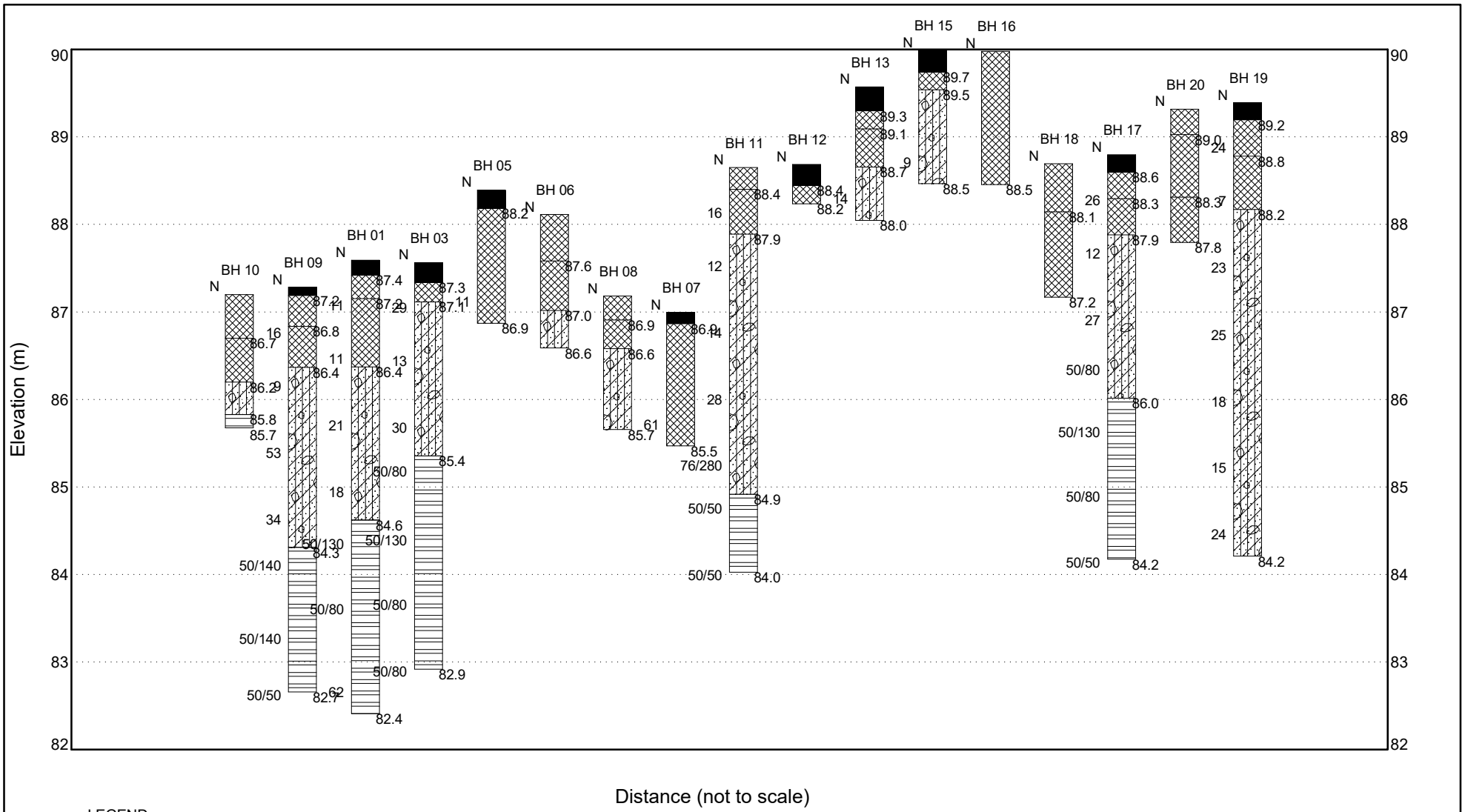
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

PHASES 3 AND 4 FOR BARTON STREET AND FIFTY ROAD IMPROVEMENTS

CITY OF HAMILTON, ONTARIO

DATE:	APRIL 2020
PROJECT NO:	TPB166053
RFSQ NO:	-
CONTRACT NO.:	C3-01-16
FIGURE No.	1D

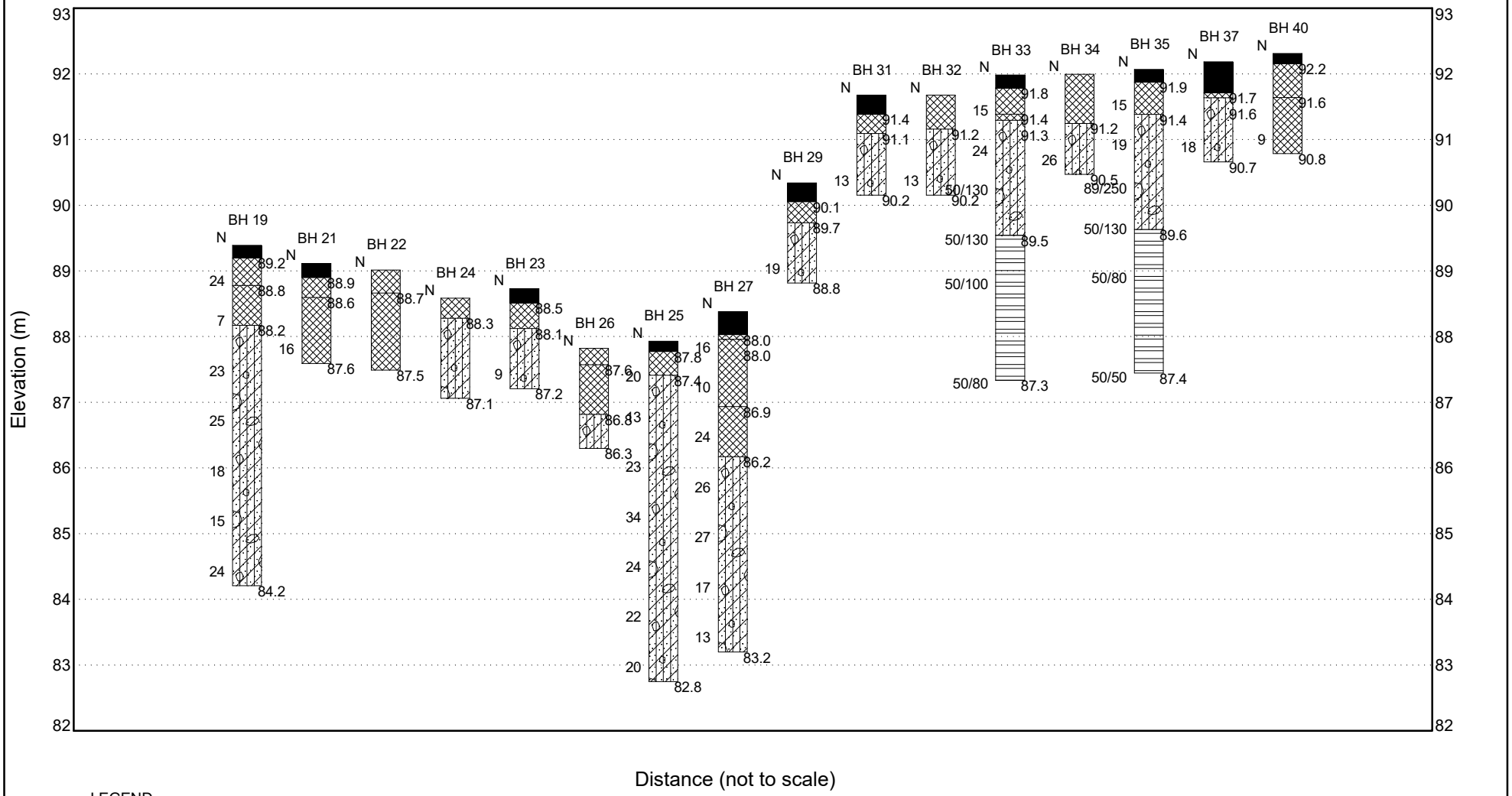
Z:\Projects\2019\# – TPB – Burlington Projects\# (2016) TPB166053 – Barton – Fifty Road\Drawings\TPB166053_08Jan2020_Site_and_BH_Location_Plan.dwg – BH Plan – Mar. 19, 2020 10:09am – kent.wong



STRATIGRAPHY ALONG BARTON STREET

Hydrogeological Assessment,
MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements
Hamilton, Ontario

JOB NO.	DATE	Figure
TPB166053	Apr 2020	2A



LEGEND

Water Level

Asphalt

Fill

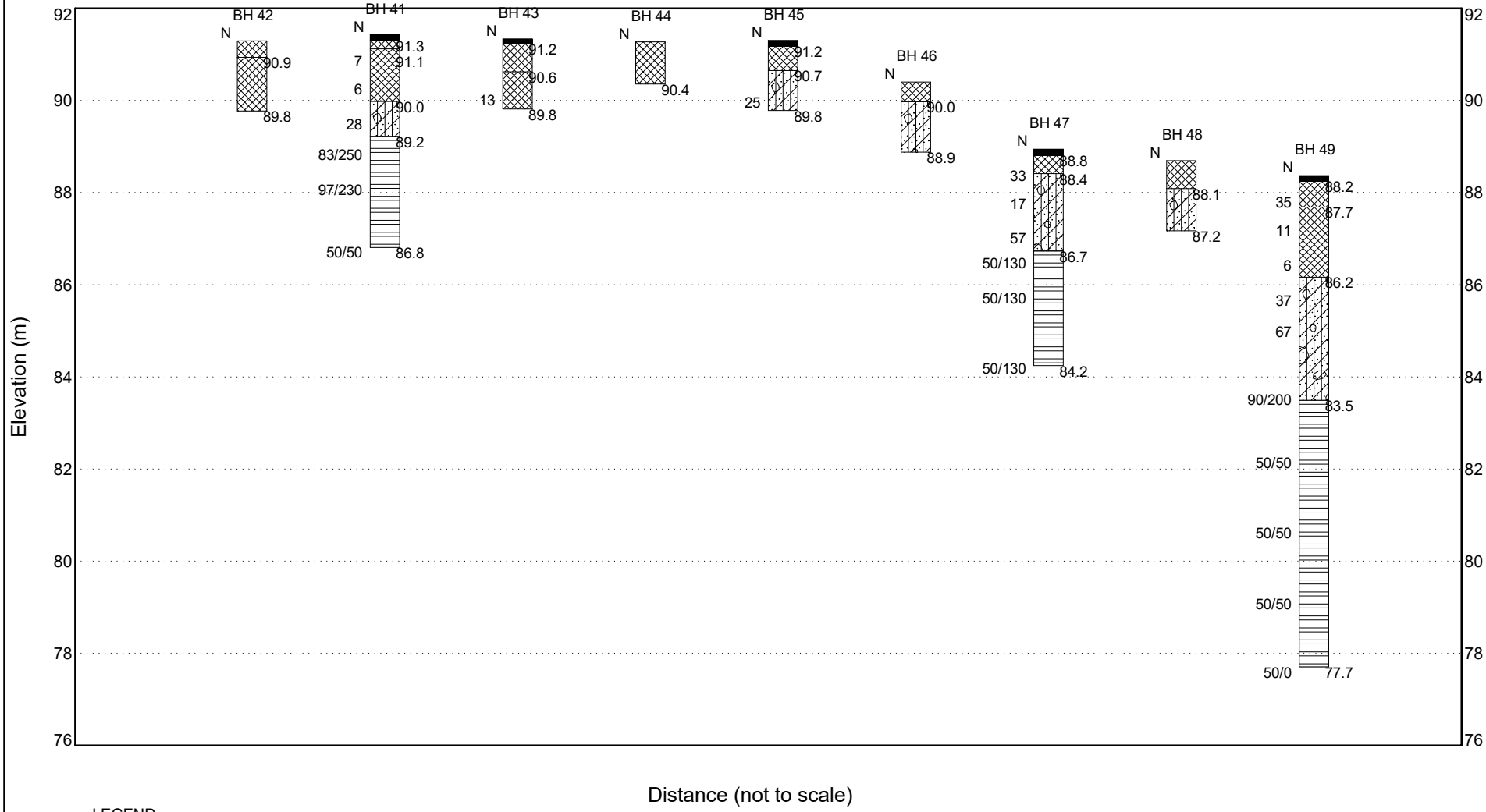
Silty Clay Till

Shale

STRATIGRAPHY ALONG BARTON STREET

Hydrogeological Assessment,
MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements
Hamilton, Ontario

JOB NO.	DATE	Figure
TPB166053	Apr 2020	2B



LEGEND

Water Level

Asphalt

Fill

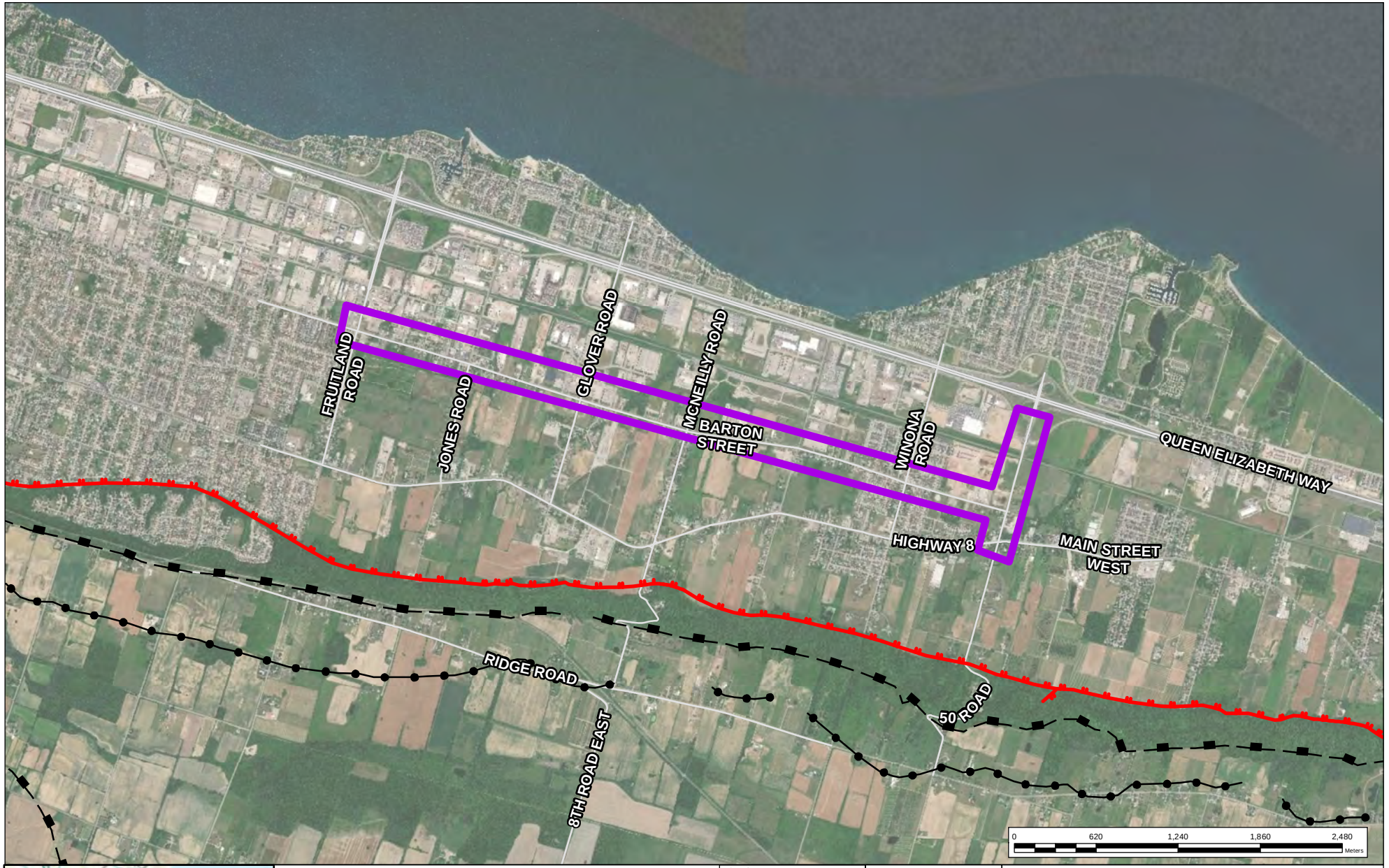
Silty Clay Till

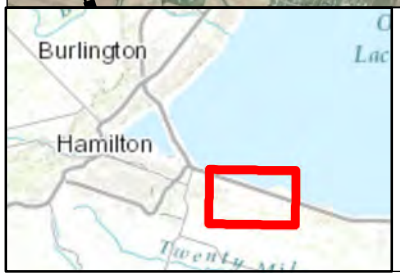
Weathered Shale

STRATIGRAPHY ALONG FIFTY ROAD

Hydrogeological Assessment,
MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements
Hamilton, Ontario

JOB NO.	DATE	Figure
TPB166053	Apr 2020	3





LEGEND

Geological Features

- Shore Bluff or Scarp
- Moraine Major
- Bedrock Escarpment
- Site Location

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:40,000	

N W E S

HYDROGEOLOGICL INVESTIGATION
Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

Niagara Escarpment

PROJECT N°: TPB166053

DATE: May, 2020

FIGURE: 4

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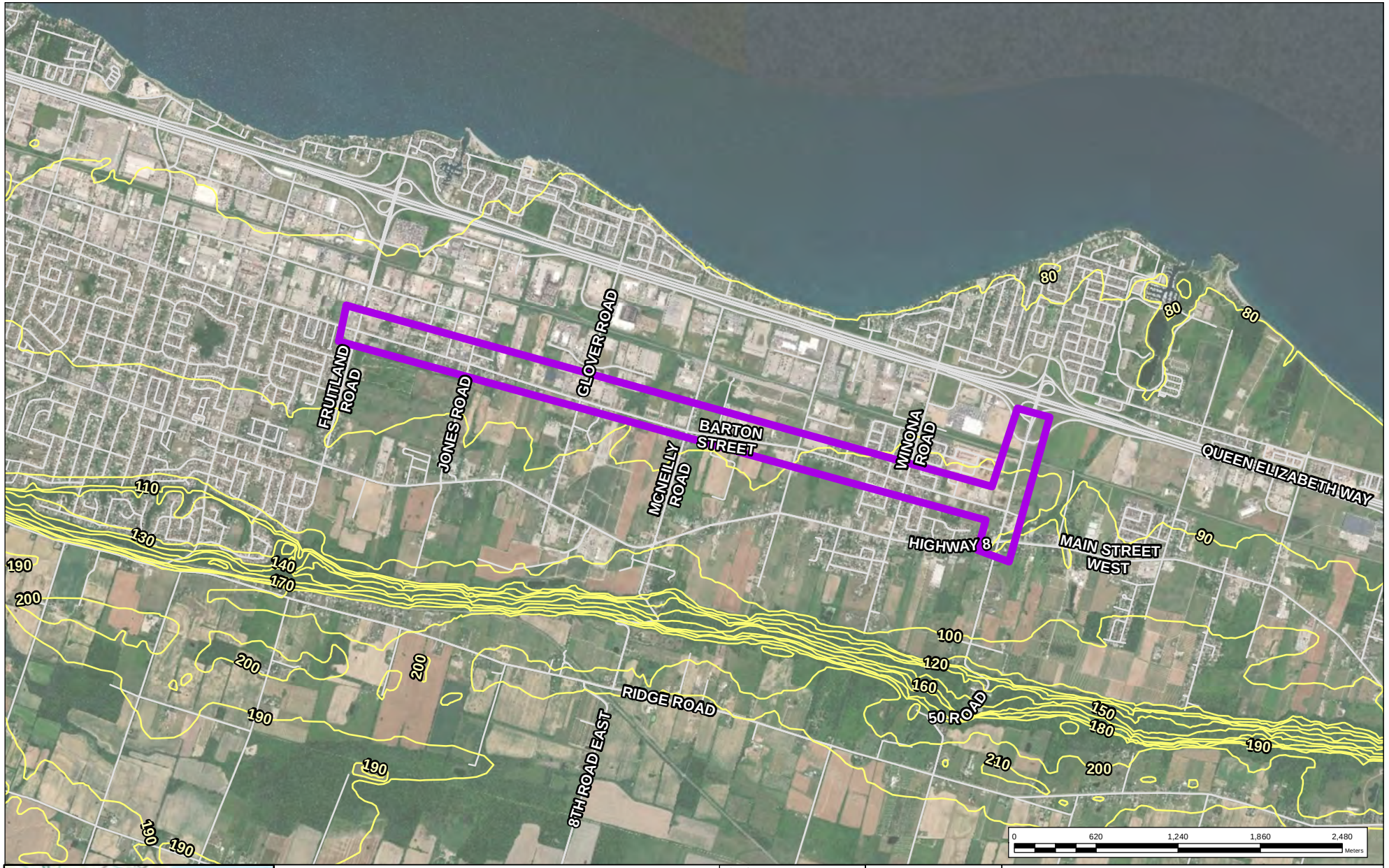

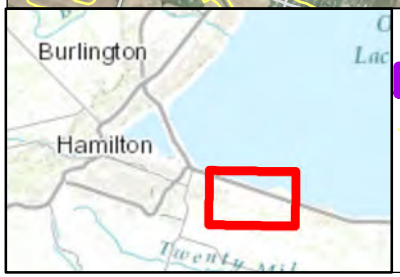

LEGEND

Site Location

Elevation Contour (masl)

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:40,000	

N W E S

HYDROGEOLOGICL INVESTIGATION
Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

Topography (m asl)

PROJECT N°: TPB166053

FIGURE: 5

DATE: May, 2020

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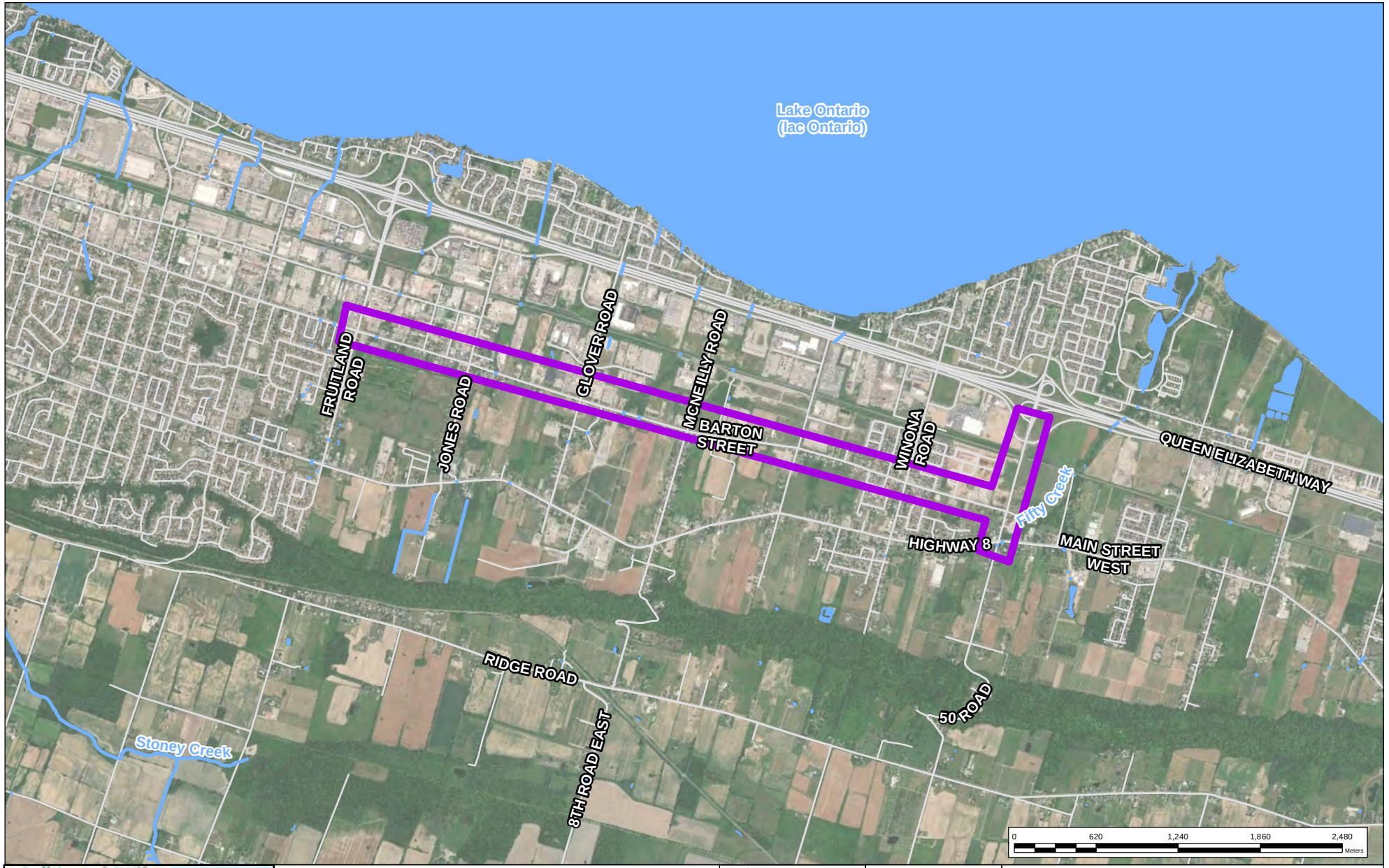

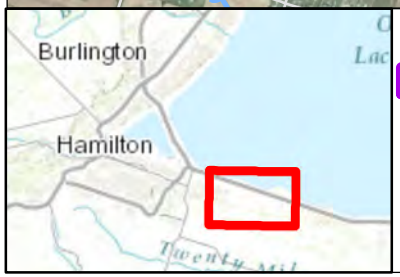

LEGEND

- Site Location
- Waterbody
- Permanent Watercourse

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:40,000	

N W E S

HYDROGEOLOGICL INVESTIGATION
Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

Surface Water Features

PROJECT N°: TPB166053
DATE: May, 2020

FIGURE: 6

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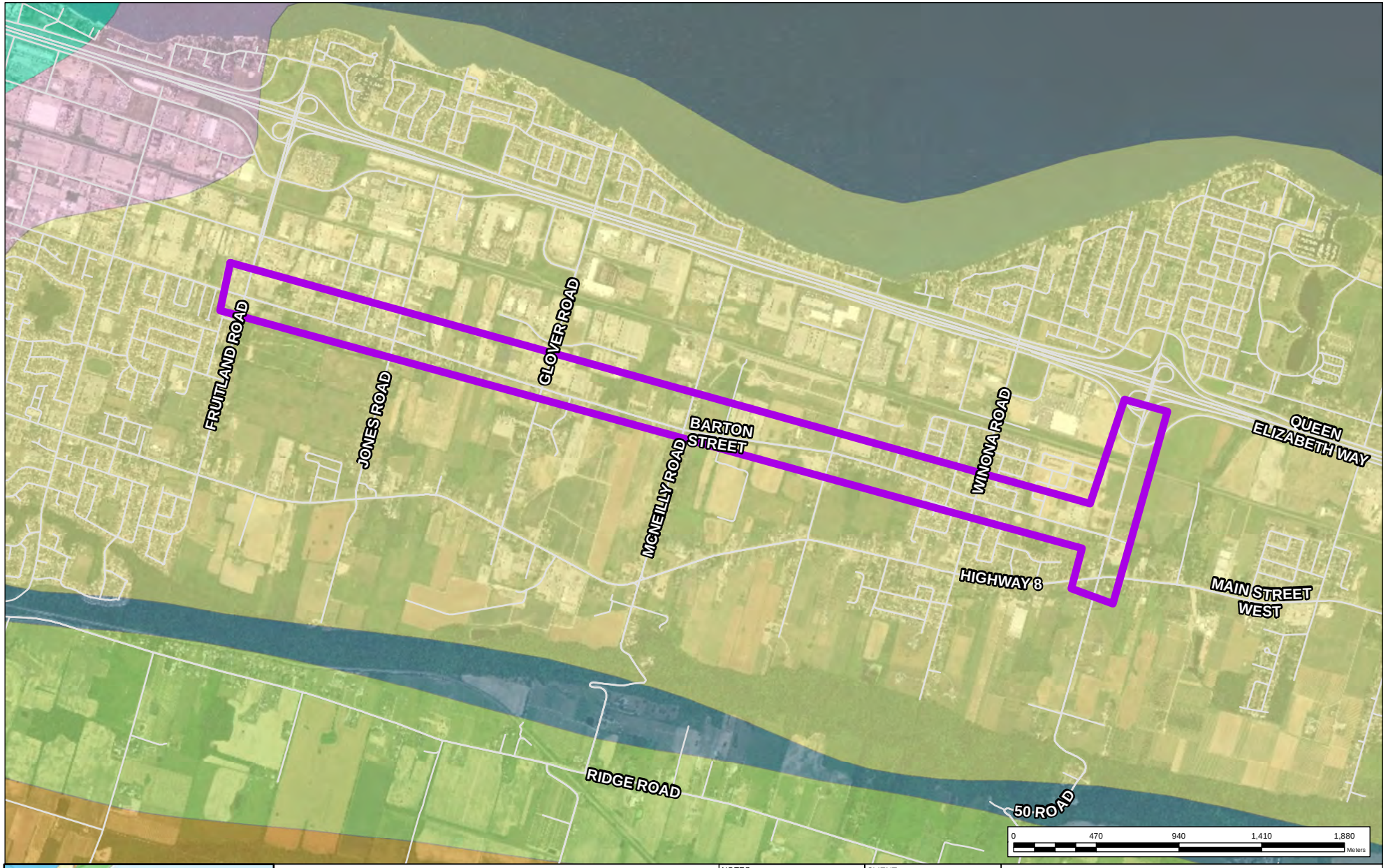

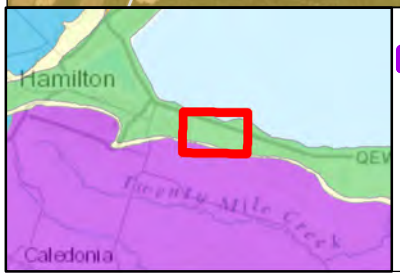

LEGEND

Site Location

Physiographic Unit and Description

- Beaches
- Clay Plains
- Escarpments
- 16: Sand Plains
- Shale Plains
- Till Moraines

Physiographic Region (shown in inset map)

- Flamborough Plain
- Haldimand Clay Plain
- Iroquois Plain
- Niagara Escarpment
- Norfolk Sand Plain
- South Slope

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:30,000	

N W E S

HYDROGEOLOGICL INVESTIGATION

Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

Physiography

PROJECT N°: TPB166053

FIGURE: 7

DATE: May, 2020

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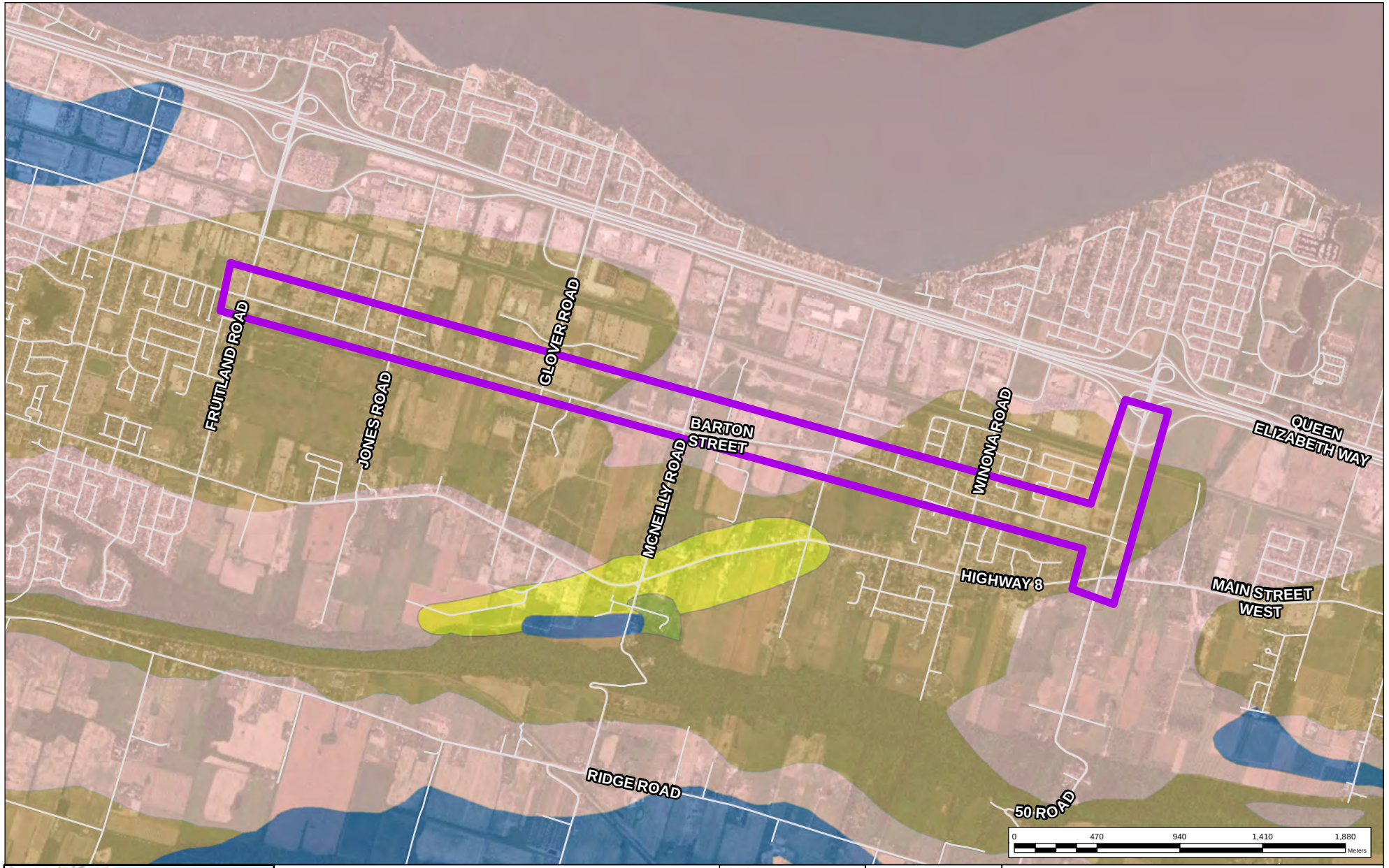

LEGEND

- Site Location

Surficial Geology: Primary Material

- 3 Paleozoic Bedrock
- 8a Fine-textured Glaciolacustrine Deposits: silt and clay, minor sand and gracel. Massive to well laminated
- 5d Till: Clay to silt-textured till (derived from glaciolacustrine deposits or shale)
- 9 Coarse-textured Glaciolacustrine Deposits
- Sand, gravel - River Deposits: Sand and gravel

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:30,000	

N W E S

HYDROGEOLOGICL INVESTIGATION
Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

Surficial Geology

PROJECT N°: TPB166053
DATE: May, 2020
FIGURE: 8

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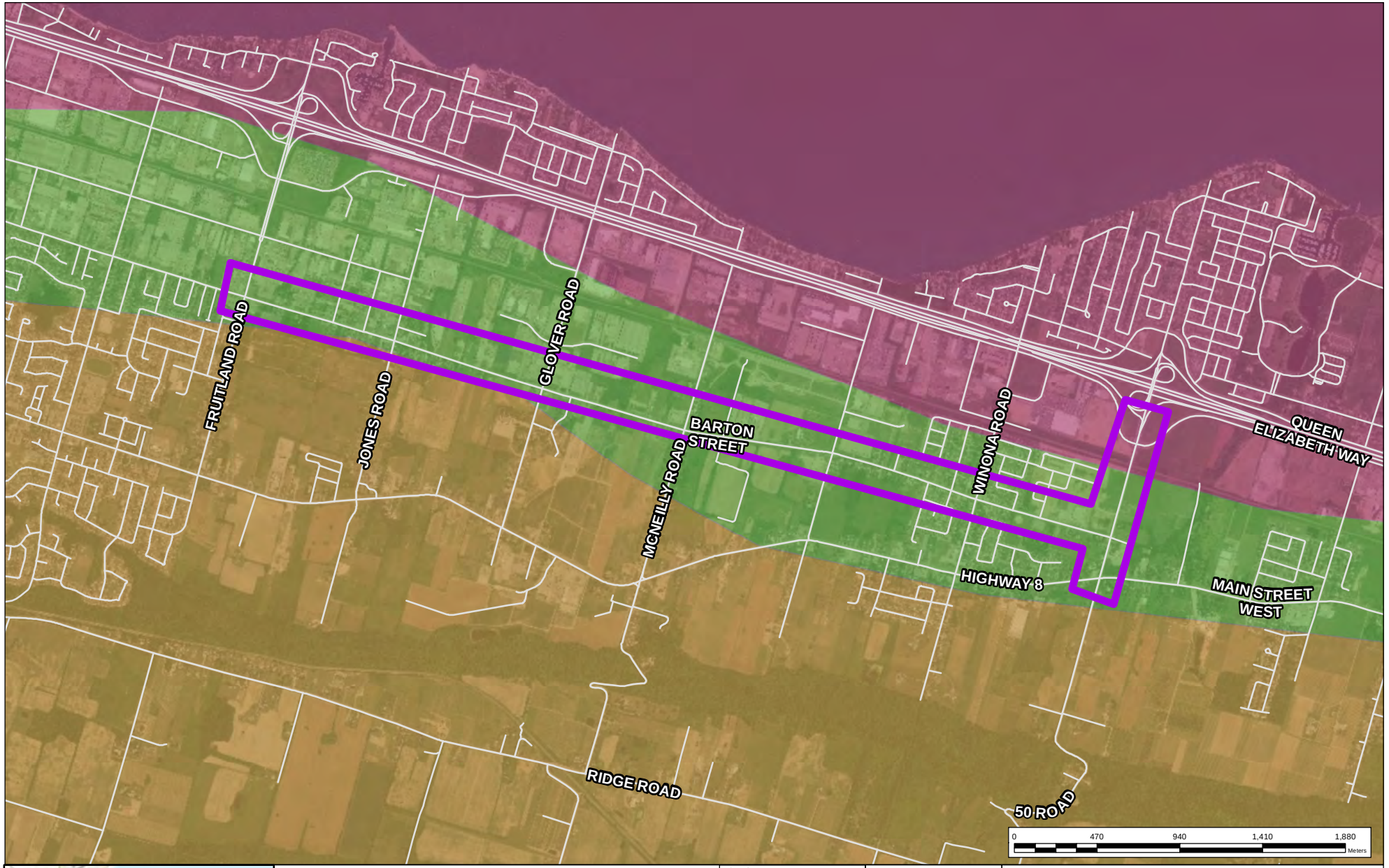

LEGEND

Site Location

Bedrock Geology

- Clinton Group; Cataract Group
- Lockport Formation
- Queenston Formation

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:30,000	

N W E S

HYDROGEOLOGICL INVESTIGATION
Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

Bedrock Geology

PROJECT N°: TPB166053

FIGURE: 9

DATE: May, 2020

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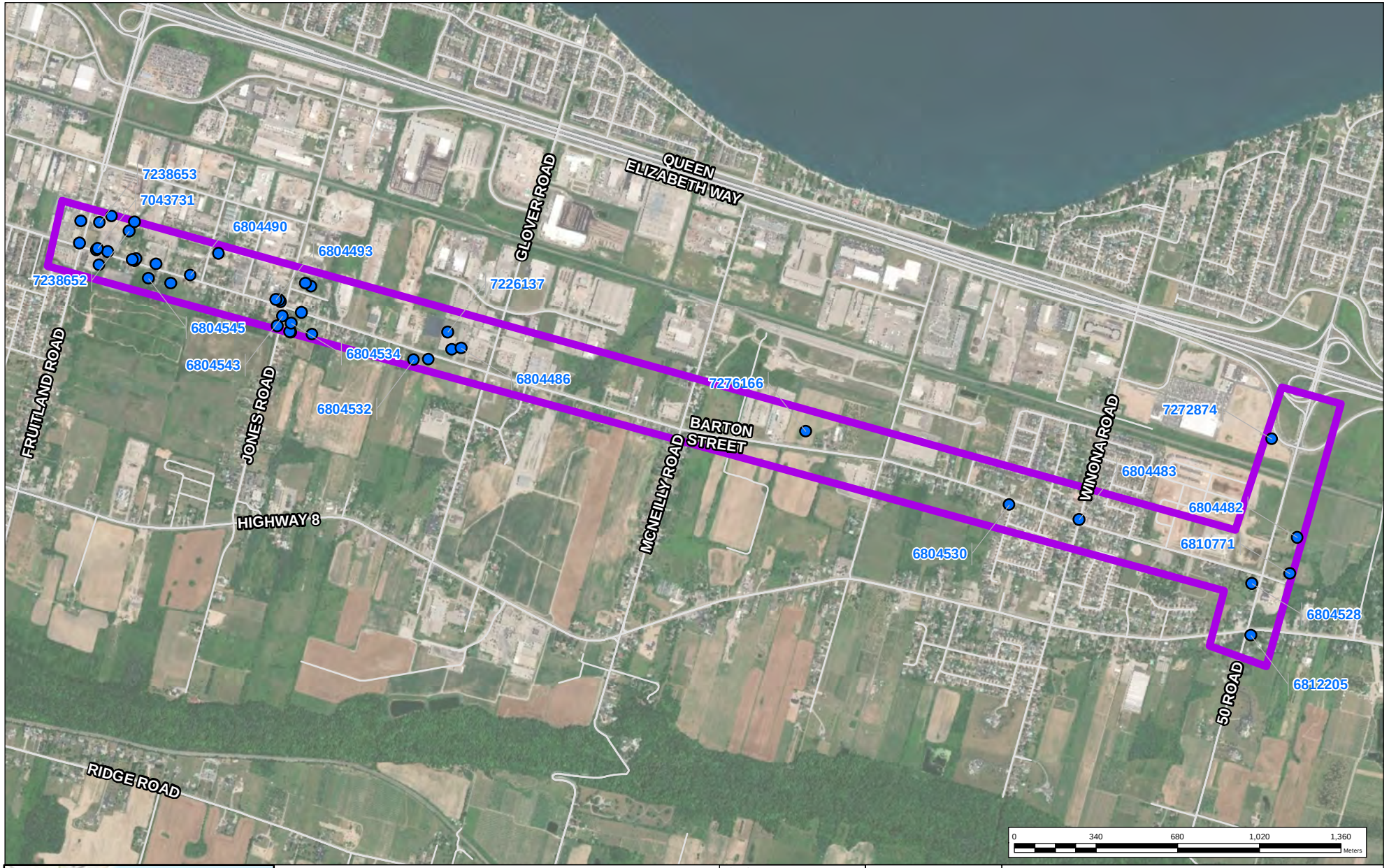

LEGEND

- Water Well Records within Site Location
- Site Location

NOTES:

LOCATION OF FEATURES ARE APPROXIMATE

This drawing should be read in conjunction with theWood Environment & Infrastructure Solutions Report No.TPB166053
Conditions encountered in the field may be different from the interpreted information presented on this figure.

SOURCE: Some data presented in this figure is from the Ontario open dataset: Hillshade (2012); ORN, 2012; Canvec10 (contours).

CLIENT:

Drawn By: LJM	Checked By: BF
Revision: A	Projection: UTM Zone 17N
SCALE: 1:22,000	

N W E S

HYDROGEOLOGICL INVESTIGATION
Phases 3 & 4 Barton Street and Fifty Road Improvements
Municipal Class Environmental Assessment, Hamilton, ON

MECP Water Well Records

PROJECT N°: TPB166053	**FIGURE: 10**
DATE: May, 2020	

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Appendix A

Wood Geotechnical Borehole Logs

RECORD OF BOREHOLE No. BH 01

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4786265 E: 605803	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 20, 2019 Date Completed: Jun 20, 2019	Revision No.:	0, 3/17/20

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 87.6 m)		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%)
	about 170 mm Asphalt	87.4							Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane*: △ Intact ▲ Remould; Nilcon Vane*: ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80		GR SA SI CL
	Sand and Gravel FILL	0.2 / 87.2										
	brown/grey Silty Clay FILL trace sand, trace gravel	0.4 / 86.4	SS	1	13	11		87		2		
			SS	2	50	11	1			9		
	red SILTY CLAY TILL trace sand very stiff	1.2 / 84.6	SS	3	58	21	2	86		9		
			SS	4	58	18		85		8		
	red WEATHERED SHALE moist	3.0 / 82.4	SS	5	100	50 / 130mm	3		50 / 130 mm	8		
	cobbles/boulders							84				
			SS	6	100	50 / 80mm	4		50 / 80 mm	8		
			SS	7	83	62		83		8		
	END OF BOREHOLE	5.2 / 82.4					5					

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Canada
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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 03

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4786207 E: 606010	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 20, 2019 Date Completed: Jun 20, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 87.6 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 230 mm Asphalt														
		87.3													
	Sand and Gravel FILL	0.2													
		87.1													
	red SILTY CLAY TILL trace sand, trace gravel stiff to very stiff	0.5	SS	1	63	29	0	87	○	18					
			SS	2	63	13	1		○	13					
			SS	3	79	30	2	86	○	11		2	3	70	25
		85.4													
	red WEATHERED SHALE moist cobbles/boulders	2.2	SS	4	100	50 / 80mm			50 ○ 80 mm	5					
			SS	5	100	50 / 130mm	3	85	50 ○ 130 mm	6					
			SS	6	100	50 / 80mm	4	84	50 ○ 80 mm	5					
		82.9	SS	7	100	50 / 80mm		83	50 ○ 80 mm	4					
	END OF BOREHOLE	4.6													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 05

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4786121 E: 606286	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.4 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 210 mm Asphalt	88.2													
	Sand and Gravel FILL	0.2						88							
			AS	1		NA				7		28	44		(28)
			SS	2	100	11	1			4					
		86.9						87							
	END OF BOREHOLE	1.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Borehole Log'.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 06

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4786118 E: 606287	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.1 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Sand and Gravel FILL	87.6						88				
	red/grey **Silty Clay FILL**	0.5 87.0					1	87				
	red **SILTY CLAY TILL**	1.1 86.6	AS	1		NA				○ 28		
	END OF BOREHOLE	1.5										

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Canada
Tel. No.: (905) 415-2632
www.woodplc.com

▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 07

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4786072 E: 606452	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 87.0 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 130 mm Asphalt	86.9										
	Sand and Gravel FILL	0.1	AS	1		NA						
			SS	2	100	61	1	86	○	○ 11		
		85.5										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 08

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4786071 E: 606451	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 87.2 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	Sand and Gravel FILL	86.9						87				
	grey **Silty Clay FILL**	0.3 86.6					1					
	red **SILTY CLAY TILL**	0.6 85.7						86				
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 09

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785981 E:606725	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

Geodetic Ground Surface Elevation: 87.3 m

Lithology Plot	DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (SPT / PPT / DCPT), MTO Vane* (Intact / Remould), Nilcon Vane* (Intact / Remould), * Undrained Shear Strength (kPa)	LAB TESTING: Soil Vapour Reading COV (LEL) / TOV (LEL), COV (ppm) / TOV (ppm), W_P / W / W_L, Plastic / Liquid	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 95 mm Asphalt	87.2										
	Sand and Gravel FILL	0.1										
		86.8	SS	1	75	16		87		14		
	brown Silty Sand / Sand FILL trace clay, trace gravel moist	0.4										
		86.4	SS	2	83	9	1			19		
	red SILTY CLAY TILL trace sand stiff to hard	0.9						86				
			SS	3	58	53				10		
			SS	4	67	34	2	85		10		
		84.3										
	red WEATHERED SHALE moist	3.0	SS	5	91	50 / 140mm	3		50 / 140 mm	7		
	cobbles/boulders							84				
			SS	6	96	50 / 140mm	4		50 / 140 mm	9		
								83				
		82.7	SS	7	100	50 / 50mm			50 / 50 mm			
	END OF BOREHOLE	4.6										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 10

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785976 E:606721	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 87.2 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Sand and Gravel FILL		AS	1		NA		87		○ 6		44 38 (18)
		86.7										
	grey/red **Silty Clay FILL**	0.5										
		86.2					1					
	red/grey **SILTY CLAY TILL**	1.0	AS	2		NA		86		○ 17		
		85.8										
	red **WEATHERED SHALE**	1.4 85.7										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 11

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785897 E: 606967	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	Sand and Gravel FILL	88.4													
	brown **Silty Clay FILL**	0.2 87.9	SS	1	58	16		88	○	10					
	red/brown **SILTY CLAY TILL** trace sand stiff to hard	0.8	SS	2	67	12	1		○	17					
			SS	3	71	14		87	○	15					
			SS	4	83	28	2		○	● 13		<1	7	74	19
	cobbles/boulders		SS	5	74	76 / 280mm	3	86	76 ○ 280 mm	○ 11					
	red **WEATHERED SHALE** moist	84.9 3.7	SS	6	50	50 / 50mm		85	50 ○ 50 mm						
	cobbles/boulders						4								
	END OF BOREHOLE	84.0 4.6	SS	7	0	50 / 50mm			50 ○ 50 mm						

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 12

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785900 E: 606968	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 240 mm Asphalt	88.4													
	Sand and Gravel FILL	0.2 88.2													
	END OF BOREHOLE Borehole terminated due to presence of Sanitary sewer	0.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 13

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785851 E: 607126	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 89.6 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	about 270 mm Asphalt	89.3										
	Sand and Gravel FILL	0.3 89.1										
	grey Silty Clay FILL	0.5 88.7						89				
	red SILTY CLAY TILL trace sand stiff	0.9 88.0	SS	1	100	14	1		○	○ 17		
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying'Explanation of Borehole Log'.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 15

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785761 E: 607431	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 90.0 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 250 mm Asphalt	89.7													
	Sand and Gravel FILL	0.2 89.5	AS	1		NA						44	46		(10)
	red SILTY CLAY TILL trace sand stiff	0.5													
			SS	2	100	9	1	89	○	○ 13					
		88.5													
	END OF BOREHOLE	1.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 16

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785756 E: 607432	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 90.0 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	Sand and Gravel FILL										
		AS	1		NA	1	89		3		
	88.5										
	END OF BOREHOLE 1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 17

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785700 E: 607650	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 88.8 m)		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (SPT / PPT / DCPT); MTO Vane* (Intact / Remould); Nilcon Vane* (Intact / Remould); * Undrained Shear Strength (kPa)	LAB TESTING: Soil Vapour Reading (COV (LEL) / TOV (LEL)); (COV (ppm) / TOV (ppm)); W_P / W / W_L; Plastic / Liquid	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 200 mm Asphalt	88.6										
	Sand and Gravel FILL	0.2										
		88.3	SS	1	54	26				12		
	grey/brown/red Sand FILL trace to some silt, trace gravel, trace clay moist	0.5										
		87.9						88				
	grey/red SILTY CLAY TILL trace sand stiff to hard	0.9	SS	2	83	12	1			14		
			SS	3	88	27	2	87		13		
	cobbles/boulders		SS	4	100	50 / 80mm			50 / 80 mm	8		
		86.0						86				
	red WEATHERED SHALE moist	2.8					3					
			SS	5	100	50 / 130mm			50 / 130 mm	9		
	cobbles/boulders											
			SS	6	100	50 / 80mm	4	85	50 / 80 mm			
		84.2	SS	7	0	50 / 50mm			50 / 50 mm			
	END OF BOREHOLE	4.6										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 18

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785692 E: 607646	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 21, 2019 Date Completed: Jun 21, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	grey **Sand and Gravel FILL**	88.1													
	grey **Silty Clay FILL** trace sand	0.5					1	88							
		87.2													
	END OF BOREHOLE	1.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying'Explanation of Borehole Log'.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 19

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785614 E: 607925	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 89.4 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 195 mm Asphalt	89.2													
	Sand and Gravel FILL	0.2	SS	1	42	24		89	○	1					
	brown Silty Sand FILL moist	0.6	SS	2	83	7	1		○	16					
		88.2						88							
	grey/brown SILTY CLAY TILL trace to some sand, trace gravel stiff to very stiff	1.2	SS	3	92	23	2		○	13					
			SS	4	100	25		87	○	13		3	19	48	30
			SS	5	100	18	3	86	○	13					
			SS	6	96	15	4	85	○	12					
			SS	7	96	24	5		○	11					
		84.2													
	END OF BOREHOLE	5.2													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 20

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785610 E: 607924	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 89.3 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	Sand and Gravel FILL	89.0													
	brown **Silty Clay FILL** with cobbles	0.3	AS	1		NA		89		○ 3		34	48		(18)
		88.3					1								
	light brown **Silty Sand FILL** trace clay moist	1.0	AS	2		NA		88		○ 16					
		87.8													
	END OF BOREHOLE	1.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 21

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785557 E: 608166	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 89.1 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 220 mm Asphalt	88.9						89				
	Sand and Gravel FILL -------- asphalt pieces	0.2 88.6										
	brown/grey Silty Clay FILL some sand, trace gravel	0.5					1					
			SS	1	100	16		88	○	○ 13		
		87.6										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying'Explanation of Borehole Log'.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 22

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785554 E: 608166	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 89.0 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Sand and Gravel FILL	88.7	AS	1		NA				○2		
	brown **Silty Clay FILL** some sand, trace gravel	0.4										
			AS	2		NA	1	88		○17		
		87.5										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 23

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785534 E: 608328	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 220 mm Asphalt	88.5										
	Sand and Gravel FILL	0.2	AS	1		NA				2		
		88.1						88				
	brown SILTY CLAY TILL trace sand stiff	0.6					1					
			SS	2	100	9			○	15		
		87.2										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 24

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785530 E: 608327	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.6 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	Sand and Gravel FILL 88.3										
	grey/brown 0.3 **SILTY CLAY TILL** trace sand, trace gravel						88				
		AS	1		NA	1			○ 19		
	87.1										
	END OF BOREHOLE 1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 25

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785494 E: 608581	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 87.9 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 160 mm Asphalt	87.8										
	Sand and Gravel FILL	0.2										
		87.4	SS	1	67	20			○	○ 14		
	grey SILTY CLAY TILL trace sand, trace gravel stiff to hard	0.5	SS	2	83	13	1	87	○	○ 14		
			SS	3	100	23	2	86	○	○ 14		
			SS	4	100	34			○	○ 12		
			SS	5	100	24	3	85	○	○ 12		
			SS	6	92	22	4	84	○	○ 12		
			SS	7	100	20	5	83	○	○ 11		
		82.8										
	END OF BOREHOLE	5.2										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 26

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785492 E: 608580	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 24, 2019 Date Completed: Jun 24, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 87.8 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Sand and Gravel FILL	87.6	AS	1		NA				○3		41 47 (12)
	grey **Silty Clay FILL** trace sand, trace gravel	0.2 86.8					1	87				
	brown **SILTY CLAY TILL** trace sand, trace gravel	1.0 86.3	AS	2		NA				○18		
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 27

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785430 E: 608982	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019 Date Completed: Jun 19, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.4 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 350 mm Asphalt	88.0													
	Sand and Gravel FILL	88.0													
	brown Silt FILL some sand, trace clay, trace gravel	0.4	SS	1	29	16		88	○	13					
			SS	2	63	10	1		○	16					
		86.9						87							
	grey Silty Clay FILL trace sand, trace gravel	1.4	SS	3	17	24	2		○	15					
		86.2													
	brown SILTY CLAY TILL trace to some sand, trace gravel stiff to very stiff	2.2	SS	4	75	26		86	○	14					
			SS	5	100	27	3	85	○	14		6	19	49	26
			SS	6	83	17	4	84	○	12					
			SS	7	71	13	5		○	12					
		83.2													
	END OF BOREHOLE	5.2													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 29

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785384 E: 609138	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019	Date Completed: Jun 19, 2019	Revision No.: 0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 90.3 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 290 mm Asphalt	90.1										
	Sand and Gravel FILL	0.3	AS	1		NA		90		○3		
		89.7										
	brown/red SILTY CLAY TILL very stiff	0.6										
			SS	2	100	19	1	89	○	○12		
		88.8										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 31

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785327 E: 609317	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019	Date Completed: Jun 19, 2019	Revision No.: 0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 91.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 290 mm Asphalt	91.4										
	Sand and Gravel FILL	0.3										
		91.1										
	red SILTY CLAY TILL trace sand, trace gravel stiff	0.6						91				
			SS	1	100	13	1		○	○ 13		
		90.2										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 32

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785328 E: 609320	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019	Date Completed: Jun 19, 2019	Revision No.: 0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 91.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	Sand and Gravel FILL	91.2	AS	1		NA				○4		31	49		(20)
	brown/red **SILTY CLAY TILL** trace sand stiff	0.5						91							
			SS	2	100	13	1		○	○14					
	END OF BOREHOLE	90.2 1.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 33

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785249 E: 609527	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019 Date Completed: Jun 19, 2019	Revision No.:	0, 3/17/20

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 92.0 m)		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%)
	about 195 mm Asphalt	91.8										
	Sand and Gravel FILL	0.2	SS	1	50	15			50 mm			
	grey	91.4										
	Silty Clay FILL trace sand	90.6 0.7										
	red/grey SILTY CLAY TILL trace sand very stiff to hard		SS	2	50	24	1	91		25 16		
	cobbles/boulders		SS	3	100	50 / 130mm			50 / 130 mm	9		
							2	90				
		89.5	SS	4	100	50 / 130mm			50 / 130 mm	6		
	red WEATHERED SHALE moist	2.4										
	cobbles/boulders						3	89				
			SS	5	100	50 / 100mm			50 / 100 mm	5		
		87.3	SS	6	100	50 / 80mm	4	88	50 / 80 mm	6		
	END OF BOREHOLE	4.6										

FIELD TESTING: Penetration Testing — ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS & GRAIN SIZE DISTRIBUTION (%) — GR SA SI CL

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 34

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785244 E: 609526	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019 Date Completed: Jun 19, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 92.0 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Sand and Gravel FILL											
			AS	1		NA				○4		
		91.2										
	red **SILTY CLAY TILL** very stiff	0.7										
			SS	2	100	26	1	91	○	○9		
		90.5										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 35

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785166 E: 609796	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019 Date Completed: Jun 19, 2019	Revision No.:	0, 3/17/20

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 92.1 m)		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR	SA	SI	CL
	about 135 mm Asphalt	91.9													
	Sand and Gravel FILL	0.2	SS	1	58	15		92		21					
		91.4													
	red/grey SILTY CLAY TILL trace sand, some gravel very stiff to hard	0.7	SS	2	79	19	1	91		10		18	6	56	20
	cobbles/boulders		SS	3	81	89 / 250mm			89 250 mm	8					
		89.6	SS	4	100	50 / 130mm	2	90	50 130 mm	5					
	red WEATHERED SHALE moist	2.4													
	cobbles/boulders		SS	5	100	50 / 80mm	3	89	50 80 mm	6					
		87.4	SS	6	0	50 / 50mm	4	88	50 50 mm						
	END OF BOREHOLE	4.6													

FIELD TESTING: Penetration Testing — ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Borehole Log'.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 37

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785101 E: 610013	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019 Date Completed: Jun 19, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 92.2 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 470 mm Asphalt	91.7						92				
	Sand and Gravel FILL	90.6	AS	1		NA				4		
	red SILTY CLAY TILL	0.5										
			SS	2	100	18	1	91		13		
		90.7										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 40

wood.

Project Number:	TPB166053	Drilling Location:	Barton Street, N: 4785040 E: 610232	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 19, 2019 Date Completed: Jun 19, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 92.3 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 150 mm Asphalt	92.2										
	Sand and Gravel FILL	0.2	AS	1		NA		92		○ 9		40 39 (21)
		91.6										
	red Silty Clay FILL trace sand	0.7	SS	2	100	9	1	91	○	○ 17		
	END OF BOREHOLE	90.8 1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

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Scale: 1 : 37

RECORD OF BOREHOLE No. BH 41

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4784889 E: 610450	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 91.4 m)		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%)
	about 125 mm Asphalt	91.3							Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80		GR SA SI CL
	Sand and Gravel FILL	0.1										
		91.1										
	grey/brown Silty Clay FILL trace to some sand, trace gravel	0.3	SS	1	42	7		91	○	29		
			SS	2	58	6	1		○	40		
		90.0						90				
	red/grey SILTY CLAY TILL trace sand, trace gravel very stiff	1.4	SS	3	71	28	2		○	9		
		89.2										
	red/grey WEATHERED SHALE moist	2.2	SS	4	75	83 / 250mm		89	83 250 mm	7		
	cobbles/boulders						3					
			SS	5	80	97 / 230mm			97	230mm		
							4	88				
		86.8						87				
			SS	6	0	50 / 50mm			50 50 mm			
	END OF BOREHOLE	4.6										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 42

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4784890 E: 610446	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 91.3 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	grey **Sand and Gravel FILL** moist 90.9						91				
	brown 0.4 **Silty Clay FILL** some sand and gravel	AS	1		NA	1			○ 26		
	89.8						90				
	END OF BOREHOLE 1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Borehole Log'.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 43

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785071 E: 610501	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 91.3 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	about 110 mm Asphalt	91.2													
	grey **Sand and Gravel FILL** moist	0.1	AS	1		NA		91		3		40	52	(8)	
		90.6													
	brown/red **Silty Clay FILL** trace sand	0.7	SS	2	100	13	1	90	○	10					
		89.8													
	END OF BOREHOLE	1.5													

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 44

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785071 E: 610503	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 91.3 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	grey **Sand and Gravel FILL** --- some clay, trace cobbles						91				
	90.4 **END OF BOREHOLE** 0.9										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 45

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785190 E: 610532	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 91.3 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 130 mm Asphalt	91.2										
	grey Sand and Gravel FILL moist	0.1	AS	1		NA		91		○ 5		
		90.7										
	red SILTY CLAY TILL very stiff	0.7					1					
			SS	2	100	25		90	○	○ 11		
		89.8										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 46

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785192 E: 610531	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 90.4 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR SA SI CL
	grey **Sand and Gravel FILL** 90.0											
	red 0.4 **SILTY CLAY TILL**						1	90 89				
	88.9 **END OF BOREHOLE** 1.5											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 47

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785306 E: 610568	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

Geodetic Ground Surface Elevation: 88.9 m

Lithology Plot	DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (SPT / PPT / DCPT), MTO Vane* (Intact / Remould), Nilcon Vane* (Intact / Remould), * Undrained Shear Strength (kPa)	LAB TESTING: Soil Vapour Reading (COV (LEL) / TOV (LEL)), COV (ppm) / TOV (ppm), W_P / W / W_L, Plastic / Liquid	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	about 135 mm Asphalt	88.8										
	grey	0.1										
	Sand and Gravel FILL moist		SS	1	71	33				18		
		88.4						88				
	red/grey	0.5					1					
	SILTY CLAY TILL trace sand very stiff to hard		SS	2	67	17				14		
			SS	3	78	57		87		8		
		86.7					2					
	grey/red	2.2										
	WEATHERED SHALE moist		SS	4	80	50 / 130mm			50 / 130 mm	6		
	cobbles/boulders											
			SS	5	100	50 / 130mm	3	86	50 / 130 mm	6		
							4	85				
		84.2	SS	6	100	50 / 130mm			50 / 130 mm	6		
	END OF BOREHOLE	4.7										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH 48

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785306 E: 610570	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING			
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 88.7 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	PenetrationTesting ○ SPT □ PPT ● DCPT MTO Vane* △ Intact ▲ Remould Nilcon Vane* ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8 △ COV (ppm) □ TOV (ppm) 100 200 300 400 W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	grey **Sand and Gravel FILL**											
		88.1	AS	1		NA				○7		41 48 (11)
	red **SILTY CLAY TILL** trace sand, trace gravel	0.6						88				
			AS	2		NA	1			○23		
		87.2										
	END OF BOREHOLE	1.5										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 37

RECORD OF BOREHOLE No. BH 49

wood.

Project Number:	TPB166053	Drilling Location:	Fifty Road, N: 4785400 E: 610588	Logged by:	TH
Project Client:	City of Hamilton	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TH/PR
Project Name:	Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements	Drilling Machine:	Truck Mounted Drill	Reviewed by:	HS/SM
Project Location:	Stoney Creek and Winona, Hamilton	Date Started:	Jun 18, 2019 Date Completed: Jun 18, 2019	Revision No.:	0, 3/17/20

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 88.4 m)		Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR	SA	SI	CL
	about 125 mm Asphalt	88.2													
	Sand and Gravel FILL	0.1	SS	1	75	35		88		3					
		87.7													
	brown/grey Silty Clay FILL trace to some sand, trace gravel, trace organics	0.7	SS	2	33	11	1	87		11					
			SS	3	42	6	2			24					
		86.2						86							
	red/brown SILTY CLAY TILL trace sand hard	2.2	SS	4	67	37				12					
			SS	5	67	67	3	85		12		<1	1	77	22
							4	84							
	cobbles/boulders	83.5	SS	6	71	90 / 200mm				90 200 mm					
	red/grey WEATHERED SHALE moist cobbles/boulders	4.9					5	83							
			SS	7	100	50 / 50mm	6	82		50 50 mm					
							7								

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

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Continued on Next Page

RECORD OF BOREHOLE No. BH 49

Project Number: TPB166053

Project Name: Geotechnical Investigation, MCEA Phases 3 & 4 Barton Street and Fifty Road Improvements

Project Location: Stoney Creek and Winona, Hamilton

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' / RQD (%)	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT □ PPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Soil Vapour Reading: ▲ COV (LEL) ■ TOV (LEL) 2 4 6 8; △ COV (ppm) □ TOV (ppm) 100 200 300 400; W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	GR	SA	SI	CL
	red/grey **WEATHERED SHALE** moist						81							
	cobbles/boulders	SS	8	100	50 / 50mm			50 / 50 mm						
						8	80							
						9								
		SS	9	100	50 / 50mm		79	50 / 50 mm						
						10								
							78							
	77.7	SS	10		50 / 0mm			50 / 0 mm						
	END OF BOREHOLE 10.7 Borehole terminated due to auger refusal on Inferred bedrock													

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Borehole Log'.

Scale: 1 : 37

Appendix B

MECP Water Well Records

UTM Z E
9 R N
Elev. 9 R
Basin 2 4

ONTARIO

68 No 4483

RECEIVED
FEB 28 1951
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

County or Territorial District... Wentworth ... Township, ~~Village, Town or City~~ Saltfleet
Con. I ... Lot 3 ... Street and Number (if in Village, Town or City) ... Winona
Owner ... Canadian Legion ... Address ... Station Rd ... Winona
Date Completed ... 24 (day) ... 7 (month) ... 50 (year) ... Cost of Well (excluding pump) ... 100.00

Pipe and Casing Record

Casing diameter(s) ... 6" 4
Length(s) of casing(s) ... 18 ft.
Type of screen ... none
Length of screen ...
Distance from top of screen to ground level ...
Is well a gravel-wall type? ... no

Pumping Test

Date ... July 24-50
Static level ... 7 ft.
Pumping level ... 25 ft.
Pumping rate ... 3 gal. per
Duration of test ... 1 hour
Distance from cylinder or bowls to ground level ...

Water Record

Kind (fresh or mineral) ... fresh
Quality (hard, soft, contains iron, sulphur, etc.) ... hard
Appearance (clear, cloudy, coloured) ... clear
For what purpose(s) is the water to be used? ... Toilet & Drinking
How far is well from possible source of contamination? ... 35 ft.
What is the source of contamination? ... Septic tank
Enclose a copy of any mineral analysis that has been made of water

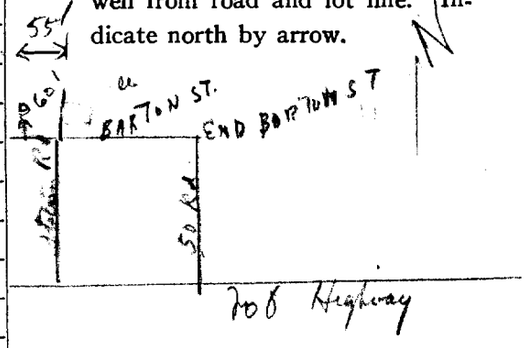
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
32 ft.	Good.	25 ft.

Well Log

Overburden and Bedrock Record	From	To
Red clay	0 ft.	15 ft.
Red shale	15.	32 ft.

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? ... upland
Drilling Firm ... S. Gull
Address ...
Name of Driller ... Address ... 55 Ave
Date ... Licence Number ... no 3
S. Gull
Signature of Licensee

FORM 5

CSS.S8

UTM Z ____ E
9 R ____ N
Elev. 9 R ____
Basin 2 4 ____

38

3

ONTARIO

68 No. 4484

RECEIVED
NO. 23
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

County or Territorial District. Wentworth ..... Township, ~~Village, Town or City~~. Saltfleet .....
Con. I ..... Lot 5 ..... Street and Number (if in Village, Town or City) .....
Owner Dept of Highways, Winona ..... Address Toronto. ont .....
Date Completed 7 April 1951 ..... Cost of Well (excluding pump) .....
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) ... 6 1/4" .....
Length(s) of casing(s) ... 52' .....
Type of screen .....
Length of screen .....
Distance from top of screen to ground level .....
Is well a gravel-wall type? No. .....

Pumping Test

Date ... 7 April 1951 .....
Static level ... 19 FT .....
Pumping level ... 65' .....
Pumping rate ... 100 GALS PER DAY .....
Duration of test ... 2 HRS .....
Distance from cylinder or bowls to ground level ... 60' .....

Water Record

Kind (fresh or mineral) ... FRESH.
Quality (hard, soft, contains iron, sulphur, etc.) .....
Appearance (clear, cloudy, coloured) ... CLEAR.
For what purpose(s) is the water to be used? ... DRINKING.
.....
How far is well from possible source of contamination? ... NONE.
What is the source of contamination? .....
Enclose a copy of any mineral analysis that has been made of water .....

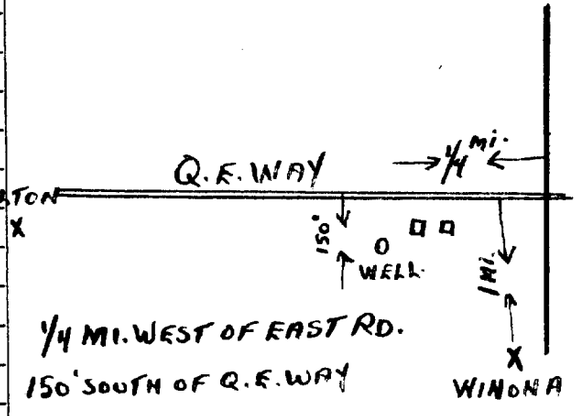
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
68'	FRESH.	49'

Well Log

Overburden and Bedrock Record	From	To
	0 ft.	....ft.
Hard clay	0	20
BLUE CLAY	20	42
HARD PAN	42	52
ROCK (RED MEDINA)	52	
" " "	52	68
" " " WATER	68	
" " "	68	70
		HAMILTON

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? UPLAND.
Drilling Firm. W. A. Lounsbury & Sons .....
Address ... 32 Bernard Ave, St Catharines. ont .....
Name of Driller W. A. & G. K. Lounsbury ..... Address .....
Date ... 30 APRIL 1951 ..... Licence Number .....
G. K. Lounsbury
Signature of Licensee

FORM 5

CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 2 4

ONTARIO

RECEIVED
DEC 10 1952
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

68 No 4485

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

Kentworth [redacted] Village, Town or City. Saltfleet
[redacted] wn or City) ...
[redacted] Toronto
Date Completed 15 (day) June (month) 1952 (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 8"
Length(s) of casing(s) 2 lengths 41
Type of screen No Screen
Length of screen
Distance from top of screen to ground level ~
Is well a gravel-wall type? ~

Pumping Test

Date
Static level 10 ft.
Pumping level Pumps out with baler
Pumping rate comes in at 60 G.P.H.
Duration of test
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) Mineral
Quality (hard, soft, contains iron, sulphur, etc.) hard, iron, Salt
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? Service Station
How far is well from possible source of contamination? 50'
What is the source of contamination? Septic tank
Enclose a copy of any mineral analysis that has been made of water. ~

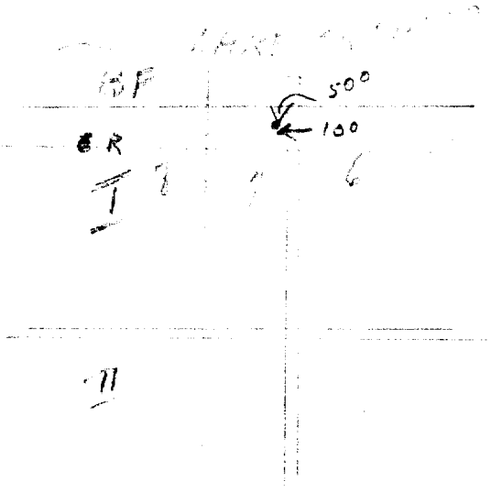
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
52'	Salt	42'

Well Log

Overburden and Bedrock Record	From	To
Sandy Top soil	0 ft.	3 ft.
Hard clay	3	27
Red Hardpan	27	41
Red Medium Shale	41	123

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Upland
Drilling Firm W. A. Lowmabury & Sons
Address 32 Bergman Ave St. Catharines
Name of Driller Wm. Lowmabury Address 35 Spruce St
Date Dec 6/52 Licence Number
Wm. Lowmabury
Signature of Licensee

FORM 5

CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 2 4

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

RECEIVED
JAN 17 1955
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No. 4486

Water-Well Record

County or Territorial District. Wentworth Township, ~~Village, Town or City~~ Saltfleet

Village, Town or City) R.R.#1 Dundas

Address 1233 Beach Blvd

(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6 in
Length(s) 11 ft
Type of screen
Length of screen

Pumping Test

Static level 3 ft
Pumping rate 4 min
Pumping level 12 ft
Duration of test ½ hour

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Top soil	0	2	25	24	Fresh
Brown clay	2	4			
Red shale	4	30			

For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside? upland

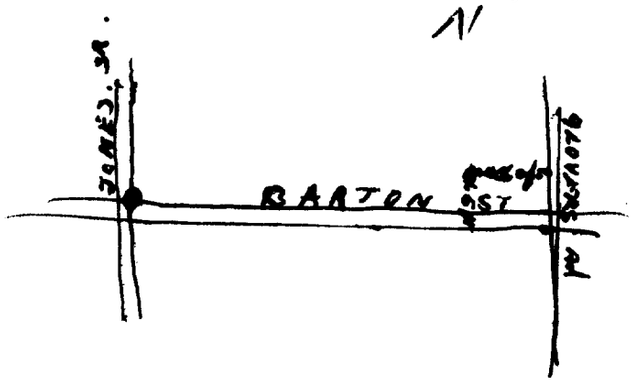
Drilling firm S Gill
Address 55 Alpine ave Hamilton
Name of Driller L Chinn
Address 72 East 18th Hamilton
Licence Number 604

I certify that the foregoing statements of fact are true.

Date 12/1/1954 L Chinn
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM | | Z | | | | | | E
| 9 | R | | | | | | N
Elev. | 9 | R | 6 | | | |
Basin | 2 | 4 | | | | |
Lot 12

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

68 No 4487

GROUND WATER BRANCH
MAY 16 1957
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

[redacted] ...hip, Village, ~~Town or City~~ ..Saltfleet.....
...n Village, Town or City) ..Cornell Survey.....
Address ..R.R.# 2 ..Fruitland.....

Date completed ..9.. (day) ..march.. (month) ..1957 (year)

Pipe and Casing Record

Casing diameter(s) ..6".....
Length(s) ..12 feet.....
Type of screen .....
Length of screen .....

Pumping Test

Static level ..3'.....
Pumping rate ..1 gal per min.....
Pumping level ..can be bailed down.....
Duration of test ..recovers at 1 gal per min.....

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brown heavy clay	0	2	32'	30	Fresh
Red clay	2	5			
Red shale	5	33			

Water Record

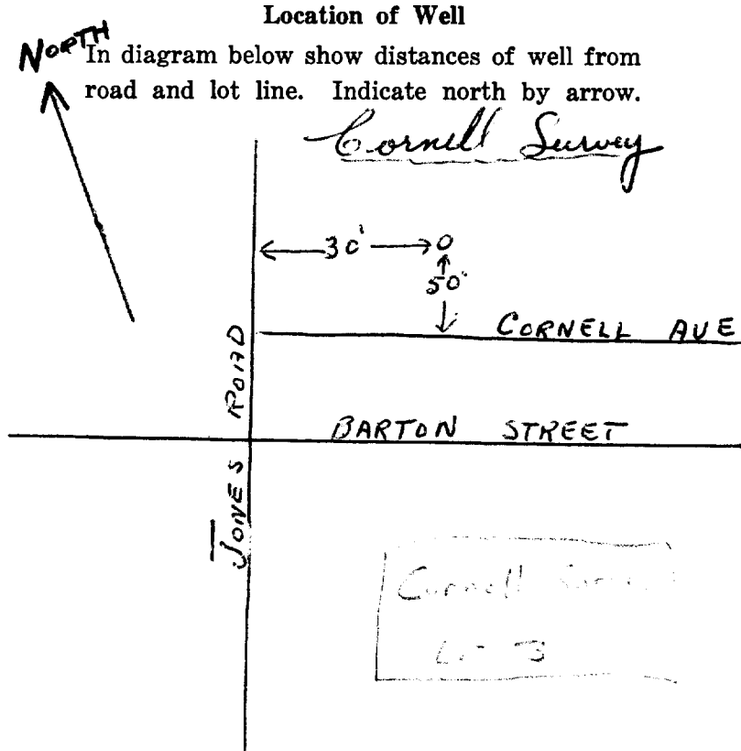
For what purpose(s) is the water to be used?
..Domestic.....
Is water clear or cloudy?..clear.....
Is well on upland, in valley, or on hillside?.....
..upland.....
Drilling firm ..H. W. COMFORT.....
Address ..14 CORMAN AVE.....
..STONEY CREEK.....
Name of Driller ..H. W. COMFORT.....
Address ..SAME.....
.....
Licence Number..1026.....

I certify that the foregoing statements of fact are true.

Date..MAY 14/57.. ..Howard W. Comfort..
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

Ontario

Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the Open Data catalogue.

Go Back to Map

Well ID

Well ID Number: 6804488
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	SALTFLEET TOWNSHIP
Lot	012
Concession	CON 01
County/District/Municipality	WENTWORTH
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 606517.50 Northing: 4786173.00
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	CLAY			0 ft	2 ft
RED	CLAY			2 ft	5 ft
RED	SHLE			5 ft	42 ft

Annular Space/Abandonment Sealing Record

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

Method of Construction & Well Use

Method of Construction	Well Use
Cable Tool	
	Domestic

Status of Well

Water Supply

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
6 inch	STEEL		12 ft
6 inch	OPEN HOLE		42 ft

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1640

Results of Well Yield Testing

After test of well yield, water was	CLEAR
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	2 GPM
Duration of Pumping	1 h:0 m
Final water level	40 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)	Recovery Water level
SWL	12 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
41 ft	Fresh

Hole Diameter

Depth From	Depth To	Diameter

Audit Number:

Date Well Completed: October 11, 1957

Date Well Record Received by MOE: February 20, 1958

Updated: January 24, 2020

UTM Z E
10 9 R N
Elev. 9 R
Basin 24

The Ontario Water Resources Commission Act, 1957

GROUND WATER BR.
SEP 28 1959
ONTARIO WATER RESOURCES COMMISSION

13
4489

WATER WELL RECORD

County or ~~District~~ Wentworth 12 Township, ~~Village, Town or City~~ Saltfleet

[redacted] Date completed 4 (day) Sept (month) 59 (year)

Address R.R.# 2 Fruitland Ont.

Casing and Screen Record

Inside diameter of casing 6 ¼
Total length of casing 13'
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole — 6 ¼

Pumping Test

Static level 8'
Test-pumping rate 10 G.P.M.
Pumping level 12
Duration of test pumping 1 hr.
Water clear or cloudy at end of test clear
Recommended pumping rate 3 G.P.M.
with pumping level of 8

Well Log

Overburden and Bedrock Record	From ft.	To ft.
Brown clay	0	4
Red shale	4	40

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
37	32	Fresh

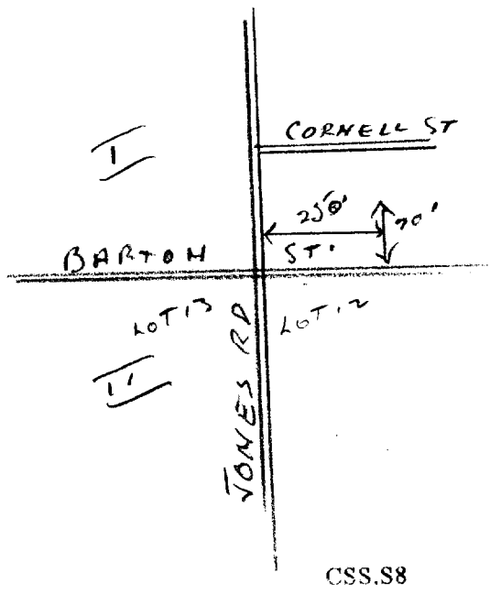
For what purpose(s) is the water to be used?
Domestic

Is well on upland, in valley, or on hillside?
upland

Drilling Firm H. W. Comfort
Address 137 Corman Ave.
Stony Creek Ont.
Licence Number 15
Name of Driller Same
Address
Date Sept 17/59
Howard W. Comfort
(Signature of Licensed Drilling Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5
15M-58-4149

CSS.S8

Z ____ E

9 R ____ N

9 R ____ 7

asin Z 4 ____

ONTARIO

RECEIVED
SEP 11 1952
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

68 No 4490

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted] Village, Town or City... Saltfleet

[redacted] own or City)... Trudtland

Date Completed... 12 (day) July (month) 54 (year) ... Cost of Well (excluding pump)...

Pipe and Casing Record

Casing diameter(s)... 6 3/4

Length(s) of casing(s)... 11'

Type of screen...

Length of screen...

Distance from top of screen to ground level...

Is well a gravel-wall type? ... no

Pumping Test

Date... July 14 1954

Static level... 7'

Pumping level...

Pumping rate... 3 gal. per...

Duration of test... 1/2 hour

Distance from cylinder or bowls to ground level...

Water Record

Kind (fresh or mineral)... fresh

Quality (hard, soft, contains iron, sulphur, etc.)... hard

Appearance (clear, cloudy, coloured)... clear

For what purpose(s) is the water to be used? ... household

...

How far is well from possible source of contamination? ... 30'

What is the source of contamination? ... septic tank

Enclose a copy of any mineral analysis that has been made of water...

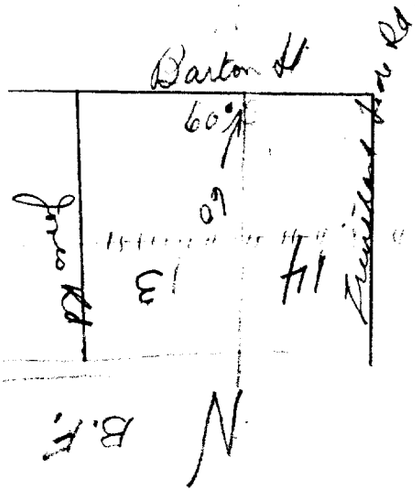
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
28'	Good	21'

Well Log

Overburden and Bedrock Record	From	To
	0 ft.	....ft.
Red clay	1	9
Red shale	9	28

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? ... Upland

Drilling Firm... A. Gill

Address... 355 Upper Ave. Hamilton

Name of Driller... A. Gill Address... Hamilton

Date... July 14 1954 Licence Number... 5

A. Gill
Signature of Licensee

FORM 5

CSS.S8

UTM Z ____ E ____
R ____ N ____
Elev. R ____
Basin 2 19
Lot 13

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

RECEIVED
FEB 1958
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No 4491

Water-Well Record

County or Territorial District Wentworth Township, Village, Town or City Salyfleet
Village, Town or City)
Address Brantland

[redacted]

(day) (month) (year)

Pipe and Casing Record P. Verheul

Casing diameter(s) 6 in
Length(s) 21
Type of screen
Length of screen

Pumping Test

Static level 4 ft
Pumping rate ~~60~~ gal/hour
Pumping level 15'
Duration of test

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
clay	0	12	18-22	18'	Fresh
Red Shale	12	23			

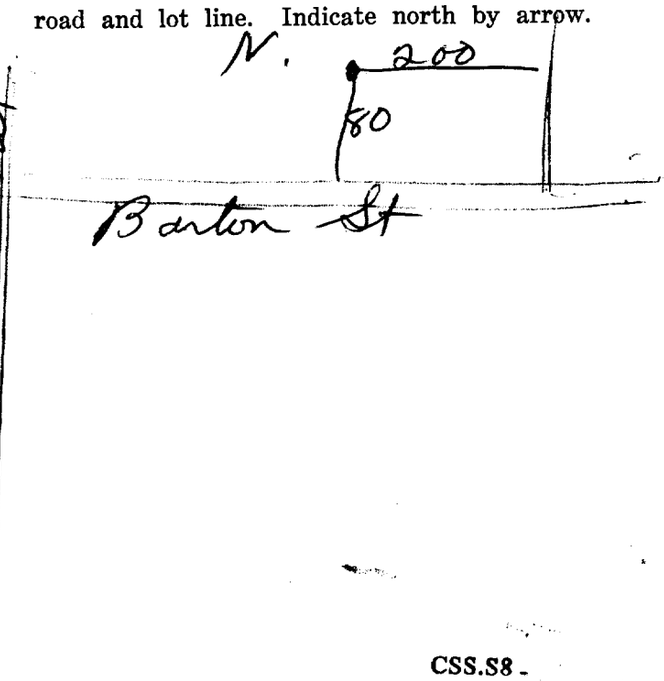
For what purpose(s) is the water to be used? Domestic Under Mountain
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside? Domestic
Drilling firm S. W. Merritt
Address R.R. 1 Smithville
Name of Driller Frank Merritt
Address R.R. 1 Smithville
Licence Number 172

I certify that the foregoing statements of fact are true.

Date Jan 27 Sidney Merritt
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

Form 5

E

UTM | | Z. | | E

9 R | | N

Elev. 9 R | |

Basin 24 | |

Con I

lot 13

ONTARIO

The Water-well Drillers Act, 1954

Department of Mines

RECEIVED FEB - 2 1956 GEOLOGICAL BRANCH DEPARTMENT OF MINES

68 № ~~4492~~

SW

Water-Well Record

County or Territorial District Wentworth Township, Village, Town or City Salfleet

[redacted] Village, Town or City)

[redacted]ddress Barton St Stoney Creek.

(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6 in

Length(s) 12 ft

Type of screen

Length of screen

Pumping Test

Static level 4 ft

Pumping rate 1000 gal hour

Pumping level 15

Duration of test 24 Dec

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
clay	0	12		25 ft	Fresh
Red Shale	12	29	29 ft		
			14 "		
			18 "		

BW

For what purpose(s) is the water to be used? Domestic

Is water clear or cloudy? Clear

Is well on upland, in valley, or on hillside? Below Mountain

Drilling firm S. W. Merritt

Address R R 1 Smithville

Name of Driller Same

Address

Licence Number 172

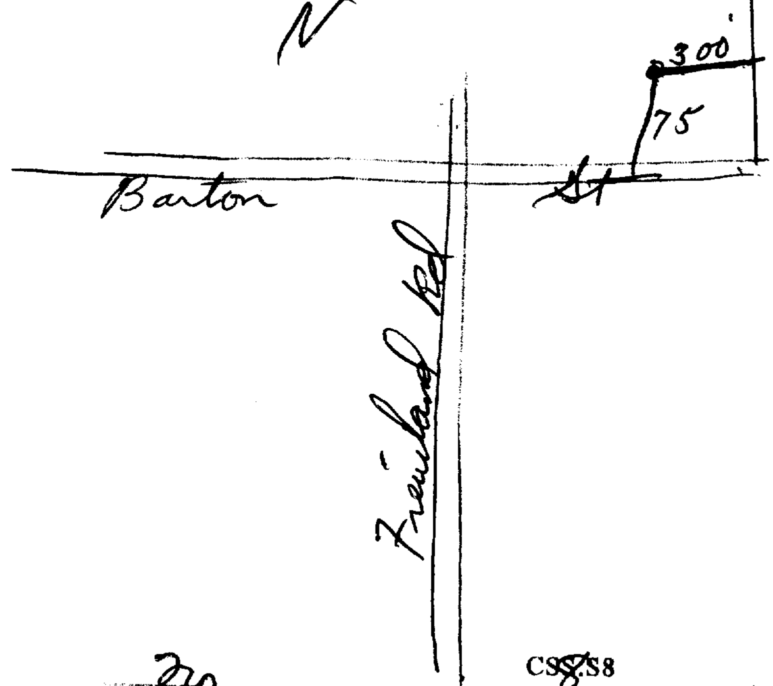
I certify that the foregoing statements of fact are true.

Date Jan 27 Sidney Merritt

Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

Form 5

UTM Z ____ E ____
R ____ N ____
Elev. R ____
Basin ____
lot 13

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

4493

Water-Well Record

County or Territorial District ..... Wentworth ..... Township, Village, Town or City ..... Saltfleet .....

[redacted] Village, Town or City ..... Address ..... Mountain .....

(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) ..... 6 in .....
Length(s) ..... 12 ft .....
Type of screen .....
Length of screen .....

Pumping Test

Static level ..... 4' .....
Pumping rate ..... 250 .....
Pumping level ..... 18' .....
Duration of test ..... Dec 2 Co .....

Well Log

Overburden and Bedrock Record	From ft.	To ft.
Clay	0	8
Red Shale	8	24

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
12-24	20'	Fresh

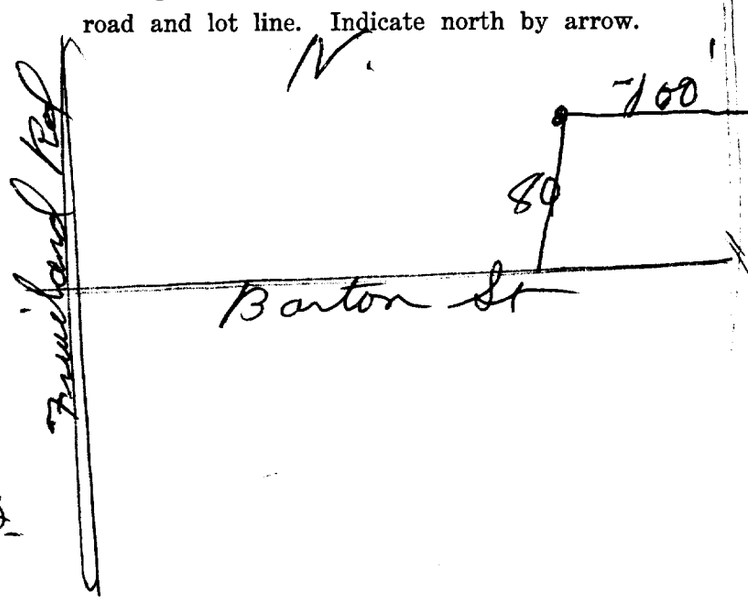
For what purpose(s) is the water to be used?
..... Domestic .....
Is water clear or cloudy? ..... Clear .....
Is well on upland, in valley, or on hillside?
..... Below Mountain .....
Drilling firm ..... S. W. Merritt .....
Address ..... R.R. 1 Smithville .....
.....
Name of Driller ..... Frank Merritt .....
Address ..... R.R. 1 Smithville .....
.....
Licence Number ..... 172 .....

I certify that the foregoing statements of fact are true.

Date Jan 27 ..... Sidney Merritt .....
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

UTM Z E

R N

Elev. R 9

Basin 24

ONTARIO

The Water-well Drillers Act, 1954

Department of Mines

RECEIVED
FEB 14 1956
GEOLOGICAL BRANCH
DEPARTMENT of MINES

No. 4494

Con. I

Lot 13

Water-Well Record

County or Territorial District [redacted] Township, ~~Village, Town or City~~ [redacted]

[redacted] n Village, Town or City) [redacted]

[redacted] Address S. Creek P.O.

Date completed [redacted]
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6 4

Length(s) 12 ft

Type of screen

Length of screen

Pumping Test

Static level 4 ft

Pumping rate 2 gal p.m.

Pumping level 4 ft

Duration of test 1 hr

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Clay	0	11	23	22	fresh
red shale	11	26			

Water Record

For what purpose(s) is the water to be used?

Domestic

Is water clear or cloudy? Clear

Is well on upland, in valley, or on hillside?

upland

Drilling firm S. Gill

Address 65 Alpine Ave

Barrie Ont

Name of Driller R. Lewis

Address 18 Arkell Ave

Barrie Ont

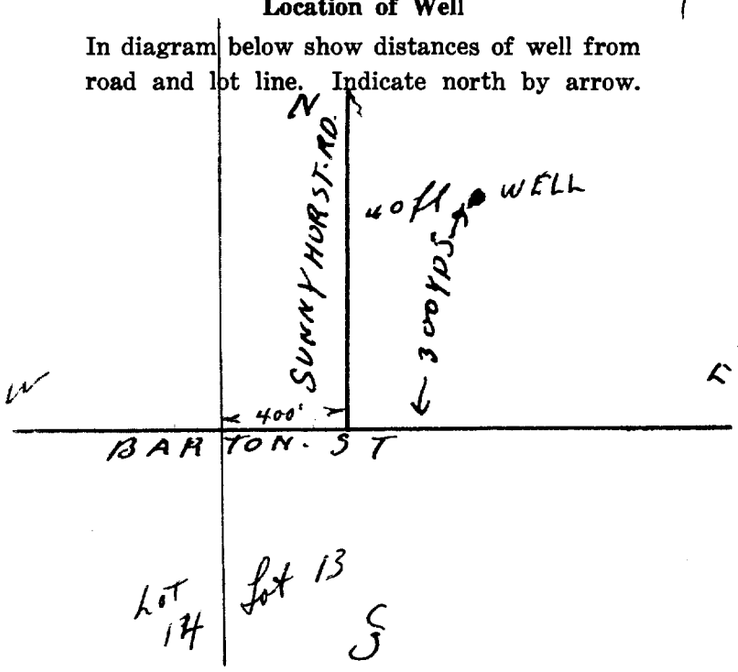
Licence Number 411

I certify that the foregoing statements of fact are true.

Date Feb 9 R Lewis
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 24

Con. - I
Lot - 13

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

RECEIVED
FEB 14 1956
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No. 4495

Water-Well Record

County or Territorial District Wentworth Township, Village, Town or City Saltfleet
[redacted] Village, Town or City)
Address S Creek P. O.
Date completed (day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6 4"
Length(s) 12 ft
Type of screen
Length of screen

Pumping Test

Static level 4 ft
Pumping rate 3 gal/min
Pumping level 6 ft
Duration of test 2 hrs bailing

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Clay	0	11	22 ft	22 ft	fresh
Red clay shale	11	26			

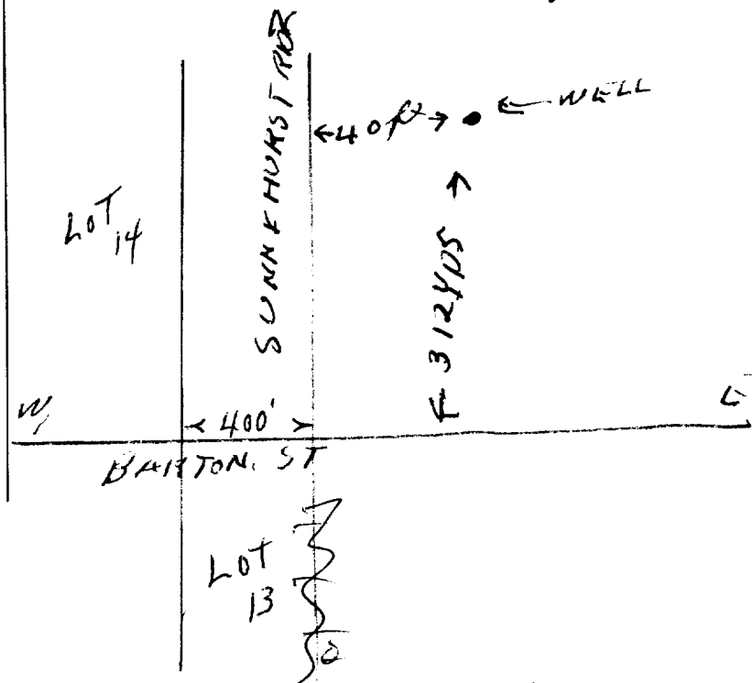
For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside?
upland
Drilling firm S. Gull
Address 5 5 alpine ave
Rexdale Ont
Name of Driller R. Lewis
Address 75 Carledon ave
Rexdale Ont
Licence Number 411

I certify that the foregoing statements of fact are true.

Date Feb 13 R Lewis
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 24

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

RECEIVED
FEB 14 1956
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No. 4196

Water-Well Record

Con. I
Lot 13

County or Territorial District Wentworth Township, Village, Town or City Saltfleet
[redacted] Village, Town or City)
Address S. Creek P.O.
Date completed (day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6 4"
Length(s) 17 ft
Type of screen
Length of screen

Pumping Test

Static level 4 ft
Pumping rate 3 gal/min
Pumping level 5 ft
Duration of test 2 hrs bailing

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Clay	0	11	22 ft	22	fresh
Red shale	11	26			

Water Record

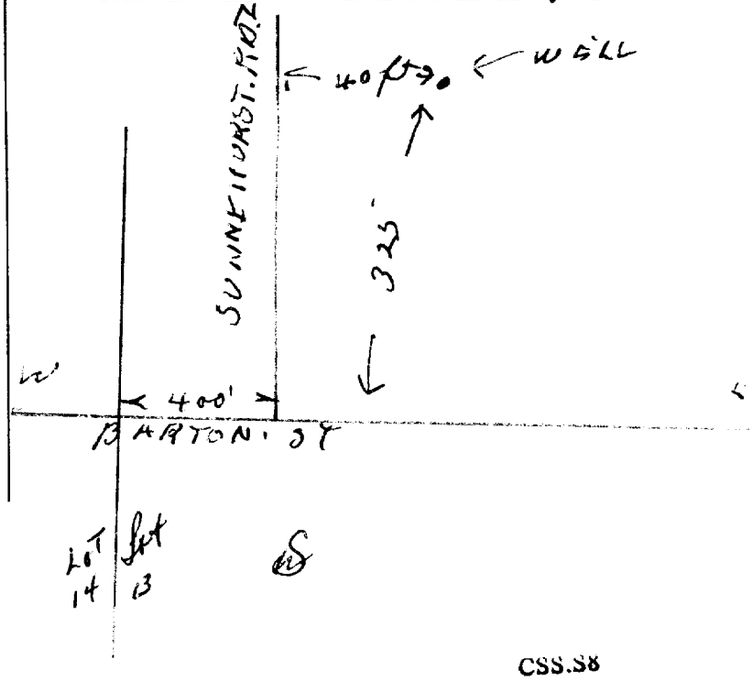
For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside?
upland
Drilling firm J. Gill
Address RR Ancaster
Ham Ont
Name of Driller R. Lewis
Address RR Ancaster Ont
Ham Ont
Licence Number 16

I certify that the foregoing statements of fact are true.

Date Feb 13 R. Lewis
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.58

UTM Z E

9 R N

Elev. 9 R

Basin 2 4

Lot 13

ONTARIO

The Water-well Drillers Act, 1954

Department of Mines

GROUND WATER BRANCH
JAN 22 1958
ONTARIO WATER RESOURCES COMMISSION

68 No. 4197

Water-Well Record

[redacted] ...hip, Village, Town or City... Saltfleet

...n Village, Town or City)

...Address ...R.R.2 Brantford

Date completed ...14... July ...57...
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) ...6"...
Length(s) ...13'...
Type of screen ...—...
Length of screen ...—...

Pumping Test

Static level ...10'...
Pumping rate ...250 G.p.H...
Pumping level ...15'...
Duration of test ...30 min...

Well Log

Overburden and Bedrock Record	From ft.	To ft.
red clay	0'	13'
red shale	13'	21'

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
15'-20'	11'	fresh

For what purpose(s) is the water to be used?
...House...
Is water clear or cloudy?...clear...
Is well on upland, in valley, or on hillside?...
...upland...
Drilling firm ...Frank Merritt...
Address ...86 R. 31 Smithville, Ont...
Name of Driller ...
Address ...R.R. 1, ...

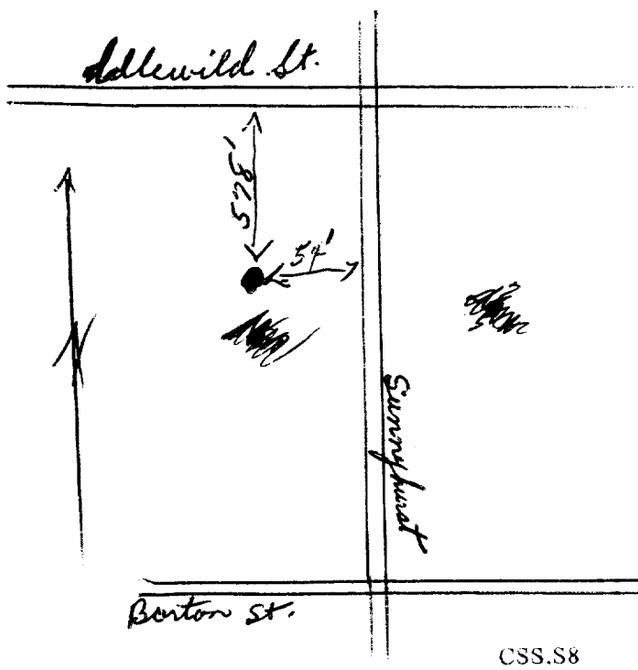
Licence Number...705...

I certify that the foregoing statements of fact are true.

Date...Jan 4... ...Frank Merritt...
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z ____ E ____
9 R ____ N ____
Elev. 9 R ____
Basin 24
Lot 13

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

GROUND WATER BRANCH
JAN 22 1958
ONTARIO WATER RESOURCES COMMISSION

68 No. 4488

Water-Well Record

[redacted] ...hip, Village, Town or City.....Saltfleet.....
...n Village, Town or City).....
...Address RR 2 Fruitland

Date completed ....10.... (day) ....July.... (month) ....57.... (year)

Pipe and Casing Record

Casing diameter(s) ....6"....
Length(s) ....14'....
Type of screen ....
Length of screen ....

Pumping Test

Static level ....10'....
Pumping rate ....200 Hb p. H....
Pumping level ....15'....
Duration of test ....30 min....

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
red clay	0'	14'			
red shale	14'	20'	15'—20'	10'	Salty

Water Record

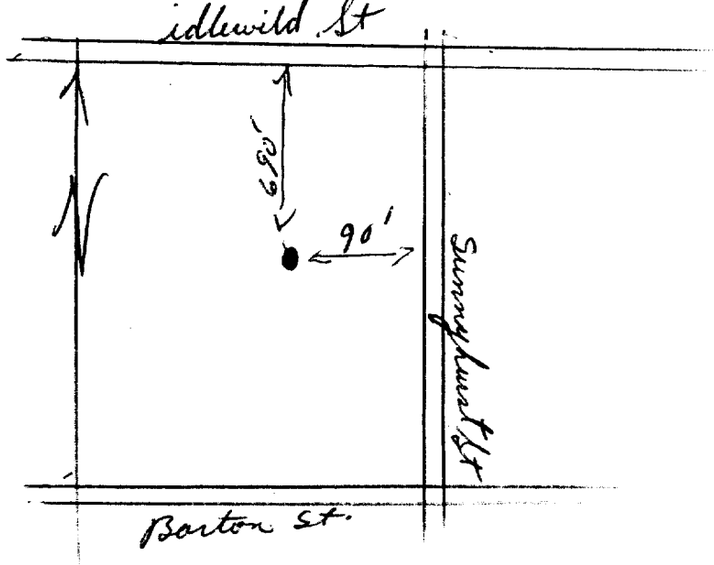
For what purpose(s) is the water to be used?
....Home....
Is water clear or cloudy?....clear....
Is well on upland, in valley, or on hillside?....upland....
Drilling firm ....
Address ....Frank Merrill....
....
Name of Driller ....
Address ....
....
Licence Number....705....

I certify that the foregoing statements of fact are true.

Date....Jan. 4.... ....Frank Merrill....
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z E
9 R 10 N
Elev. 9 R
Basin 2+9

ONTARIO

GROUND WATER BRANCH
JAN 22 1958
ONTARIO WATER RESOURCES COMMISSION

68 No. 4499

The Water-well Drillers Act, 1954
Department of Mines

Water-Well Record

[redacted], Village, Town or City Smithville
Village, Town or City)
Address R.R. 2 Fonthill

Date completed 1 17 July 57
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) 14'
Type of screen —
Length of screen —

Pumping Test

Static level 10'
Pumping rate 250 G.p.H.
Pumping level 15'
Duration of test 30 min

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
red Clay	0'	14'			
red Shale	14'	22'	15'–22'	12'	Fresh

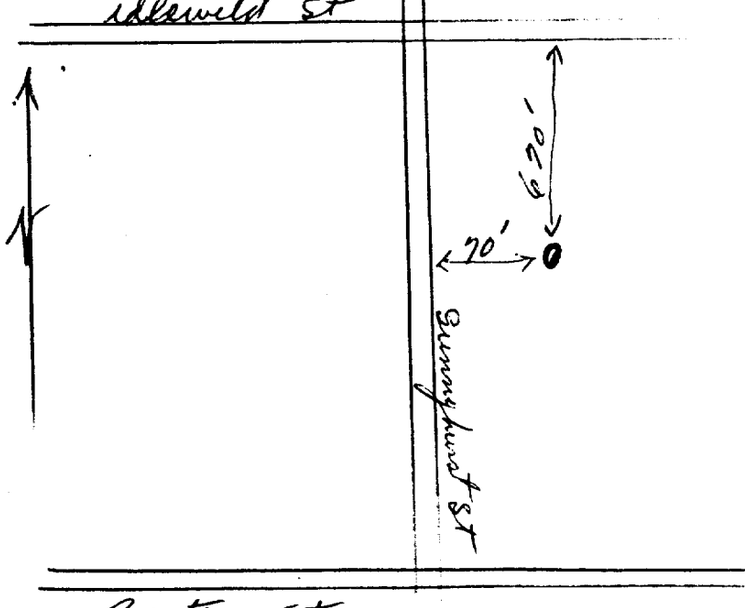
For what purpose(s) is the water to be used?
House
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside?
upland
Drilling firm Frank Merrill
Address 86 R 31 Smithville Ont.
Name of Driller
Address R.R. 1, Smithville
Licence Number 705

I certify that the foregoing statements of fact are true.

Date Jan 4 Frank Merrill
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM [X] Z [ ] E [ ]
[9] R [ ] N [10]
Elev. [9] R [ ]
Basin [24]
Lot 13

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

GROUND WATER BRANCH
JAN 22 1958
ONTARIO WATER RESOURCES COMMISSION

68 No. 4499

Water-Well Record

[redacted] Township, Village, Town or City Saltfleet
Village, Town or City)
Address R.R. 2 Binbrook

Date completed 11 (day) July (month) 57 (year)

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) 14'
Type of screen —
Length of screen —

Pumping Test

Static level 10'
Pumping rate 250 G.p.H.
Pumping level 15'
Duration of test 30 min

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
red Clay	0'	14'			
red Shale	14'	22'	15'–22'	12'	Fresh

For what purpose(s) is the water to be used?
House
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside?
upland
Drilling firm Frank Merritt
Address 86 R 31 Smithville, Ont.
Name of Driller Frank Merritt
Address R.R. 1, Smithville, Ont.

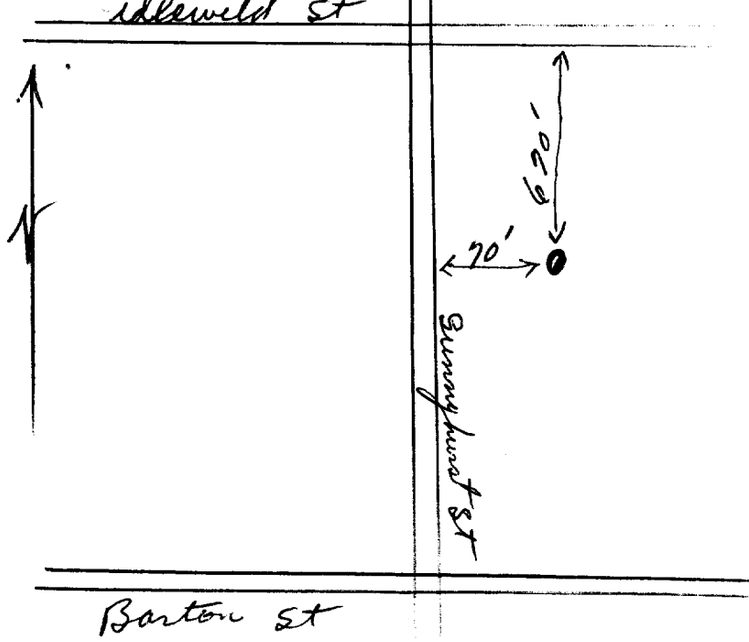
Licence Number 705

I certify that the foregoing statements of fact are true.

Date Jan 4 Frank Merritt
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.58

UTM Z E
R N
Elev. R
Basin 2 4

ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

68 No. 4500

RECEIVED
MAY 15 1952
GEOLOGICAL BRANCH
DEPARTMENT of MINES

Water Well Record

[redacted] ~~Village, Town or City~~ Saltfleet Township
wn or City)
R.R. - 1 - Frantland
Date Completed 18 (day) Sept (month) 1951 Cost of Well (excluding pump) Nearly double

Pipe and Casing Record

Casing diameter(s) 6 1/2
Length(s) of casing(s) 14 ft
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date Sept 18
Static level 7 ft
Pumping level would pump at rate of 2 gals per m
Pumping rate
Duration of test 1/2 hr
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured)
For what purpose(s) is the water to be used? Domestic
How far is well from possible source of contamination? none at time of drilling
What is the source of contamination?
Enclose a copy of any mineral analysis that has been made of water

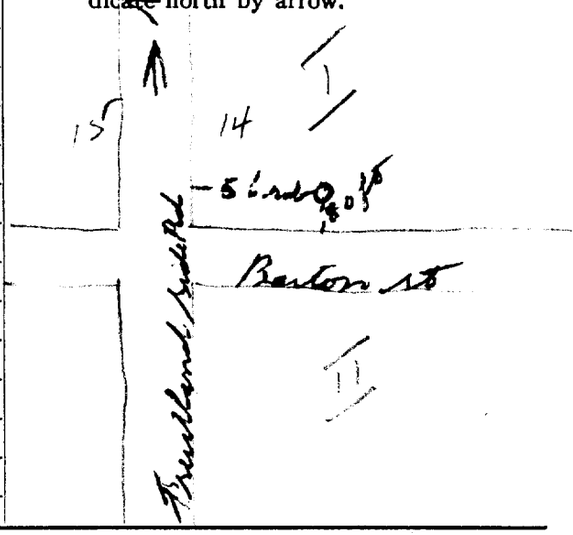
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
27	fresh	20 ft

Well Log

Overburden and Bedrock Record	From	To
red clay	0 ft.	14 ft.
red & blue streaked shale	14	27

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm R. B. Clark
Address Mt. Hamilton P.O.
Name of Driller W. Stevens Address R.R. - 3 - Hannon
Date April 14 Licence Number 43
R. B. Clark
Signature of Licensee

FORM 5

CSS.S8

#8.

UTM | | Z | | E

| 9 | R | 17 | N

Elev. | 9 | R | 0 |

Basin | 2 | 4 | |

ONTARIO

RECEIVED
AUG 21 1952
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

68 Nº ~~4501~~

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted] ~~Village, Town or City~~ Saltfleet

[redacted]wn or City) Barton St. E.

[redacted] R.R. #1 Fruitland Ont. P.O.

Date Completed 25 (day) April (month) 1952 (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 6 inch

Length(s) of casing(s) 13 feet

Type of screen -

Length of screen -

Distance from top of screen to ground level -

Is well a gravel-wall type? no

Pumping Test

Date April 25 / 1952

Static level 2½ ft.

Pumping level 5 ft.

Pumping rate 5½ gals per minute bailer test

Duration of test ½ hour

Distance from cylinder or bowls ~~to ground level~~ 5 ft. outside hand pump installed for present

Water Record

Kind (fresh or mineral) fresh

Quality (hard, soft, contains iron, sulphur, etc.) hard

Appearance (clear, cloudy, coloured) clear

For what purpose(s) is the water to be used? Domestic uses in the home wash & bathroom facilities

How far is well from possible source of contamination? 36 ft.

What is the source of contamination? Sewer water way

Enclose a copy of any mineral analysis that has been made of water

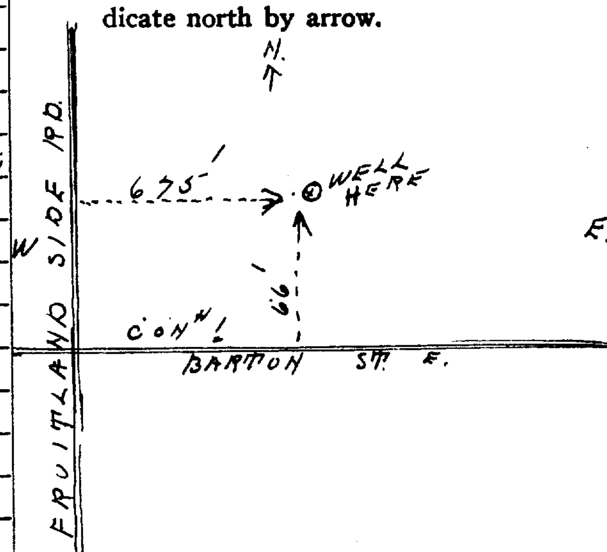
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
22 ft.	fresh	19½ ft.

Well Log

Overburden and Bedrock Record	From	To
Dark Sandy loam	0 ft.	2 ft.
Brown clay with pebbles & odd stone	2'	4'
Mixture of brown & grey clay	4'	6'
Red clay	6'	10'
Red shale rock	10'	26'

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Well is on the upland

Drilling Firm Robert Embleton, Well Driller

Address R.R. #3 Hamilton, Mt. Albion Village Phone 28 R5 Hannon

Name of Driller Robert Embleton Address R.R. #3 Hamilton Ont.

Date April 25/52 Licence Number 595

R. W. Embleton
Signature of Licensee

FORM 5

CSS S8

No 14 - 1953.

UTM | | 7 | | E

19 R | | N

Elev. 9 R | | 13

Basin 2 4 | |

CON I

1 - 14

68 No ~~4502~~

ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted], Village, ~~Town or City~~ Saltfleet Twsp.

own or City) Barton St. E & Dewitt Side Rd.

R.R. #1 Fruitland Post Office

Date Completed 13 August 1952 (day) (month) (year) Cost of Well (excluding pump) T. East Fruitland Side Road.

Pipe and Casing Record

Casing diameter(s) 6" casing

Length(s) of casing(s) 14 1/2' feet

Type of screen none

Length of screen none

Distance from top of screen to ground level none X

Is well a gravel-wall type? no

Pumping Test

Date August 12-1952

Static level 5 1/2 ft

Pumping level 14 ft

Pumping rate 15 g.p.m. 5" bailer test exceptionally

Duration of test 1/2 hour Extra good well this area

Distance from cylinder or bowls to ground level We did not install pumping unit

Water Record

Kind (fresh or mineral) fresh

Quality (hard, soft, contains iron, sulphur, etc.) hard

Appearance (clear, cloudy, coloured) clear

For what purpose(s) is the water to be used? Domestic uses in the home wash + bathroom facilities

How far is well from possible source of contamination? 40 ft.

What is the source of contamination? septic system + laterals

Enclose a copy of any mineral analysis that has been made of water

Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
21 ft	fresh	15 1/2 ft

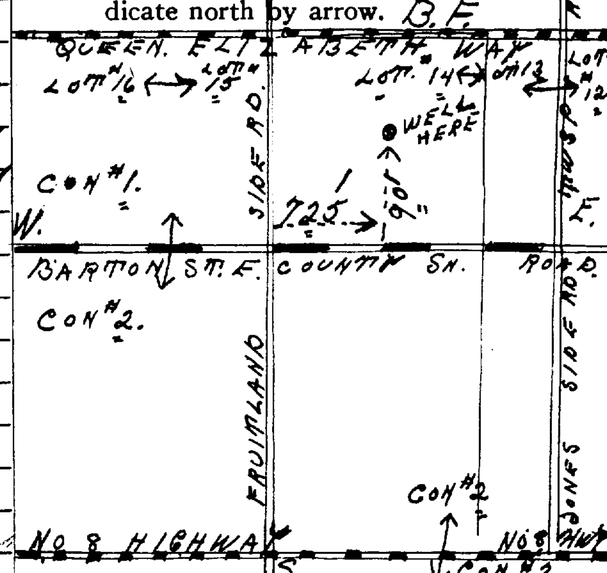
Well Log

Overburden and Bedrock Record	From	To
Dark clay loam	0 ft.	1.5. (1 1/4)
Brown clay	1 1/4 (~~15"~~)	3'
Mixture of brown + grey clay containing a few pebbles of sandstone size + there	3'	5'
Red clay quite soft streaks	5'	11'
Red shale bedrock	11'	25'

Casing seated 3 ft in bedrock + cemented as bedrock was quite soft after commencement from 11' to 13' ft levels

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow. B.F.



Situation: Is well on upland, in valley, or on hillside? Well is on the upland.

Drilling Firm R. Embleton + Son Well Drillers Phone # Hannon 28R5

Address P.O. R.R. #3 Hamilton Ontario Res. Mud St E Mt Albion Village

Name of Driller Mr. Robert Embleton P.O. Address R.R. #3 Hamilton Ontario

Date August 12 - 1952 Licence Number #505

Robert W. Embleton

Signature of Licensee

Form 5

UTM Z ... E ...
R ... N ...
Elev. R ...
Basin Z 4

14.

ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

RECEIVED
JUN - 7 1954
GEOLOGICAL BRANCH
DEPARTMENT of MINES

No. 4503

Water Well Record

[redacted], Village, Town or City Lakeflat
[redacted] own or City)
[redacted] RR no 3 Hamilton
Owner[redacted]
Date Completed 9 (day) Jan (month) 54 (year) Cost of Well (excluding pump) 104

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) of casing(s) 10
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date Jan 9
Static level 12
Pumping level 22 ft
Pumping rate 300 Gal pr hour
Duration of test 1 hour
Distance from cylinder or bowls to ground level Bowling

Water Record

Kind (fresh or mineral) Fresh
Quality (hard, soft, contains iron, sulphur, etc.) soft
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? Domestic

How far is well from possible source of contamination? 75 ft
What is the source of contamination? septic tank lead
Enclose a copy of any mineral analysis that has been made of water

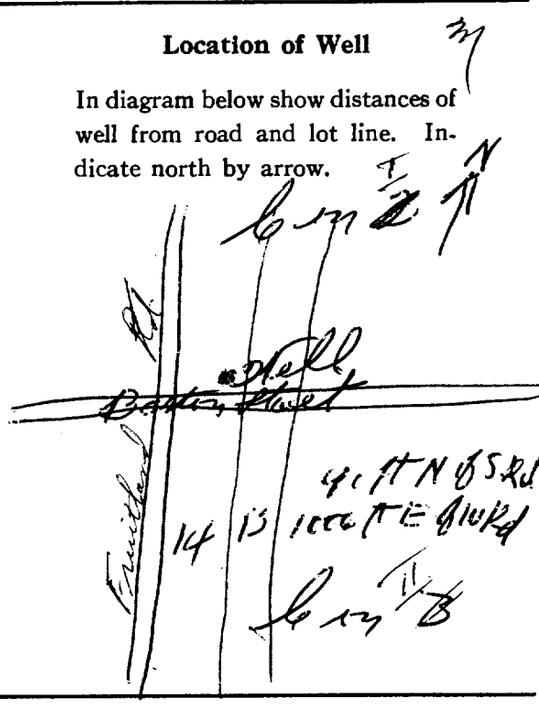
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
25	fresh	13

Well Log

Overburden and Bedrock Record	From	To
	0 ft.	5 ft.
red clay	5	24
red rock (shale)		

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm Wesley Packham
Address Smithville
Name of Driller Wesley Packham Address Smithville
Date June 3/54 Licence Number 187
Wesley Packham
Signature of Licensee

FORM 5

CSS.S8

UTM Z E
R N
Elev. R
Basin 24

ONTARIO

RECEIVED
SEP - 3 1954
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No 4304

The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

County or Territorial District. Wentworth. Township, ~~Village, Town or City~~ Saltfleet
Con. 1 Lot 14 Street and Number (if in Village, Town or City) Barton Stud
Owner. [redacted] Address Saltfleet
Date Completed 30 (day) June (month) 54 (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) of casing(s) 10½ ft
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date
Static level 6'
Pumping level 10'
Pumping rate 4 gals. per ~~min~~
Duration of test
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) Hard
Appearance (clear, cloudy, coloured) Clear
For what purpose(s) is the water to be used? Household
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

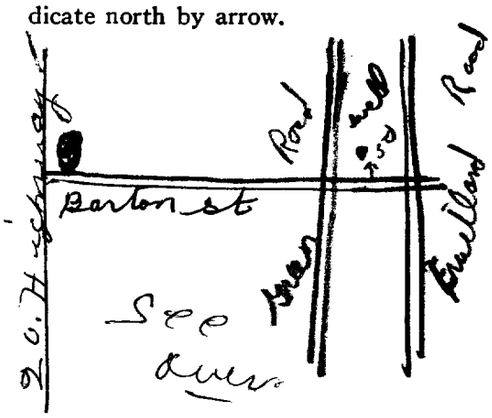
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
~~to~~ 14'	fresh	~~25'~~ 18'

Well Log

Overburden and Bedrock Record	From	To
red clay	0 ft.	10½ ft.
red shale	10½	25

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? valley
Drilling Firm. A. B. Clark
Address. Box 207 P.O. Hamilton
Name of Driller. W. Scrimin Address
Date Licence Number

Signature of Licensee

FORM 5

CSS.S8

UTM Z ____ E ____
R ____ N ____
Elev. 9 R ____
Basin 24 ____
OM

ONTARIO

No. 4505

The Water-well Drillers Act, 1954
Department of Mines

Water-Well Record

County or Territorial District ..... Wentworth ..... Township, Village, Town or City ..... Saltfleet .....
[redacted] Village, Town or City) .....
[redacted] ddress ..... Fruitland .....
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) ..... 6 in .....
Length(s) ..... 10' .....
Type of screen .....
Length of screen .....

Pumping Test

Static level ..... 8 ft .....
Pumping rate ..... 75 gal hour .....
Pumping level ..... impaty .....
Duration of test ..... 1/4 .....

Well Log

Overburden and Bedrock Record	From ft.	To ft.
Clay	0	8
Red Shale	8	29

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
15-23	21 ft	Fresh

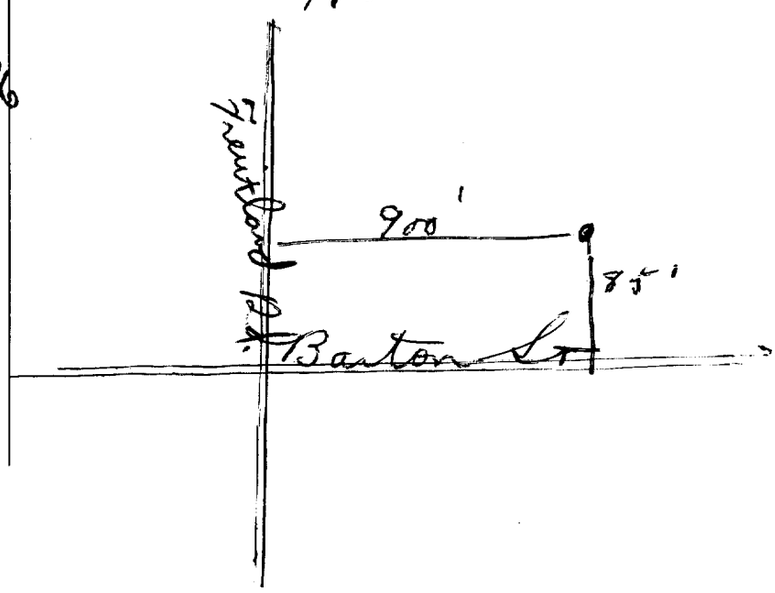
For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside? Under Mountain
Drilling firm ..... S-W. Merritt .....
Address ..... R.R.1 Smithville .....
Name of Driller ..... Lawn .....
Address .....
Licence Number ..... 172 .....

I certify that the foregoing statements of fact are true.

Date. Oct 31 ..... Sidney Merritt .....
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

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Elev. | 9 | R | | | |

Basin | 2 | 4 | | | |

ONTARIO

68 No. 4527

The Well Drillers Act

Department of Mines, Province of Ontario

RECEIVED
FEB 28 1951
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

Water Well Record

[redacted] ..... Con 11 ..... Lot 3 ..... Pt. Lot .....

..... Warnica ..... Acres 12 .....

Date Completed Aug 17 ..... 19 50 . Cost of Well (not including pump) ..... 112.00 .....

Pipe and Casing Record

Casing diameter(s) ..... 6 1/4 .....

Length(s) of casing(s) ..... 14 ft .....

Length of screen ..... none .....

Type of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

Pumping Test

Date ..... Aug 17 50 .....

Developed Capacity ..... 3 gpm .....

Duration of Test ..... 1/2 hour .....

Pumping Rate ..... 2 gpm .....

Drawdown ..... 25 ft .....

Static level of completed well 10 ft. from top .....

Is well a gravel-wall type? ..... No .....

Water Record

Kind (fresh or mineral) ..... mineral .....

Quality (hard, soft, contains iron, sulphur etc.) ..... little salt .....

.....

Appearance (clear, cloudy, coloured) ..... Clear .....

For what purpose(s) is the water to be used? ..... watering mink .....

.....

How far is well from possible source of contamination? ..... 100 ft .....

What is source of contamination? ..... septic tank .....

Enclose a copy of any mineral analysis that has been made of water .....

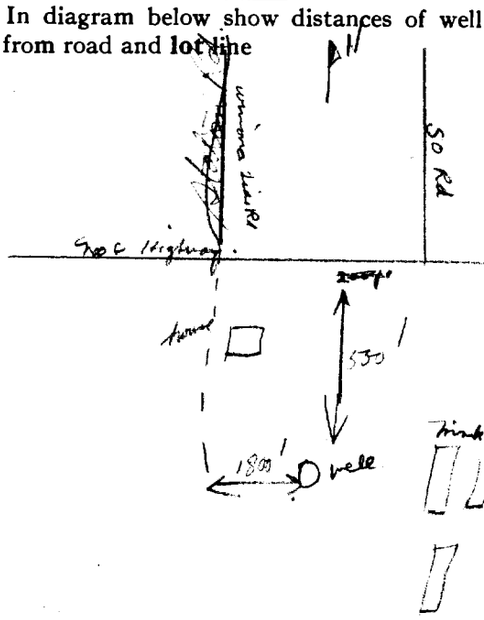
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
36 ft	Good	26 ft.

Well Log

Drift and Bedrock Record	From	To
Red clay.	0 ft.	10 ft.
Red shale	10	36 ft

Location of Well

In diagram below show distances of well from road and lot line



Situation: Is well on upland, in valley, or on hillside? ..... Upland .....

Drilling Firm ..... Full .....

Address .....

Recorded by ..... Address ..... 55 Alpine Ave .....

Date ..... Feb 25 ..... 19 51 ..... Licence Number ..... No. 3 .....

CSS.S8

UTM Z E

R

Elev. R

Basin

ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario

DEPARTMENT OF MINES AUG 1 1950 TO

No. 4529

Water Well Record

[redacted]

County or Territorial District Wentworth Township, ~~Village, Town or City~~ Saltfleet

Con. II Lot [redacted] 4. Street and Number (if in Village, Town or City)

Owner [redacted] Address Ironona

Date Completed March / 1949 (day) (month) (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 5/5/8 inch

Length(s) of casing(s) 20 feet

Type of screen

Length of screen

Distance from top of screen to ground level

Is well a gravel-wall type? no

Pumping Test

Date

Static level ✓ 20' (flt)

Pumping level

Pumping rate

Duration of test

Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) Mineral

Quality (hard, soft, contains iron, sulphur, etc.) a little salty + flat tasting

Appearance (clear, cloudy, coloured) clear

For what purpose(s) is the water to be used? house use

How far is well from possible source of contamination? none

What is the source of contamination? "

Enclose a copy of any mineral analysis that has been made of water

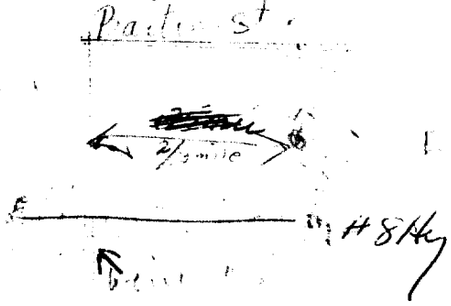
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
depth of well 42 ft.		22

Well Log

Overburden and Bedrock Record	From	To
	0 ft.	....ft.
Sandy Gravel to red shale where Casing Set at 20 ft	0	20
22 ft of red shale before getting water	20	42

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Level Ground

Drilling Firm S. W. Merritt

Address Smithville

Name of Driller S. W. Merritt Address Smithville R.R. 1

Date July 31 1950 Licence Number Ont

Signature of Licensee

FORM 5

CSS.S8

UTM Zone E
9 R N
Elev. 9 R
Basin 2 4

1

ONTARIO

68 No 4530

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DEPARTMENT OF MINES

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted] Wentworth

[redacted] Street ... Con 11 ... Lot 3 ... Pt. Lot ...

[redacted] No 8 Highway, Winona ... Acres 2 0 0 ...

Date Completed [redacted] ... Cost of Well (not including pump) ...

Pipe and Casing Record

Casing diameter(s) ... 6 1/4
Length(s) of casing(s) ... 12 ft
Length of screen ... none
Type of screen ...
Type of pump ...
Capacity of pump ...
Depth of pump setting ...

Pumping Test

Date ... Aug 15 1950
Developed Capacity ... 2 gal min
Duration of Test ... 1 1/2 hours
Pumping Rate ... 2 gal min
Drawdown ... 24 ft
Static level of completed well ... 12 ft from top
Is well a gravel-wall type? ... no

Water Record

Kind (fresh or mineral) ... little salt
Quality (hard, soft, contains iron, sulphur etc.) ... hard
Appearance (clear, cloudy, coloured) ... clear
For what purpose(s) is the water to be used? ... household
How far is well from possible source of contamination? ... 40 ft
What is source of contamination? ... septic tank
Enclose a copy of any mineral analysis that has been made of water

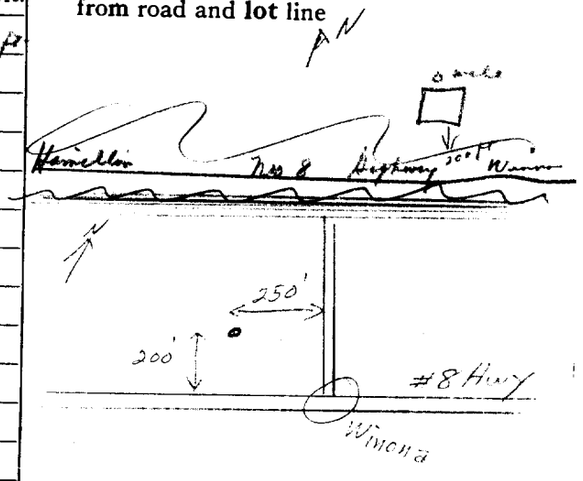
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
36 ft	Salt	12 ft 6

Well Log

Drift and Bedrock Record	From	To
Red clay	0 ft.	10 ft.
Red shale	10	36 ft

Location of Well

In diagram below show distances of well from road and lot line



Situation: Is well on upland, in valley, or on hillside? ... upland
Drilling Firm ... J. Gill
Address ... 55 alpine ave
Recorded by ... Address ... 55 alpine ave
Date ... Feb 25 1951 ... Licence Number ... no 3

CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 2 4

36

ONTARIO

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JUL 31 1951 68
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

No 4531

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted] Township, ~~Village, Town or City~~ LaSalette

[redacted] Town or City) Barton St E

[redacted] Winona

Date Completed July 26 1951 (day) (month) (year) Cost of Well (excluding pump) 100.00

Pipe and Casing Record

Casing diameter(s) 6" 4"
Length(s) of casing(s) 9'
Type of screen None
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type? no

Pumping Test

Date July 26 1951
Static level 26' 4'
Pumping level 20'
Pumping rate 2 gal min
Duration of test 1/2 hour
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) Fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? Household

How far is well from possible source of contamination? 40'
What is the source of contamination? Septic Tank
Enclose a copy of any mineral analysis that has been made of water

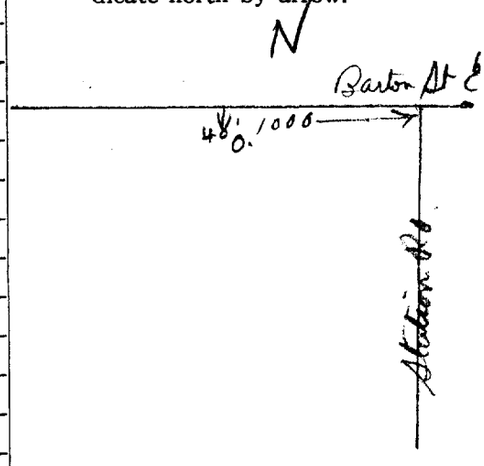
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
30'	Good	26'

Well Log

Overburden and Bedrock Record	From	To
Red clay	10 ft.	8 ft.
Red shale	8'	30'

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland

Drilling Firm S. Gill

Address 55 Ferguson Ave

Name of Driller S. Gill Address

Date July 30 1951 Licence Number 3

S. Gill
Signature of Licensee

FORM 5

CSS.S8

UTM Z E
R N
Elev. R
Basin 24
Con 11
lot 11

ONTARIO

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NOV - 2 1955
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No 4532

The Water-well Drillers Act, ~~1954~~
Department of Mines

Water-Well Record

County or Territorial District Wentworth Township, Village, Town or City Saltfleet
[redacted] Village, Town or City
Address Twistdale

(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6 1/4
Length(s) 10 ft
Type of screen
Length of screen

Pumping Test

Static level 8 ft
Pumping rate 600 gal/hour
Pumping level 12 ft
Duration of test 2 hrs 15

Well Log

Overburden and Bedrock Record	From ft.	To ft.
Clay	0	8
Red Shale	8	22

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
22 ft	14	Fresh

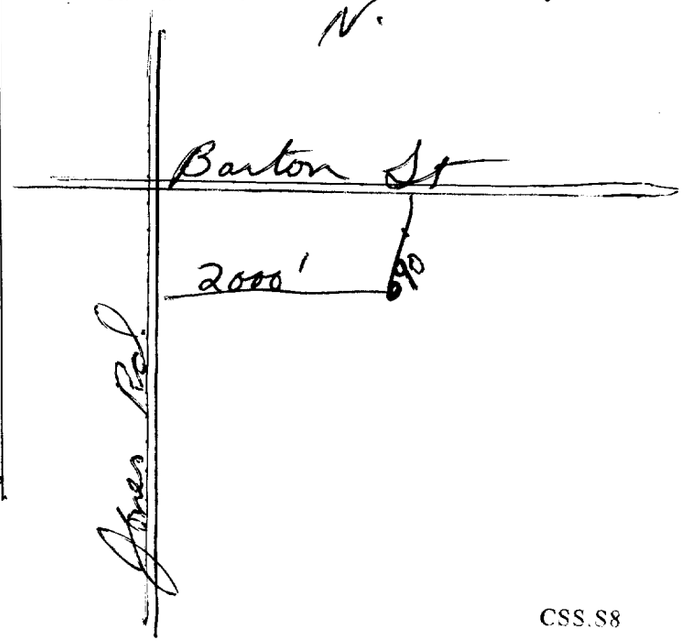
For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside?
Under Mountain
Drilling firm S. W. Merritt
Address RR 1 Smithville
Name of Driller Same
Address
Licence Number 172

I certify that the foregoing statements of fact are true.

Date Oct 31 Sidney Merritt
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

Form 5

UTM Z ____ E
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Basin 29 ____

ONTARIO

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OCT - 2 1953
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

68 No 4533

Conc - II
Lot - 12.

The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

[redacted], ~~Village, Town or City~~ Selkirk ~~County~~
(Town or City)
Jones Siffle Road Fruitland
Date Completed 25 Apr 53 (day) (month) (year) Cost of Well (excluding pump) 95.00

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) of casing(s) 10'
Type of screen ~
Length of screen ~
Distance from top of screen to ground level ~
Is well a gravel-wall type? ~

Pumping Test

Date April 25/53
Static level 2'
Pumping level [redacted]
Pumping rate 3 gal min
Duration of test 1/2 hour
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) fairly clear
For what purpose(s) is the water to be used? domestic

How far is well from possible source of contamination? 50'
What is the source of contamination? septic tank
Enclose a copy of any mineral analysis that has been made of water

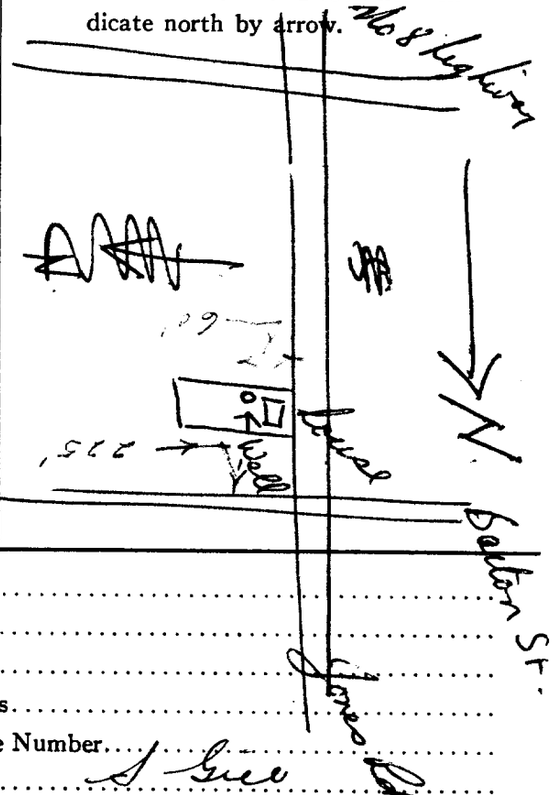
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
24'	fresh	22'

Well Log

Overburden and Bedrock Record	From	To
Red clay	10 ft.	8 ft.
Red shale	8'	24'

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm S. Guie
Address
Name of Driller Address
Date April 25/53 Licence Number
S Guie
Signature of Licensee

FORM 5

CSS.S8

UTM Z E
R N
Elev. R
Basin 2 4

ONTARIO

RECEIVED
OCT 19 1953
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No. 4534

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

County or Territorial District. Wentworth ..... Township, ~~Village, Town or City~~ Saltfleet .....

Con. 2 ..... Lot. 12 ..... Street and Number (if in Village, Town or City) Jones Rd. .....

Owner. [redacted] ..... Address ..... Hamilton .....

Date Completed .... 10 (day) June (month) 53 (year) ... Cost of Well (excluding pump) .....

Pipe and Casing Record

Casing diameter(s) .. 6 ¼ .....

Length(s) of casing(s) .... 13 ft .....

Type of screen .....

Length of screen .....

Distance from top of screen to ground level .....

Is well a gravel-wall type? No .....

Pumping Test

Date .. 10 June .....

Static level ... 3 ft .....

Pumping level ... empty .....

Pumping rate ... 400 gal per hour .....

Duration of test .....

Distance from cylinder or bowls to ground level .....

Water Record

Kind (fresh or mineral) .... Fresh .....

Quality (hard, soft, contains iron, sulphur, etc.) .. hard .....

Appearance (clear, cloudy, coloured) ..... clear .....

For what purpose(s) is the water to be used? .. house .....

.....

How far is well from possible source of contamination? .. none .....

What is the source of contamination? .....

Enclose a copy of any mineral analysis that has been made of water .....

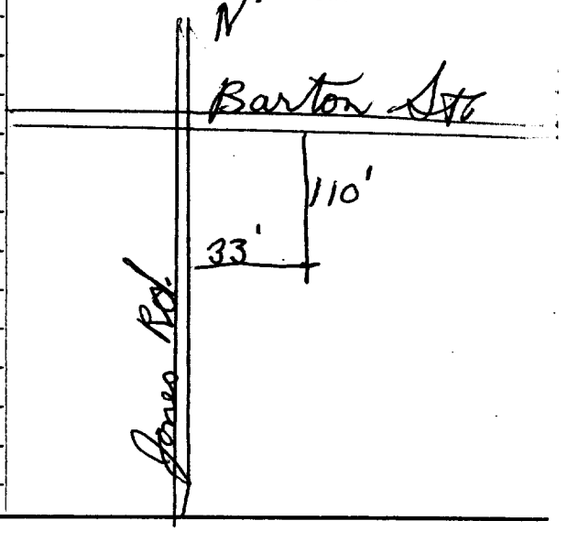
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
8 – 22	good	25 ft

Well Log

Overburden and Bedrock Record	From	To
Clay	0 ft.	4 ft.
R. Shale	4	28 ft

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Upland .....

Drilling Firm .. Sidney Merritt .....

Address .... R.R. 1 Smithville .....

Name of Driller .. Same ..... Address .....

Date ... Oct. 17 ..... 53 ..... Licence Number .. 172 .....

Sidney Merritt .....
Signature of Licensee

FORM 5

CSS.S8

No 13 – 1954

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Elev. | 9 | R | | | | | 11

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RECEIVED 68
JAN 25 1955
GEOLOGICAL BRANCH
DEPARTMENT of MINES

№ 4535

ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted], ~~Village, Town or City~~ Saltfleet Twsp.
[redacted] own or City) Jones Side Rd. N. of No. 8 Hwy & S. of Barton St. E. R.R. #1 Fruitland
Date Completed 20 (day) May (month) 1954 (year) Cost of Well (excluding pump) Post Office Ontario

Pipe and Casing Record

Casing diameter(s) 7" casing
Length(s) of casing(s) 12 ft
Type of screen none X
Length of screen none X
Distance from top of screen to ground level none X
Is well a gravel-wall type? no it is not

Pumping Test

Date May 20 – 1954
Static level 2' feet 2'
Pumping level 21 ft. with 5" bailer test
Pumping rate 3 g.p.m. " " " " "
Duration of test 1 hour & 5" bailer test only
Distance from cylinder or bowls to ground level We did not install pumping unit.

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) fairly hard
Appearance (clear, cloudy, coloured) very clear
For what purpose(s) is the water to be used? Domestic uses in the home wash + bathroom facilities later
How far is well from possible source of contamination? 27 ft. 27'
What is the source of contamination? Septic tank + latterals
Enclose a copy of any mineral analysis that has been made of water

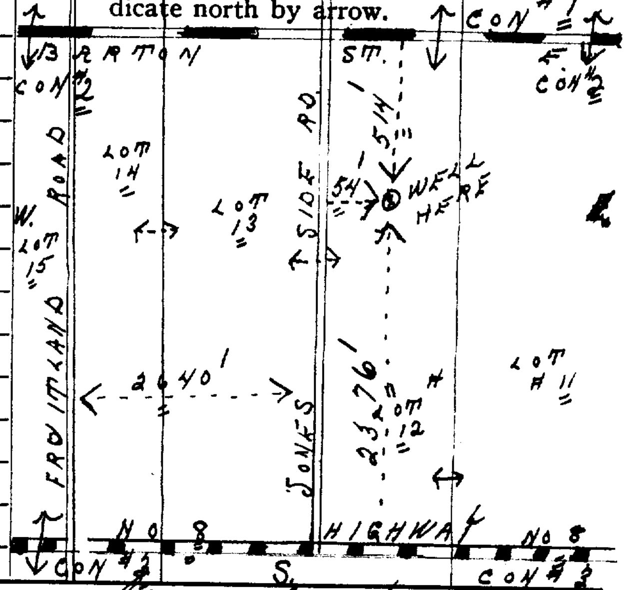
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
21 ft	fresh	19 ft

Well Log

Overburden and Bedrock Record	From	To
Very dark loam	0 ft.	6" ft.
Brown clay	6"	1 ft
Red clay little stone together	1'	8'
Red Shale bedrock contains hardy + soft streaks light + dark layers of red shale	8'	24

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Well is on the upland
Drilling Firm R. C. Embleton + Son Well Drillers Phone Hannon 28R5
Address R.R. #2 Hamilton Ont. P.O. Res. 2nd St. E. Mt. Albion Village
Name of Driller Mr. Robert Embleton Address R.R. #2 Hamilton Ontario
Date May 20 – 1954 Licence Number #505

Robert W. Embleton
Signature of Licensee

Form 5

CSS.S8

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Elev. 9 R | | | |

Basin 24 | | | |

The Well Drillers Act

Department of Mines, Province of Ontario

68 № ~~4536~~ 37

ONTARIO

Water Well Record

[redacted], ~~Village, Town or City~~ Saltfleet Twsp.
own or City) Jones Side Rd. of Barton St.
R.R.#1 Fruitland Ontario

Date Completed 23 June 1954 (day) (month) (year) Cost of Well (excluding pump) Post Office

Pipe and Casing Record

Casing diameter(s) 6" casing

Length(s) of casing(s) 12' feet

Type of screen none

Length of screen none

Distance from top of screen to ground level none

Is well a gravel-wall type? no it is not

Pumping Test

Date June 22-1954

Static level 3' feet

Pumping level 14' ft on 4" bailer test 16 ft long

Pumping rate 5 g.p.m. displacement pump pumping

Duration of test 12 hours E level

Distance from cylinder or bowls to ground level We did not install pumping unit

Water Record

Kind (fresh or mineral) fresh

Quality (hard, soft, contains iron, sulphur, etc.) not too hard

Appearance (clear, cloudy, coloured) very clear

For what purpose(s) is the water to be used? Domestic uses in the home, wash & bathroom facilities later

How far is well from possible source of contamination? 25 feet

What is the source of contamination? septic tank & latterals etc

Enclose a copy of any mineral analysis that has been made of water

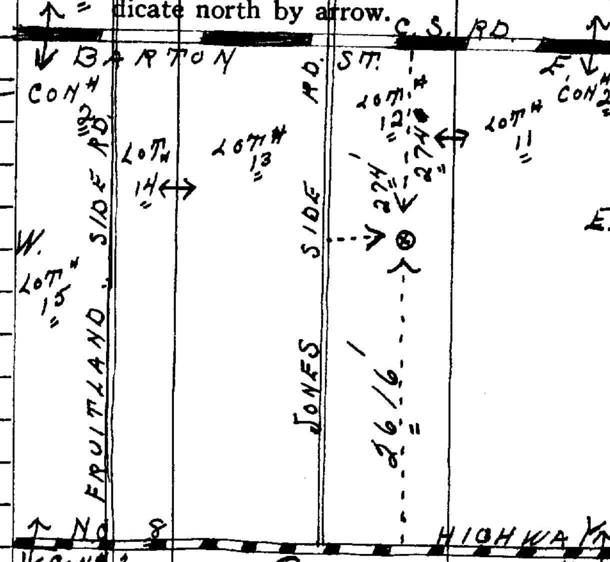
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
22" ft	fresh	19' ft
Will supply shallow well pumping system with a constant flow		

Well Log

Overburden and Bedrock Record	From	To
Dark clay loam	~~0~~ ft.	6" ft.
Brown clay	6"	1 ft
Mixture red & grey clays	1'	2'
Red clay	2'	9'
Red Shale Bed-rock	9	25

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Well is on the upland

Drilling Firm R. Embleton & Son Well Drillers Phone #9 Hannon 28 R 5

Address P.O. R.R. #2 Hamilton Ontario Res. Mud St. E. Mt. Albion Village

Name of Driller Mr. Robert Embleton Address R.R. #2 Hamilton Ont.

Date June 23/1954 Licence Number #505

Robert W. Embleton
Signature of Licensee

Form 5

CSS.S8

UTM Z E
9 R N
Elev. 4 R
Basin 24

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

GROUND WATER BRANCH
68 No. 4537
MAY 27 1958
ONTARIO WATER RESOURCES COMMISSION

WAM

Water-Well Record

County or Territorial District Wentworth
Township, Village, Town or City Saltfleet Twp.
Village, Town or City Jones Road, Fruitland, Ont.
Address R. R. #2, Fruitland, Ont.
Date completed
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) 12'
Type of screen
Length of screen

Pumping Test

Static level 7'
~~Pumping~~ rate ½ gal per min
Pumping level
Duration of test Can be bailed down to 32'

Well Log

Overburden and Bedrock Record	From ft.	To ft.
Brown clay	0	2
Red clay	2	5
Red shale	5	32

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
31'	25	Fresh

WAM

For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside? upland

Drilling firm H. W. Comfort
Address 14 Lorman Ave
Stoney Creek Ont.
Name of Driller as above.
Address

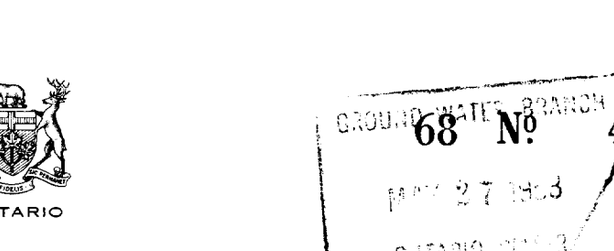
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date May 13/58 Howard W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z ____ E
9 R ____ N
Elev. 9 R ____
Basin 24
CON II
LOT 12

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

68 No 4538

GROUND WATER BRANCH
MAY 27 1958
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

County or Territorial District Wentworth
Township, Village, Town or City Saltfleet Twp.
[redacted] Village, Town or City Jones Rd., Fruitland
Address 2218 Ghent Ave., Burlington, Ont.
Date completed [redacted]
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) 10'
Type of screen —
Length of screen —

Pumping Test

Static level 8'
Pumping rate 600 G.P.H.
Pumping level 25
Duration of test 1 Hours

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brown clay	0	2	38	31	fresh
Red shale	2	39			

Water Record

For what purpose(s) is the water to be used? Domestic
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside? upland

Drilling firm H. W. Comfort
Address 14 Lorman Ave.
Stoney Creek Ont.
Name of Driller as above
Address

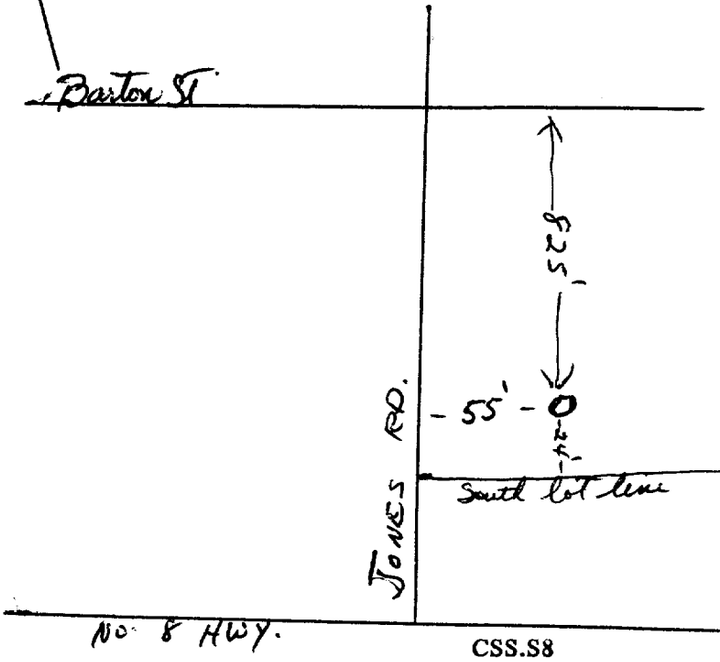
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date May 13/58 Howard W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z E
R N
Elev. R
Basin

ONTARIO

68 No 4540

RECEIVED
DEC 10 1951
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

County or Territorial District Wentworth Woodburn Saltfleet Township, ~~Village, Town or City~~ Saltfleet
Con. 2 Lot 13 Street and Number (if in Village, Town or City) Jones Rd
Owner [redacted] Address R.R. 1 Fruitland, Ont
Date Completed 29. 6. 1951 (day) Cost of Well (excluding pump) $ 106 dr wd

Pipe and Casing Record

Casing diameter(s) 6 1/4
Length(s) of casing(s) 12'
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type? No

Pumping Test

Date Sept 18 1951
Static level 12'
Pumping level 20'
Pumping rate 3 gal min
Duration of test 1/2 hour
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? household

How far is well from possible source of contamination? 35'
What is the source of contamination? septic tank
Enclose a copy of any mineral analysis that has been made of water

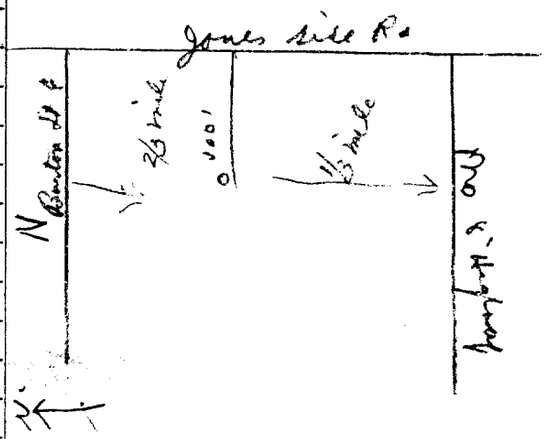
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
32	Good	20'

Well Log

Overburden and Bedrock Record	From	To
Red clay	0 ft.	10 ft.
Red shale.	10.	32

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm A. Gee
Address 55 aspen
Name of Driller A. Gee Address
Date Sept 18 1951 Licence Number A. Gee
Signature of Licensee

FORM 5

CSS 58

UTM Z E
R N
Elev. R
Basin 24

14

ONTARIO

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AUG 24 1953
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No. 4541

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted], ~~Village, Town or City~~ Saltfleet

~~own or City~~) Fruitland

Date Completed 8 (day) June (month) 1953 (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 6 4
Length(s) of casing(s) 11 ft
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date June 8
Static level 2
Pumping level empty
Pumping rate 250 gal hour
Duration of test
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) Fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? house
How far is well from possible source of contamination? none
What is the source of contamination?
Enclose a copy of any mineral analysis that has been made of water

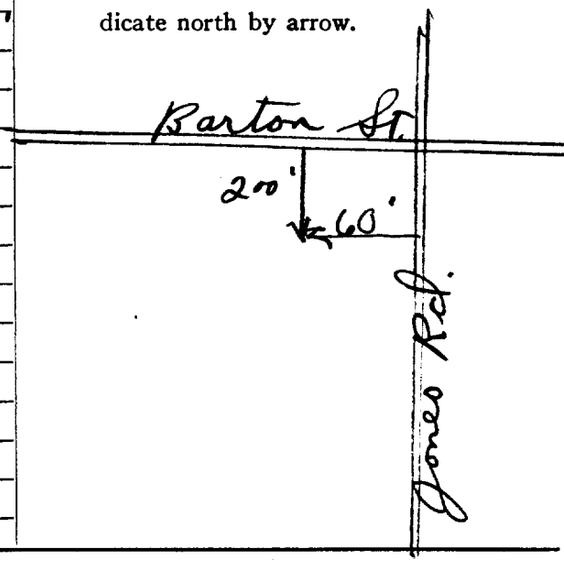
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
15-24	good	27'

Well Log

Overburden and Bedrock Record	From	~~To~~
clay	0 ft.	8 ft.
R. B shale	8'	29'

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Upland

Drilling Firm Sidney Merritt Jr.

Address RR 1 Smithville

Name of Driller Lance Address 172

Date Aug 20 1953 Licence Number 172

Sidney Merritt Jr.
Signature of Licensee

FORM 5

UTM Z ____ E ____
9 R ____ N ____
Elev. 9 R ____ 15
Basin A 2 9 1
Lot 13

ONTARIO

The Water-well Drillers Act, 19
Department of Mines

68 No 4542

BW

Water-Well Record

County or ~~Territorial District~~ Wentworth Township, ~~Village, Town or City~~ Saltfleet
Village, Town or City) Jones Road
[redacted] ddress 97 Maple Ave., Hamilton
Date completed ____ (day) ____ (month) ____ (year)

Pipe and Casing Record

Casing diameter(s) 5½"
Length(s) 14' 6"
Type of screen
Length of screen

Pumping Test

Static level 15 feet
Pumping rate 2 gals. per min.
Pumping level cant be baited down
Duration of test

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brown Sandy loam	0	2			
Red shale	2	52	42	37	fresh

Water Record

For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside? upland

Drilling firm H. W. Comfort
Address 14 Gorman Ave.
Stoney Creek Ont.
Name of Driller H. W. Comfort
Address 14 Gorman Ave.
Stoney Creek Ont.
Licence Number 1026

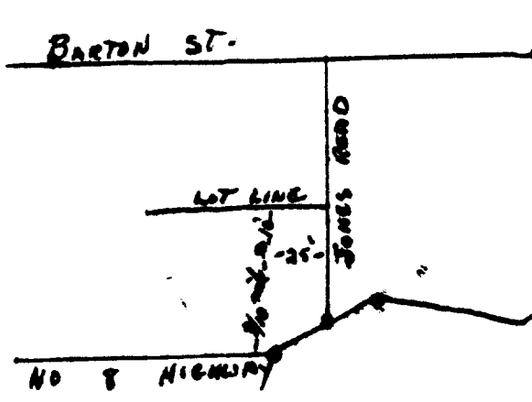
I certify that the foregoing statements of fact are true.

Date FEB. 9/56 Howard W. Comfort
Signature of Licensee

BW

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

UTM Z E
9 R N
Elev. 9 R
Basin 12 4

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

68 No 4543

GROUND WATER BRANCH
MAY 27 1958
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

[redacted] Wentworth ...hip, Village, Town or City Saltfleet Twp.
...n Village, Town or City) Cor. Barton St. & Jones Rd., Fruitland
Address R. R. #2, Fruitland, Ont.

Date completed 22nd; April; 1958
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6"
Length(s) 19'
Type of screen —
Length of screen —

Pumping Test

Static level 7'
Pumping rate ½ gal per min.
Pumping level Can be bailed down
Duration of test 1½ hrs. 40 feet

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brown clay	0	10	38'	33	Fresh
Red clay	10	18			
Red shale	18	40			

Water Record

For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside? upland

Drilling firm H. W. Comfort
Address 14 Carman Ave.
Stoney Creek, Ont.
Name of Driller as above
Address

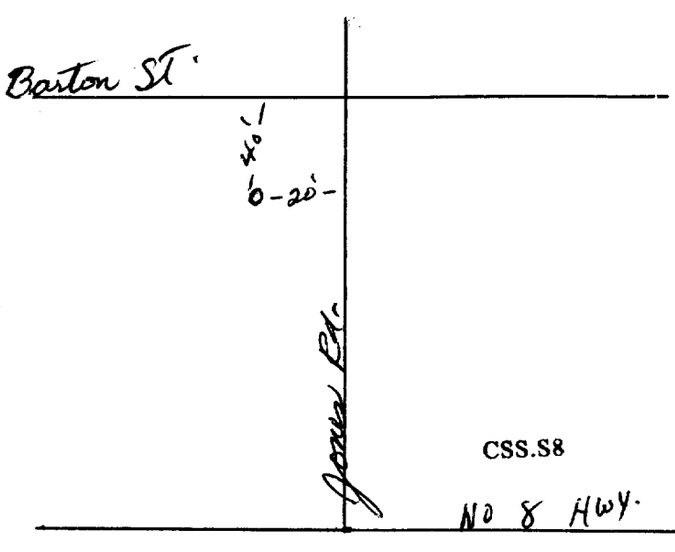
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date May 13/58 Howard W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z E
9 R N
Elev. 9 R 16
Basin 2 4

ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

68 No 4544

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MAY 15 1952
GEOLOGICAL BRANCH
DEPARTMENT of MINES

Water Well Record

[redacted], ~~Village, Town or City~~ Saltfleet Township
~~Town or City~~)
R.R. 1 Smithdale
Date Completed 10 (day) Sept (month) 1951 Cost of Well (excluding pump) Nearly dollars

Pipe and Casing Record

Casing diameter(s) 6 in
Length(s) of casing(s) 10 ft
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date Sept 10
Static level 10 ft
Pumping level bored pump at rate of
Pumping rate 2 gal per minute
Duration of test ½ hr
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? Domestic
How far is well from possible source of contamination? 75 ft
What is the source of contamination? Septic tank in rear
Enclose a copy of any mineral analysis that has been made of water

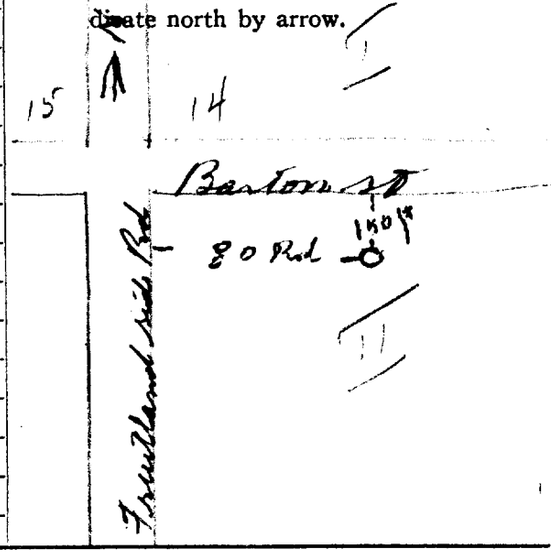
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
27 ft	fresh	17 ft

Well Log

Overburden and Bedrock Record	From	To
red clay	0 ft.	9 ft.
red & blue streaked shale	9	27

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm R.B. Clark
Address Mt. Hamilton P.O.
Name of Driller J. A. Cousens Address R.R. 3 - Hamilton
Date April 1. 52 Licence Number 63
R.B. Clark
Signature of Licensee

FORM 5

CSS.S8

UTM Z ____ E
9 R ____ 7 N
Elev. 9 R ____
Basin 24 ____

ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

68 No. 4515

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MAY 15 1952
GEOLOGICAL BRANCH
DEPARTMENT of MINES

Water Well Record

[redacted], ~~Village, Town or City~~ Hallfield Township
own or City)
R R - 1 - Trumbull
Date Completed 14 (day) Sept (month) 1951 (year). Cost of Well (excluding pump) Ninety dollars

Pipe and Casing Record

Casing diameter(s) 6 ¼
Length(s) of casing(s) 12 ft
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date Sept 14
Static level 8 ft
Pumping level would make about 2 gals p.m
Pumping rate
Duration of test ½ hr
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured)
For what purpose(s) is the water to be used? Domestic

How far is well from possible source of contamination? None at time of
What is the source of contamination? drilling
Enclose a copy of any mineral analysis that has been made of water

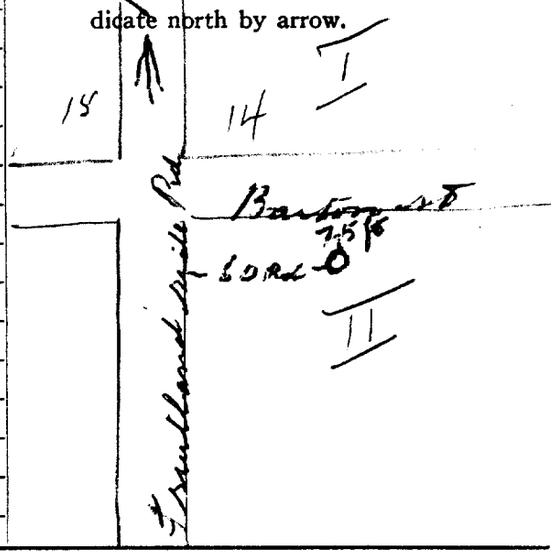
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
[redacted]	[redacted]	[redacted]
27	fresh	19 ft

Well Log

Overburden and Bedrock Record	From	To
red clay	0 ft.	12 ft.
red & blue stone & shale	12	27

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm R. B. Clark
Address Mt. Hamilton P.O.
Name of Driller W. Stevens Address R R - 3 - Hannon
Date April 14 Licence Number 63
R. B. Clark
Signature of Licensee

FORM 5

CSS.S8

UTM Z E

R N

Elev. R 0

Basin 2 A

ONTARIO

The Water-well Drillers Act, 1954

Department of Mines

Water-Well Record

[redacted] hip, Village, Town or City Saltfleet

n Village, Town or City)

Address #8 Highway, Fruitland, Ont.

Date completed 17 June 58
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 6¼"

Length(s) 20' 6"

Type of screen —

Length of screen —

Pumping Test

Static level 11½'

Pumping rate 90 g.p.h.

Pumping level 36½'

Duration of test 1 hour

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Black top soil	0'	1'			
Red clay	1'	18'			
Red shale	18'	40½	38	29'	Fresh

For what purpose(s) is the water to be used?

Domestic

Is water clear or cloudy? Clear

Is well on upland, in valley, or on hillside?

upland

Drilling firm George J. Walls

Address pk #5

Hamilton

Name of Driller Same

Address

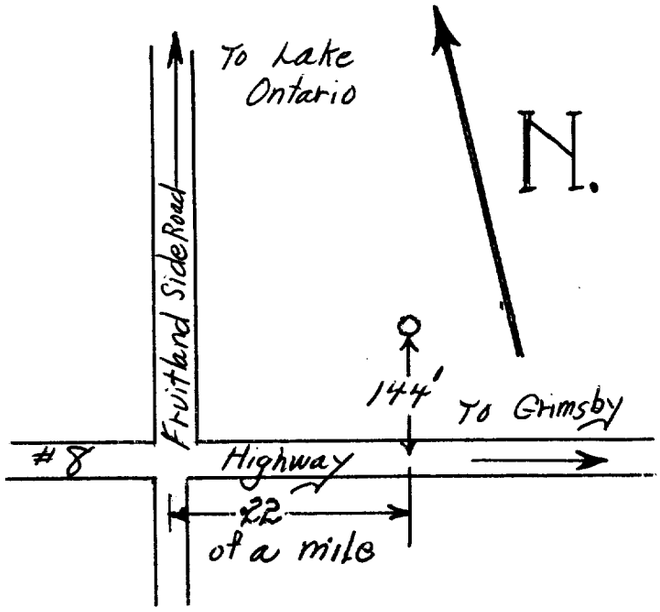
Licence Number 1098

I certify that the foregoing statements of fact are true.

Date June 17/58 George J. Walls
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 24 111
Lot 5

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

68 No. 4722

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DEC 27 1956
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

Water-Well Record

County or ~~Territorial District~~ Wentworth Township, ~~Village, Town or City~~ Saltfleet
Village, Town or City) Vinemount Ont.
[redacted]ddress 484 Main St. E., Hamilton Ont.
Date completed [redacted]
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 5"
Length(s) 31'
Type of screen
Length of screen

Pumping Test

Static level 26'
Pumping rate 9 Gals. per min.
Pumping level 42'
Duration of test ½ hour.

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brown clay	0	15			
Blue clay	15	30			
Brown Limestone	30	52	35' (insufficient)		
White limestone	52	80	78'	54'	Fresh

Water Record

For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? Clear
Is well on upland, in valley, or on hillside? Upland

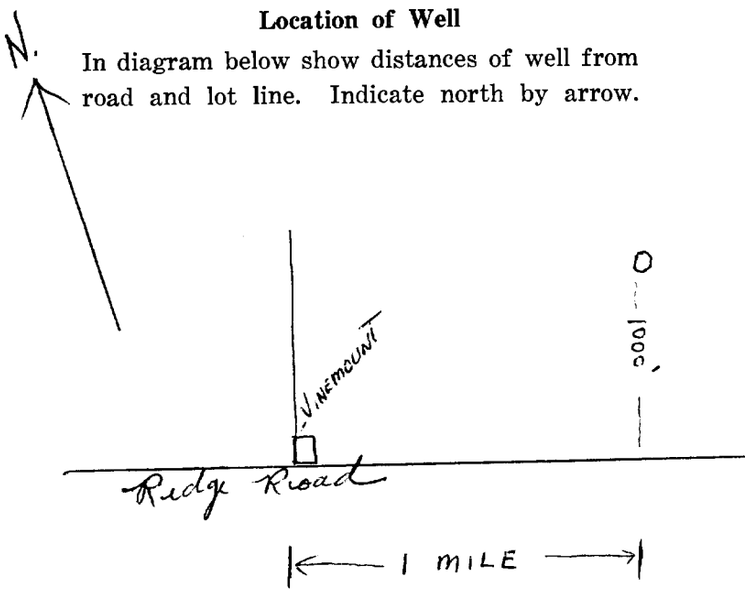
Drilling firm H.W.Comfort
Address 14 Corman Ave.
Stoney Creek Ont.
Name of Driller H.W.Comfort
Address 14 Corman Ave.,
Stoney Creek Ont.
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date Dec. 1/56 Howard W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.58

Form 5

UTM Z ____ E ____
5 R ____ N ____
Elev. 74 R ____
Basin 29 ____

The Ontario Water Resources Commission Act, 1957

WATER WELL RECORD

County or District Wentworth Township, Village, Town or City SALTFLEET

[redacted] completed 28 (day) JULY (month) 1961 (year)

[redacted]ress VINEMOUNT P.O.

Casing and Screen Record

Inside diameter of casing 6¼ in
Total length of casing 34 ft
Type of screen nil
Length of screen nil
Depth to top of screen nil
Diameter of finished hole 6¼ in

Pumping Test

Static level 33 ft
Test-pumping rate 3 G.P.M.
Pumping level 50 ft
Duration of test pumping 1 hr.
Water clear or cloudy at end of test clear
Recommended pumping rate 3 G.P.M.
with pumping level of 50 ft

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
topsoil	0	2			
brown clay	2	20			
blue clay	20	33			
limestone	33	72	72	39	fresh

Water Record

For what purpose(s) is the water to be used?
household

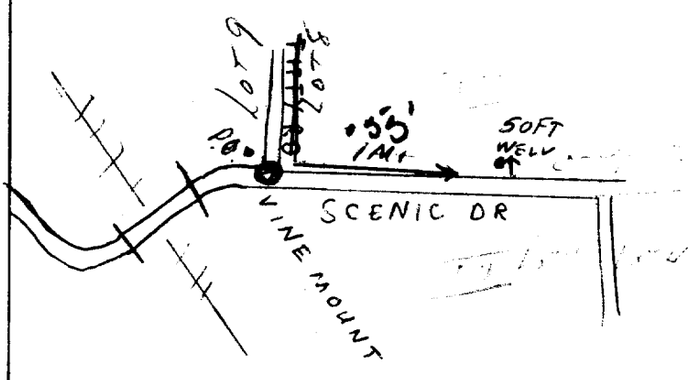
Is well on upland, in valley, or on hillside?
upland

Drilling Firm W.E. Scriven
Address Box 85 RR3 Hannon

Licence Number 170
Name of Driller SAME
Address
Date Jan 8/62
W.E. Scriven
(Signature of Licensed Drilling Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.58

UTM E

R N

Elev. R

Basin

68 No 4724

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District Wentworth Township, Village, Town or City Saltfleet

Con. 3 Lot 16 Date completed 13 (day) Nov. (month) 67 (year)

[redacted] ress Vinemount ont.

Casing and Screen Record

Inside diameter of casing 6 in.

Total length of casing 28 ft.

Type of screen —

Length of screen —

Depth to top of screen —

Diameter of finished hole 5 5/8 in.

Pumping Test

Static level 38 ft.

Test-pumping rate 3 G.P.M.

Pumping level 60 ft.

Duration of test pumping 1 hr.

Water clear or cloudy at end of test clear.

Recommended pumping rate 2 G.P.M.

with pump setting of 65 feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Brown clay	0.	18		
Blue clay	18.	27.	32 and 64 ft.	
Gray limestone	27.	67.		Fresh.

For what purpose(s) is the water to be used? Home

Is well on upland, in valley, or on hillside? upland.

Drilling or Boring Firm Frank Merritt.

Address RR 1 Smithville ont.

Licence Number 2628

Name of Driller or Borer

Address Same as above.

Date Jan. 17/68

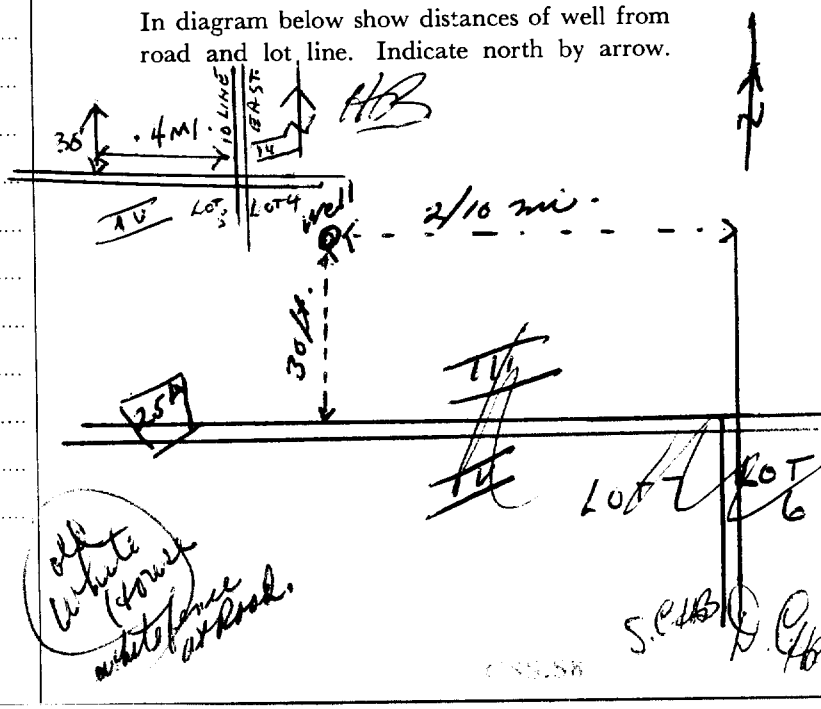
Frank Merritt.
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M-60-4138

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



UTM Z ____ E ____
9 R ____ N ____
Elev. 9 R ____
Basin 2 4 ____
Con III
Lot 7

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

RECEIVED
OCT 15 1956
GEOLOGICAL BRANCH
DEPARTMENT of MINES

No. 4725

Water-Well Record

County [redacted] Wentworth Township, Village, Town or City) Salt/fleet Vinemount

Address 148 Rogers Road Hamilton Ont.

Date completed [redacted]
(day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 5"
Length(s) 32'
Type of screen
Length of screen

Pumping Test

Static level 36'
Pumping rate 600 Gals. Per Hour
Pumping level 48'
Duration of test 1 hour

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brownclay	0	15	88'	53'	fresh
Brown clay & boulders	15	18			
Blue clay	18	30			
Brown limestone	30	50			
White limestone	50	88			
Green shale	88	89			

Water Record

BW

For what purpose(s) is the water to be used?
domestic
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside? upland

Drilling firm H.W. Comfort
Address 14 Corman Ave. Stoney Creek Ont.

Name of Driller H.W. Comfort
Address 14 Corman Ave. Stoney Creek Ont.

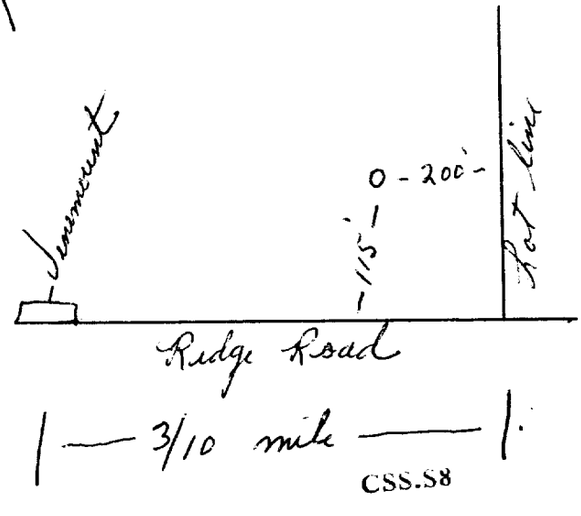
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date Sept. 14/56. Howard W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

Form 5

UTM Z E
R N
Elev. 4 R
Basin 24

68 No 4726

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District Wentworth
Con III Lot 7 & 8
Township, Village, Town or City Saltfleet
Date completed 17 (day) July (month) 67 (year)
[redacted] ess P.O. Box Vinemount Ont.

Casing and Screen Record

Inside diameter of casing 6 1/4"
Total length of casing 31'-3"
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 6 1/4"

Pumping Test

Static level 33'
Test-pumping rate 1 3/4 G.P.M.
Pumping level 60'
Duration of test pumping 1 hour
Water clear or cloudy at end of test Clear.
Recommended pumping rate 1 1/2 G.P.M.
with pump setting of 65 feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Br Clay	0	9		
Grey Clay	9	29		
Grey Limestone	29	70	67	Fresh.

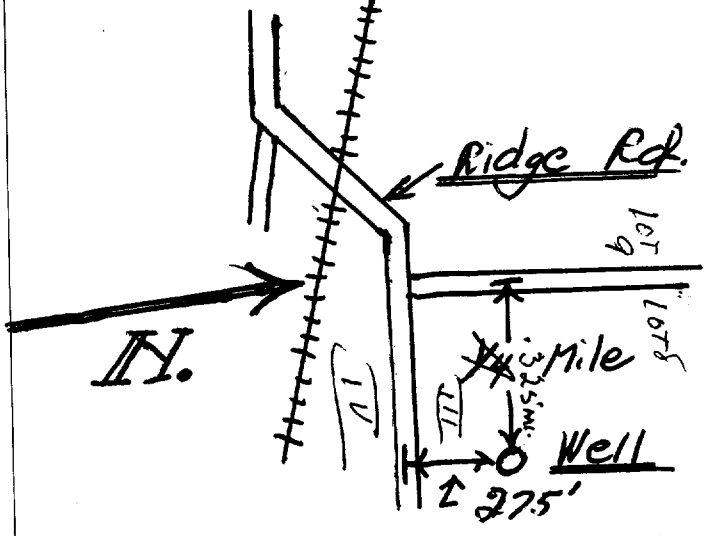
For what purpose(s) is the water to be used? Poultry, farm Spraying & Home
Is well on upland, in valley, or on hillside? Upland
Drilling or Boring Firm C. J. Wallis
Address RR#2 Stoney Creek
Licence Number 2635
Name of Driller or Borer Same
Address
Date July 21/67
George J Wallis
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M-60-4138

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

UTM Z E
5 R N
Elev. 4 R
Basin 24

68 No 4727

GROUND WATER BRANCH
JAN 18 1960
ONTARIO WATER RESOURCES COMMISSION

The Ontario Water Resources Commission Act, 1957

WATER WELL RECORD

County or District Wentworth Township, ~~Village, Town or City~~ Saltfleet

[redacted] completed 20 (day) 6 (month) 59 (year)

[redacted]ress Winona

Casing and Screen Record

Inside diameter of casing 5"
Total length of casing 35'
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 5"

Pumping Test

Static level 25'
Test-pumping rate 1 G.P.M.
Pumping level 50'
Duration of test pumping 30 min.
Water clear or cloudy at end of test clear
Recommended pumping rate 1 G.P.M.
with pumping level of 50'

Well Log

Overburden and Bedrock Record	From ft.	To ft.
Clay	0'	35'
Red Shale	35'	59'

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
DCO		
36' 59	34'	Fresh

For what purpose(s) is the water to be used?
House

Is well on upland, in valley, or on hillside?
Hillside

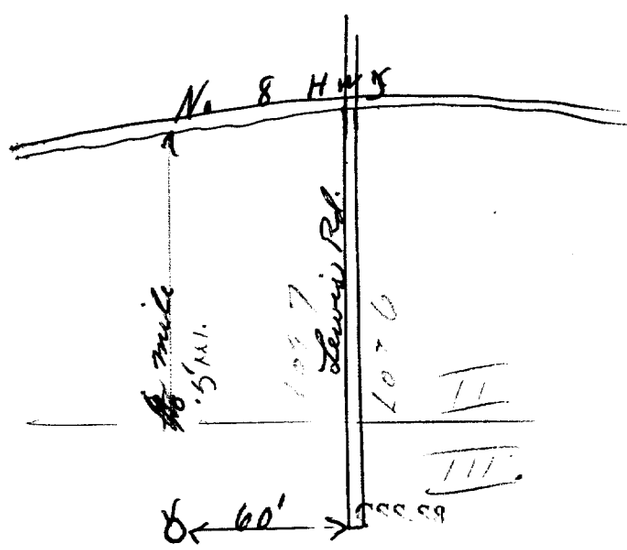
Drilling Firm Frank Merritt
Address R. R. 1, Smithville, Ont.

Licence Number 705
Name of Driller Frank Merritt
Address R. R. 1, Smithville, Ont.
Date Dec 14/59

Frank Merritt
(Signature of Licensed Drilling Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5
15M-58-4149

UTM | | Z | | | | | | | E
| 9 | R | | | | | | | | N
Elev. | 9 | R | | | | | 6
Basin | 2 | 4 | | | 6

ONTARIO

RECEIVED
JAN - 5 1954
GEOLOGICAL BRANCH
DEPARTMENT of MINES

68 No. 4728

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted] p, ~~Village, Town or City~~ Salfleet

Town or City)

s Vinemount

Date Completed 30 Oct 1953 (day) (month) (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 5 5/8

Length(s) of casing(s) 5 ft

Type of screen

Length of screen

Distance from top of screen to ground level

Is well a gravel-wall type?

Pumping Test

Date Oct 30

Static level 25'

Pumping level 35

Pumping rate 600 gal hour

Duration of test

Distance from cylinder or bowls to ground level

Water Record

AS=7

Kind (fresh or mineral) Fresh

Quality (hard, soft, contains iron, sulphur, etc) hard

Appearance (clear, cloudy, coloured) clear

For what purpose(s) is the water to be used? house

How far is well from possible source of contamination? none

What is the source of contamination?

Enclose a copy of any mineral analysis that has been made of water

Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
30'-60'	good	

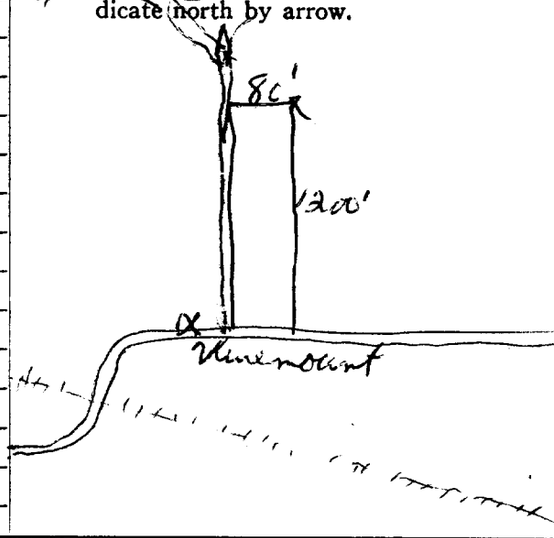
Well Log

Overburden and Bedrock Record	From	To
Clay & Shale	0 ft.	5 ft.
Rock (limestone)	5'	72'

Location of Well

Mountain

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Upland

Drilling Firm Archey Merritt

Address R.R.1 Smithville

Name of Driller Frank Merritt Address R.R.1 Smithville

Date Jan 1 1954 Licence Number 172

Archey Merritt Jr.
Signature of Licensee

FORM 5

CSS.58

UTM Z E

9 R N

Elev. Corp III

Basin Lot 249

The Ontario Water Resources Commission Act

WATER WELL RECORD

GROUND WATER BRANCH 4729
JUN 24 1963
ONTARIO WATER

County or District Wentworth Township, Village, Town or City Saltfleet

Con. 3 Lot to 9 Date completed 18 (day) 4 (month) 63 (year)

[redacted] dress Vinemount RR 0 AS=2

Casing and Screen Record

Inside diameter of casing 6 1/4

Total length of casing 43 ft

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 6"

Pumping Test

Static level 36 ft

Test-pumping rate 16 G.P.M.

Pumping level 39 ft

Duration of test pumping 1 hr

Water clear or cloudy at end of test clear

Recommended pumping rate 5 G.P.M.

with pump setting of 45 ft feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
B. clay	0	14	5 ft	fresh
blue clay	14	43		
Gray rock limestone RCO	43	51		

For what purpose(s) is the water to be used?

Domestic

Is well on upland, in valley, or on hillside? upland

Drilling or Boring Firm

S Gill

Address 55 alpine av Hamilton

Licence Number 663

Name of Driller or Borer B Lewis

Address 78 Arkledun ave Ham

Date 4. 6. 63

S Gill

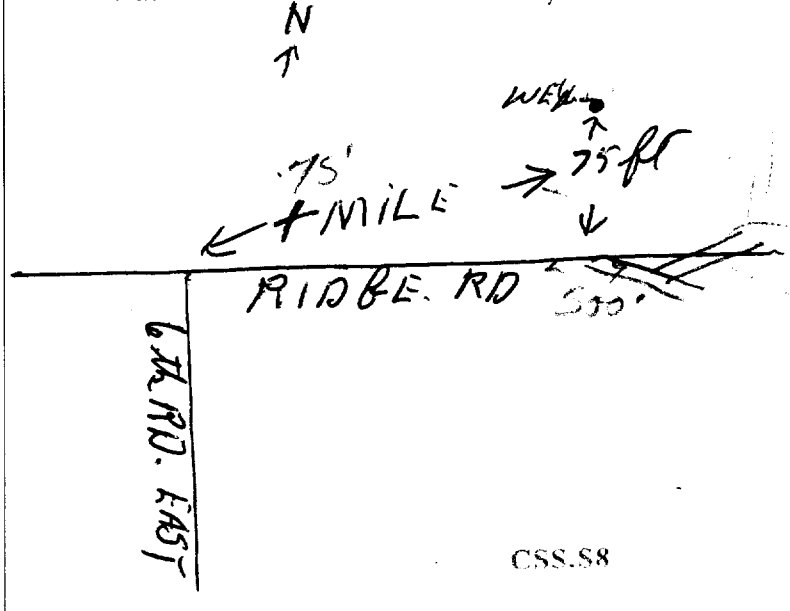
(Signature of Licensed Drilling or Boring Contractor)

Form 7 10M-62-1152

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

UTM Z E
9 R N
Elev. 9 R
Basin 214
lot 12

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

68 No. 4720

RECEIVED
JUL 6 1956
GEOLOGICAL BRANCH
DEPARTMENT of MINES

Water-Well Record

County or ~~Territorial District~~ Wentworth Township, ~~Village, Town or City~~ Saltfleet
[redacted] Village, Town or City) R.R.#1 Vinemount
[redacted] Address R.R. 1 Vinemount
Date completed ..... (day) (month) (year)

Pipe and Casing Record

Casing diameter(s) 5½"
Length(s) 51'
Type of screen
Length of screen

Pumping Test AS=7

Static level 40'
Pumping rate 10 gal per min
Pumping level 50'
Duration of test ½ hour

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Brown clay & Boulders	0	20	70'	32'	fresh
Blue clay	20	49			
Brown limestone	49	72			

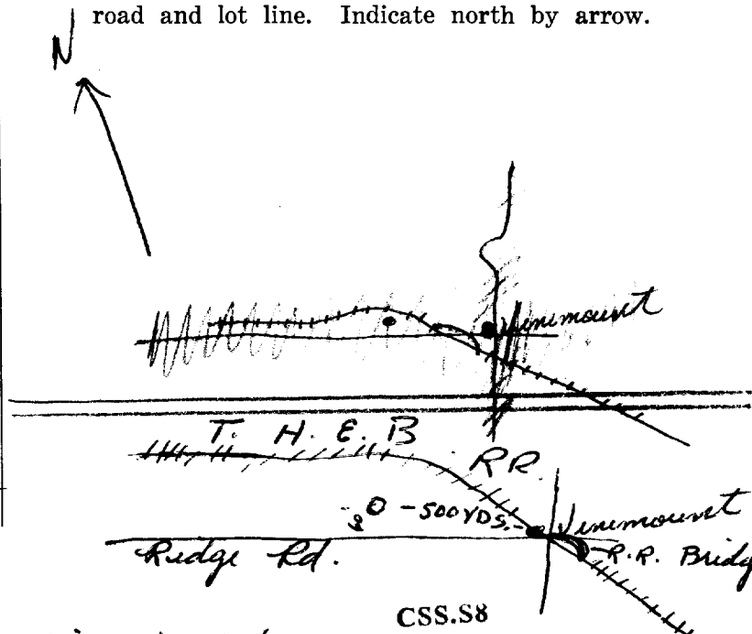
For what purpose(s) is the water to be used?
Domestic
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside?
upland
Drilling firm H. W. Comfort
Address Box 248
Stoney Creek Ont
Name of Driller H. W. Comfort
Address Box 248
Stoney Creek Ont
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date May 9/56 H. W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and line. Indicate north by arrow.



CSS.S8

Well is located 500 yds west of R.R Bridge & 60 feet from road on north side

Form 5

UTM Z E
5 R N
Elev. 4 R
Basin 24
CON III
LOT 11

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

GROUND WATER BRANCH
DEC 9 1958
ONTARIO WATER RESOURCES COMMISSION

68 No. 1731

Water-Well Record

County or ~~Territorial District~~ WENTWORTH Township, ~~Village, Town or City~~ SALTFLEET
Con 3 PART Lot 11 Street and Number (if in Village, Town or City) RIDGE ROAD
Owner [redacted] Address 387 East 43rd St. Hamilton Ont.
Date completed 22 (day) Nov. (month) 1958 (year)

Pipe and Casing Record

Casing diameter(s) 6 1/4
Length(s) 35'
Type of screen —
Length of screen —

Pumping Test AS-6

Static level 30'
Pumping rate 1000 G.P.H.
Pumping level 40'
Duration of test 1 HR.

Well Log

Overburden and Bedrock Record	From ft.	To ft.
BROWN CLAY & SMALL STONES	0	18
BLUE CLAY	18	33
BROWN LIMESTONE	33	52
WHITE LIMESTONE	52	67

Water Record

Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
65	37	FRESH

For what purpose(s) is the water to be used?
DOMESTIC
Is water clear or cloudy? CLEAR
Is well on upland, in valley, or on hillside? UPLAND

Drilling firm H. W. COMFORT
Address 137 CORMAN AVE
P.O. BOX 248 STONEY CREEK
Name of Driller
Address SAME AS ABOVE

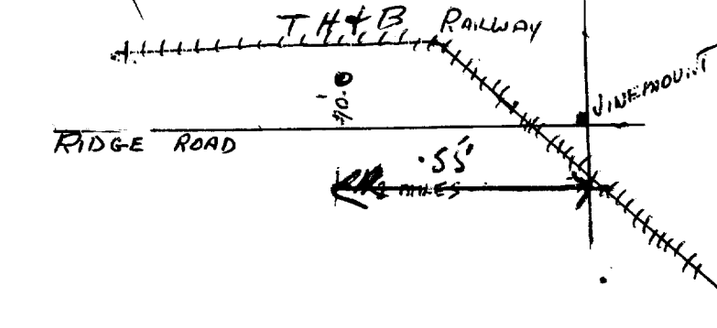
Licence Number 1026

I certify that the foregoing statements of fact are true.

Date DEC 6/58 Howard W. Comfort
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

CSS.S8

UTM | Z | E
5 R | N (Con III, Lot 12)
Elev. 4 R
Basin 24

68 № 4733

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District: Wentworth
Township, Village, Town or City: Saltfleet
Con. 3 Lot 12
Date completed: 30 (day) April (month) 66 (year)
[redacted]dress: Jones Rd. Stoney Creek

Casing and Screen Record

Inside diameter of casing: 6 ¼ in
Total length of casing: 58 ft.
Type of screen: —
Length of screen: —
Depth to top of screen: —
Diameter of finished hole: 6 ¼ in.

Pumping Test

Static level: 6 ft.
Test-pumping rate: ¾ G.P.M.
Pumping level: 65 ft.
Duration of test pumping: 2 hrs
Water clear or cloudy at end of test: clear
Recommended pumping rate: ¾ G.P.M.
with pump setting of 68 feet below ground surface

Well Log / Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
Brown clay	0	20	62	Fresh
Clay and Gravel	20	55		
Red shale	55	72		

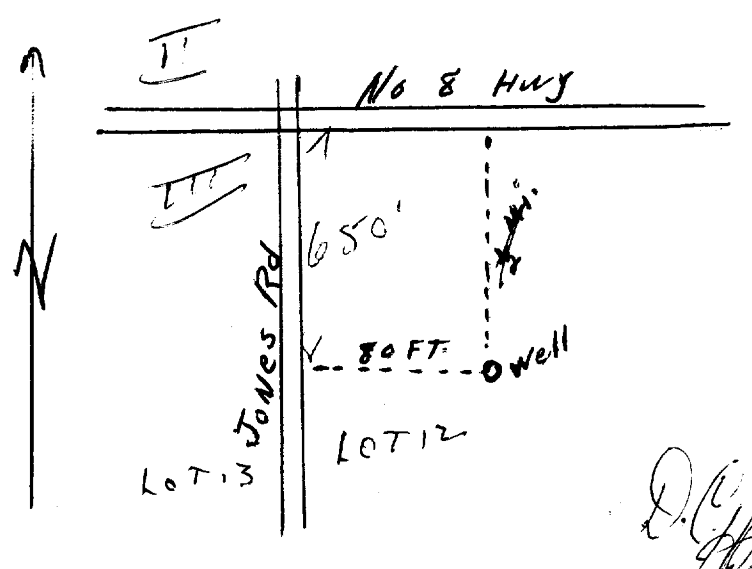
For what purpose(s) is the water to be used? House
Is well on upland, in valley, or on hillside? upland
Drilling or Boring Firm: Frank Merritt
Address: RR 1 Smithville
Licence Number: 2122
Name of Driller or Borer:
Address: April 30/66
Date:
Frank Merritt
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M-60-4138

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

UTM | | Z | | | | | | E
| 5 | R | | | | | | | N
Elev. 604 R IV
Basin 60 T 21 9

The Ontario Water Resources Commission Act

WATER WELL RECORD

WATER RESOURCES DIVISION
68 No. 4854
AUG 30 1965
ONTARIO WATER RESOURCES COMMISSION

B

County or District West
Township, Village, Town or City Saltfleet
Con. IV Lot 10
Date completed 19 (day) 8 month 65 year
[redacted] ress Stoney Creek

Casing and Screen Record

Inside diameter of casing 6 5/4
Total length of casing 46 ft
Type of screen
Length of screen
Depth to top of screen
Diameter of finished hole 6"

Pumping Test

Static level 49 ft
Test-pumping rate 10 G.P.M.
Pumping level 65
Duration of test pumping 1 hr
Water clear or cloudy at end of test cloudy
Recommended pumping rate 5 G.P.M.
with pump setting of 60 feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Dug well	0	28	65 ft	fresh
& clay	28	52	75	
rock	52	77		

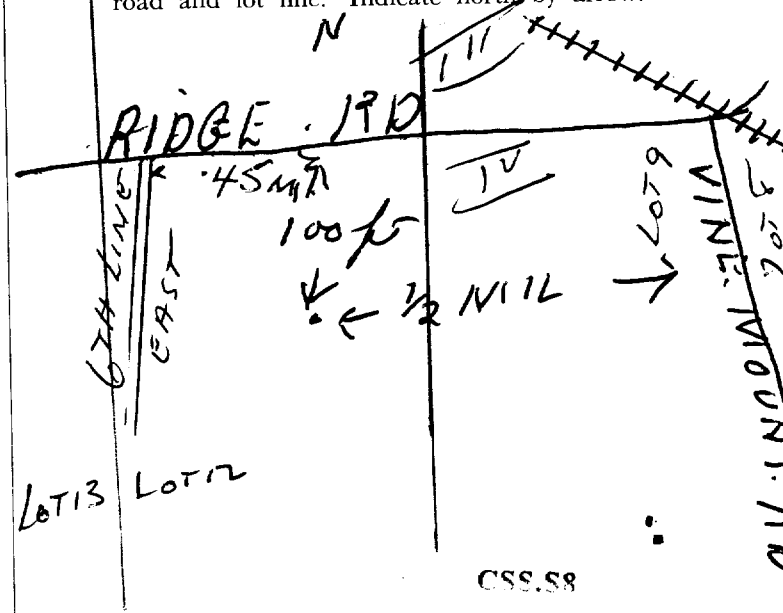
For what purpose(s) is the water to be used?
Domestic
Is well on upland, in valley, or on hillside? upland
Drilling or Boring Firm J Gill
Address 545 alpine Ave Hdm
Licence Number 38
Name of Driller or Borer R Lewis
Address 78 Appledorn Ave
Date 8.28.65
J Gill
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M-60-4138

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



UTM Z E N

Elev. R

Basin 24

The Ontario Water Resources Commission Act

WATER WELL RECORD

DIVISION

JUN 19 1967

68 No 1654855

ONTARIO WATER RESOURCES COMMISSION

County or District WENTWORTH Township, Village, Town or City SALTFLEET

Con. IV Lot 10 Date completed 7 (day) MAY (month) 1967 (year)

[redacted] R.R.1 ress VINE MOUNT

Casing and Screen Record

Inside diameter of casing 6 1/4

Total length of casing 40'

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 6 1/4

Pumping Test

Static level 20'

Test-pumping rate 5 G.P.M.

Pumping level 35'

Duration of test pumping 2 HRS.

Water clear or cloudy at end of test CLEAR

Recommended pumping rate 5 G.P.M.

with pump setting of 47' feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
TOP SOIL	0	2		
BROWN CLAY	2	22		
BLUE "	22	38		
LIMESTONE	38	50	47	FRESH

For what purpose(s) is the water to be used? House

Is well on upland, in valley, or on hillside? upland

Drilling or Boring Firm E. CONSTABLE

Address 184 25 ST E. HAMILTON

Licence Number 2637

Name of Driller or Borer SAME

Address

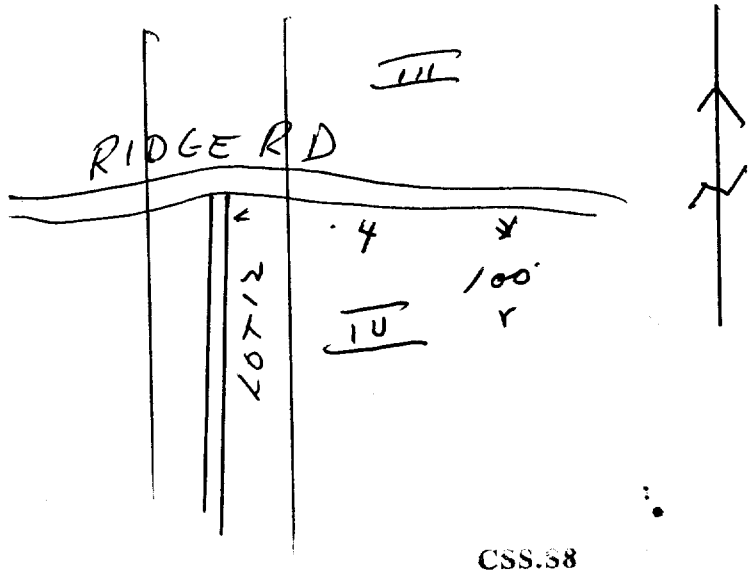
Date JUNE 14/67

Ernest Constable

(Signature of Licensed Drilling or Boring Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 7 15M-60-4138

OWRC COPY

CSS.58

UTM Z ____ E ____
5 R ____ N ____
Elev. 4 R ____
Basin 24 ____

The Ontario Water Resources Commission Act

WATER WELL RECORD

GROUND WATER BRANCH
AUG 27 1962
No 4856
ONTARIO WATER RESOURCES COMMISSION

County or District Wentworth
Township, Village, Town or City Saltfleet
Con. 4 Lot 11
Date completed 30 (day) April (month) 62 (year)
[redacted]dress 224 Holton St. S. Hamilton

Casing and Screen Record

Inside diameter of casing 6¼"
Total length of casing 24'-4"
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 6¼"

Pumping Test

Static level 18'
Test-pumping rate 25 G.P.M.
Pumping level 31
Duration of test pumping 45 min
Water clear or cloudy at end of test clear
Recommended pumping rate 5 G.P.M.
with pump setting of 36' feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Light Br. Clay	0'	15'		
Grey Clay	15'	23'		
Grey Limestone	23'	41'	40'	Fresh

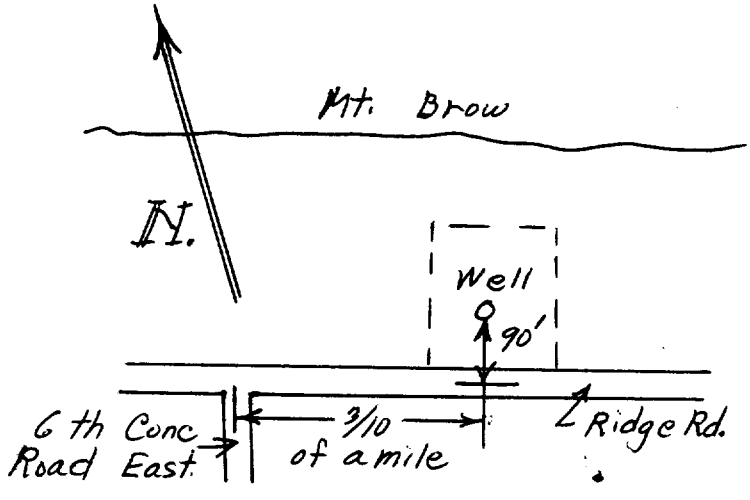
For what purpose(s) is the water to be used?
Domestic
Is well on upland, in valley, or on hillside? Upland
Drilling or Boring Firm G.J. Wallis
Address Box 5 Group 16 RR#2 Stoney Creek
Licence Number 419
Name of Driller or Borer Same
Address
Date May 24/62
George J. Wallis
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M Sets 60-5930

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

UTM 17 E 6017480 Con IV Lot 8 CODED
AR 4781325 N
Elev. 15 R 0651

6806951

DIVISION OF WATER RESOURCES
JAN 9 1969
ONTARIO WATER RESOURCES COMMISSION

30 7/49 J.B.

The Ontario Water Resources Commission Act

WATER WELL RECORD

Basin 24 W Winterpt

County or District Lincoln Township, Village, Town or City Stoney Creek

Con. 4 Lot 8 Date completed 18 Dec 68
(day) (month) (year)

[redacted] ress 245 Kenilworth Ave S Hamilton
Fairmount

Casing and Screen Record

Inside diameter of casing 6"/4
Total length of casing 32
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 6

Pumping Test

Static level 25
Test-pumping rate 20 G.P.M.
Pumping level 27
Duration of test pumping 1 hr
Water clear or cloudy at end of test clear
Recommended pumping rate 10 G.P.M.
with pump setting of 33 feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
clay	0	32	33	fresh
Shale Rock 8" 20' 6"	32	35		

For what purpose(s) is the water to be used? house

Is well on upland, in valley, or on hillside? upland

Drilling or Boring Firm W Parkhom

Address RR2 Oneaster

Licence Number 2794

Name of Driller or Borer W Parkhom

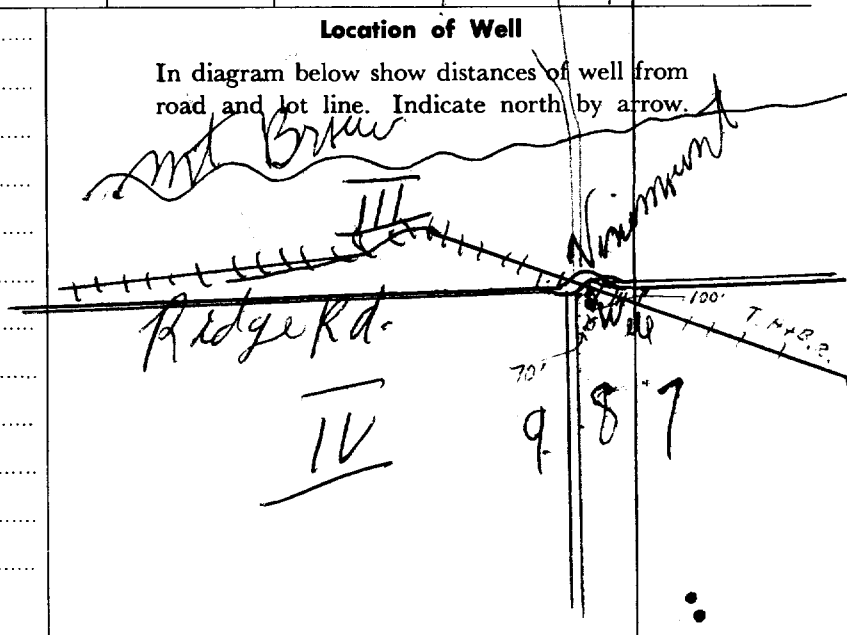
Address RR2 Oneaster

Date Dec 18/68

Wesley Parkhom
(Signature of Licensed Drilling or Boring Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 7
OWRC COPY

CSS.S8

60 ft E of W Rd
60 ft S of Railway
on N side of large remodeled house (stucco spanish style)

30M/49
Con III
Lot 7

The Ontario Water Resources Commission Act

CODED **WATER WELL RECORD** CODED

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6807179 | MUNICIP. | CON.

COUNTY OR DISTRICT: WENTWORTH
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: SALTFLEET
CON., BLOCK, TRACT, SURVEY, ETC.: III
LOT: 7
DATE COMPLETED: DAY 10 MO JULY YR 69
[redacted] VINEMONT 441 MAPLE AVE. HAMILTON
18 34 50 | RC. 4 | ELEVATION 0680 | RC. 5 | BASIN CODE 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
BROWN	CLAY			0	40
	LIMESTONE			40	71

31
32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
60	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	40
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		40	71
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

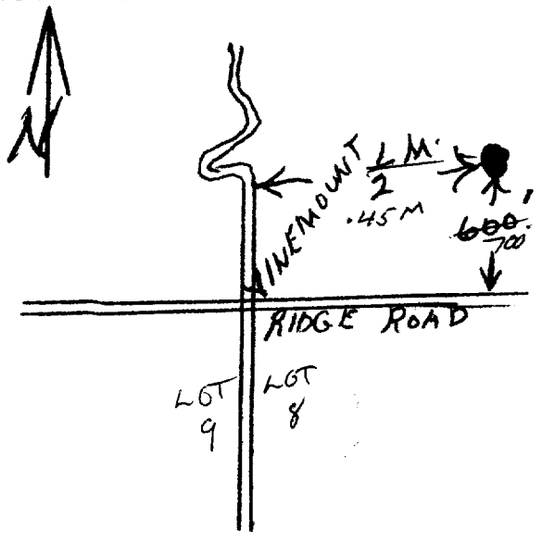
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 3 GPM.
DURATION OF PUMPING: 2 HOURS ___ MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
40 FEET	70 FEET	30 FEET	30 FEET	30 FEET	30 FEET

IF FLOWING, GIVE RATE: ___ GPM.
PUMP INTAKE SET AT: [redacted] FEET
WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 68 FEET
RECOMMENDED PUMPING RATE: 3 GPM.
GPM./FT. SPECIFIC CAPACITY: ___

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL
1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE
1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF DRILLING
1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: CROSS BROS. — LICENCE NUMBER: 2933
ADDRESS: ARTHUR CROSS
NAME OF DRILLER OR BORER: 38 KENNEDY AVE. — LICENCE NUMBER: 2933
SIGNATURE OF CONTRACTOR: Howard Cross
SUBMISSION DATE: DAY 20 MO JULY YR 69

OWRC COPY

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: JUL 23 69
DATE OF INSPECTION: 26, 10, 70 | INSPECTOR: F.I.P.
REMARKS:

CSS.58 J.B.

30 M/4g
Con III
Lot 7

The Ontario Water Resources Commission Act

CODED **WATER WELL RECORD** CODED

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6807339 | MUNICIP. | CON.

COUNTY OR DISTRICT: WENTWORTH
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: SALTFLEET
CON., BLOCK, TRACT, SURVEY, ETC.: III
LOT: 7
DATE COMPLETED: DAY 30 MO SEPT YR 69

[redacted] VINEMONT 441 MAPLE AVE. HAMILTON

83450 | RC. 4 | ELEVATION 0680 | RC. 5 | BASIN CODE 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
		OLD WELL		0	71
		LIME STONE		71	90
		BLUE SHALE		90	108
		RED SHALE		108	110

31
32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
60	1 ☐ FRESH 3 ☒ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
6 1/4	1 ☒ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE	.188	0	81
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE		81	110
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

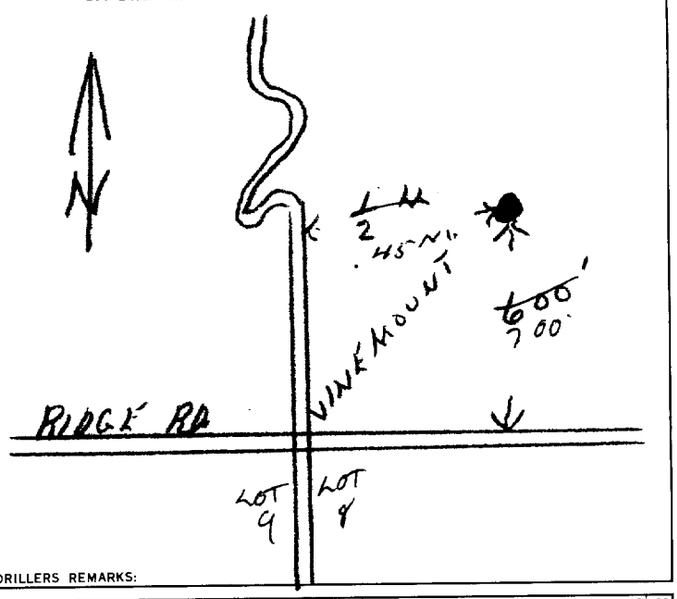
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 3 GPM.
DURATION OF PUMPING: 1 HOURS ___ MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
40 FEET	109 FEET		88 FEET	50 FEET	44 FEET	40 FEET

IF FLOWING, GIVE RATE: ___ GPM.
PUMP INTAKE SET AT: ___ FEET
WATER AT END OF TEST: ☒ 1 CLEAR ☐ 2 CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 108 FEET
RECOMMENDED PUMPING RATE: 3 GPM.
___ GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE

1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING

1 ☒ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: CROSS BROS. | LICENCE NUMBER: 3556
ADDRESS: 38 KENNEDY AVE HAMILTON
NAME OF DRILLER OR BORER: ARTHUR CROSS | LICENCE NUMBER: 3556
SIGNATURE OF CONTRACTOR: Howard Cross
SUBMISSION DATE: DAY 3 MO OCT YR 69

OWRC COPY

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: 261169
DATE OF INSPECTION: 26, 10, 70 | INSPECTOR: J.P.
REMARKS:

CSS.58 J.B.

CODED

The Ontario Water Resources Commission Act

CODED 30M/49

Con. III
Lot 8

WATER WELL RECORD

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 (1-2) | 6807343 (3) | MUNICIP. (10-14) | CON. (15-22 23 24)

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT (25-27)
Wentworth	Saltfleet	3	8

OWNER (SURNAME FIRST) [redacted] | ADDRESS 0 Vinemount | DATE COMPLETED (48-53) DAY 17 MO. Nov YR 69

TWP.	RC.	ELEVATION	RC.	BASIN CODE
7837900 (24)	4 (25)	0648 (26)	5 (30)	24 (31)

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
Brown	Clay			0	12
Grey	Limestone			12	61

5.20
28.3

31 (1-2)
32 (10 | 14 15 | 21 | 32 | 43 | 54 | 65 | 75 | 80)

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
47 (10-13)	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL (14)
(15-18)	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL (19)
(20-23)	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL (24)
(25-28)	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL (29)
(30-33)	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL (34) (80)

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
(10-11) 6¼	1 ☒ STEEL (12) 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	14 (13-16)
(17-18)	1 ☐ STEEL (19) 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		14	61 (20-23)
(24-25)	1 ☐ STEEL (26) 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			(27-30)

SCREEN

SIZE(S) OF OPENING (SLOT NO.) (31-33)	DIAMETER (34-38) INCHES	LENGTH (39-40) FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN (41-44) FEET	(80)

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
(10-13)	14-17	
18-21	22-25	
26-29	30-33 (80)	

71 PUMPING TEST

PUMPING TEST METHOD (10): 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE (11-14): ½ GPM. | DURATION OF PUMPING (15-16 HOURS) 1 (17-18 MINS.) 45

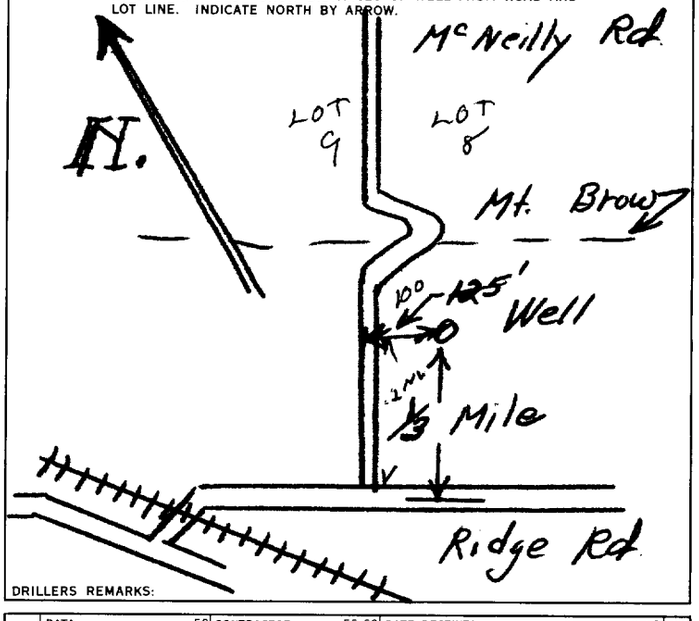
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (25) 1 ☐ PUMPING 2 ☐ RECOVERY			
		15 MINUTES (26-28)	30 MINUTES (29-31)	45 MINUTES (32-34)	60 MINUTES (35-37)
27 (19-21) FEET	55 (22-24) FEET	55 FEET	55 FEET	55 FEET	55 FEET

IF FLOWING, GIVE RATE (38-41) GPM.	PUMP INTAKE SET AT FEET	WATER AT END OF TEST (42) 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE ☐ SHALLOW ☒ DEEP	RECOMMENDED PUMP SETTING (43-45) 57 FEET	RECOMMENDED PUMPING RATE (46-49) ⅓ GPM.

(50-53) _____ GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL (54)

1 ☒ WATER SUPPLY
2 ☐ OBSERVATION WELL
3 ☐ TEST HOLE
4 ☐ RECHARGE WELL
5 ☐ ABANDONED, INSUFFICIENT SUPPLY
6 ☐ ABANDONED, POOR QUALITY
7 ☐ UNFINISHED

WATER USE (55-56)

1 ☒ DOMESTIC
2 ☐ STOCK
3 ☐ IRRIGATION
4 ☐ INDUSTRIAL
☐ OTHER
5 ☐ COMMERCIAL
6 ☐ MUNICIPAL
7 ☐ PUBLIC SUPPLY
8 ☐ COOLING OR AIR CONDITIONING
9 ☐ NOT USED

METHOD OF DRILLING (57)

1 ☒ CABLE TOOL
2 ☐ ROTARY (CONVENTIONAL)
3 ☐ ROTARY (REVERSE)
4 ☐ ROTARY (AIR)
5 ☐ AIR PERCUSSION
6 ☐ BORING
7 ☐ DIAMOND
8 ☐ JETTING
9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: George J Wallis | LICENCE NUMBER: 3383

ADDRESS: R.R. #2 Stony Creek

NAME OF DRILLER OR BORER | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: George J Wallis | SUBMISSION DATE: DAY 22 MO. 11 YR. 69

OWRC COPY

OFFICE USE ONLY

DATA SOURCE (58)	CONTRACTOR (59-62)	DATE RECEIVED (63-68) (80)
		271169

DATE OF INSPECTION: 24,10,70 | INSPECTOR: JP

REMARKS:

CODED

The Ontario Water Resources Commission Act

CODED

30 M 148

Con III Lot 12

WATER WELL RECORD

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6807533 | MUNICIP. | CON.

COUNTY OR DISTRICT: WENTWORTH

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Saltfleet

CON., BLOCK, TRACT, SURVEY, ETC.: III

LOT: 12

[redacted] RR#1 Vinemount 8 Hope Ave. HAMILTON

DATE COMPLETED: DAY 27 MO. MAY YR. 1970

ELEVATION: 0645 | BASIN CODE: 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
	TOPSOIL			0	4
	CLAY			4	16
	CLAY			16	23
	SHALE ROCK			23	60

15.37
32.3

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
57	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	148	0	27
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☑ OPEN HOLE		27	60
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	15 GPM.	1 HOURS ___ MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☑ RECOVERY)			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
20 FEET	52 FEET	20 FEET	20 FEET	20 FEET	20 FEET

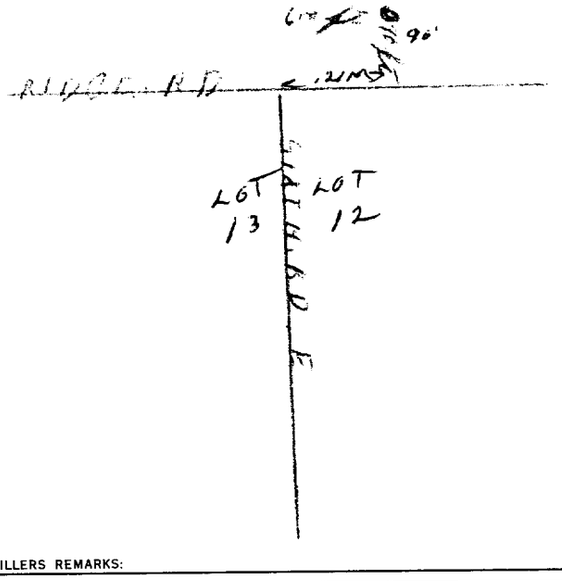
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM.	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	55 FEET	6 GPM.

___ GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL

1 ☑ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE

1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF DRILLING

1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: Frank Love | LICENCE NUMBER: 2803

ADDRESS: 176 Aberdeen Ave Hamilton

NAME OF DRILLER OR BORER: Same | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: Frank Love | SUBMISSION DATE: DAY 29 MO. 7 YR. 70

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: 40870

DATE OF INSPECTION: 26, 10, 70 | INSPECTOR: F/P

REMARKS:

3

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The Ontario Water Resources Commission Act

WATER WELL RECORD

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 6807628 MUNICIP. 68008 CON. C of N 01

COUNTY OR DISTRICT: WENTWORTH

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: SALTFLEET

CON., BLOCK, TRACT, SURVEY, ETC.: CON I

LOT: 012

[redacted] 135 ST. CLAIR AVE W TORONTO.

DATE COMPLETED: DAY 20 MO 07 YR 70

NG 7861130 RC. 4 ELEVATION 0280 RC. 4 BASIN CODE 24 JR-2

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
RED	CLAY	STONES		0	4
RED	SHALE.			4	112

31 0004710ST12 01127 17

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
NOT DETERMINED	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
8	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	1/8"	0	0007
8	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE		0	0108
8	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		0	0112 100.5

SCREEN

SIZE(S) OF OPENING (SLOT NO.): N/A

DIAMETER: 01.500 INCHES

LENGTH: 07 FEET

MATERIAL AND TYPE: POROUS PLASTIC

DEPTH TO TOP OF SCREEN: 0108 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
0	3	CEMENT GROUT.
45	1087	CEMENT GROUT.

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 0001 GPM. DURATION OF PUMPING: 00 HOURS 44 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
010 FEET	017 FEET		012 FEET	011 FEET	011 FEET	011 FEET

IF FLOWING, GIVE RATE: N/A GPM.

PUMP INTAKE SET AT: — FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☐ DEEP

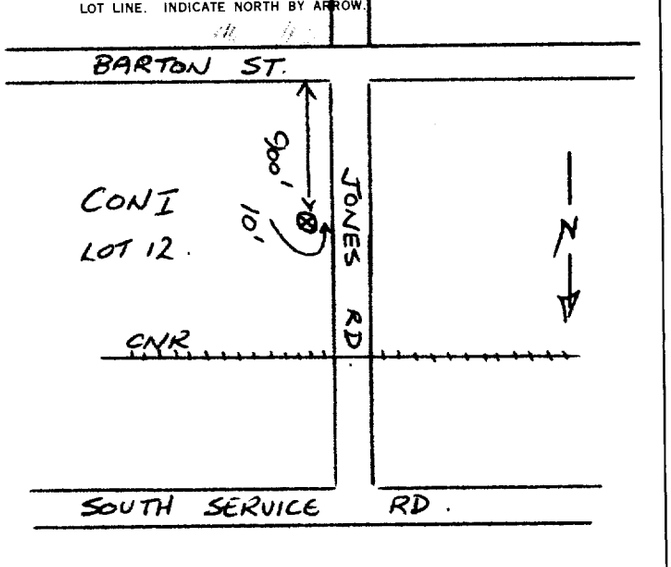
RECOMMENDED PUMP SETTING: N/A FEET

RECOMMENDED PUMPING RATE: N/A GPM.

50-53 000.1 GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL

1 ☐ WATER SUPPLY 2 ☒ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE 09

1 ☐ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☒ NOT USED

METHOD OF DRILLING

1 ☐ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: ONT. WATER RESOURCES COMM

LICENCE NUMBER: DRILLED BY OWNER

ADDRESS: 135 ST. CLAIR AVE W. TORONTO.

NAME OF DRILLER OR BORER: R. G. WILKINS.

LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: R. G. Wilkins

SUBMISSION DATE: DAY 2 MO 12 YR 70

OFFICE USE ONLY

DATA SOURCE: 1 CONTRACTOR: 9999 DATE RECEIVED: 0 31270

DATE OF INSPECTION: INSPECTOR:

REMARKS: CSS.S8

P

WI

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The Ontario Water Resources Commission Act

WATER WELL RECORD

30M/14g

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 (1 2) 6807629 | MUNICIP. 68008 (10 14) | CON. CON 02 (15 22 23 24)

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT 25-27
WENTWORTH	SALTFLEET.	CON II.	012

[redacted] 135 ST CLAIR AVE W TORONTO | DATE COMPLETED 48-53: DAY 17 MO 07 YR 70

NG 7 8 5 12 1 10 (24) | RC. 4 (25) | ELEVATION 0 3 1 2 (26) | RC 5 | BASIN CODE 2 4 (31) | I II III IV | JR 1 (47) | 4 80

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
RED	CLAY	STONES		0	11
GREY	CLAY			11	12
RED	SHALE			12	138

31 | 9 9 1 1 7 0 5 1 2 | 9 9 1 2 2 0 5 | 0 1 3 8 7 1 7 (1 2 10 14 15 21 32 43 54 65 75 80)

32 (1 2 10 14 15 21 32 43 54 65 75 80)

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER	
NOT DETERMINED (10-13)	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL (14)
(15-18)	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL (19)
(20-23)	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL (24)
(25-28)	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL (29)
(30-33)	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL (34 80)

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
(10-11) ~~3~~ 6 02	1 ☒ STEEL (12) 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	1/8"	0	0010 (13-16)
(17-18) ~~3~~ 6 01	1 ☒ STEEL (19) 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE		0	~~0135~~ ~~0130~~ 0134 (23 27-30)
(24-25) ~~3~~ 6	1 ☐ STEEL (26) 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		0	~~0135~~ 0138

SCREEN

SIZE(S) OF OPENING (SLOT NO.) (31-33)	DIAMETER (34-38)	LENGTH (39-40)
~~N/A~~	01.500 INCHES	~~15~~ 02 FEET

MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN
POROUS PLASTIC	~~N/A~~ ~~0135~~ 0134 FEET (80)

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM (10-13)	DEPTH SET AT – FEET TO (14-17)	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
0	~~4~~ 42	CONCRETE GROUT.
~~49~~ (18-21)	132 (22-25)	CONCRETE GROUT.

(25-29) (30-33) 80

71 PUMPING TEST

PUMPING TEST METHOD (10)	PUMPING RATE (11-14)	DURATION OF PUMPING (15-16 HOURS, 17-18 MINS.)
1 ☒ PUMP 2 ☐ BAILER	~~7 6 2~~ GPM.	00 HOURS 08 MINS.

STATIC LEVEL (19-21)	WATER LEVEL END OF PUMPING (22-24)	WATER LEVELS DURING (25)	15 MINUTES (26-28)	30 MINUTES (29-31)	45 MINUTES	60 MINUTES (35-37)
009 ~~9 2 9~~ FEET	018 ~~1 8 5~~ FEET	1 ☐ PUMPING 2 ☒ RECOVERY	010 ~~1 0 5 5~~ FEET	010 ~~1 0 3 1~~ FEET	010 ~~1 0 5 5~~ FEET	010 FEET

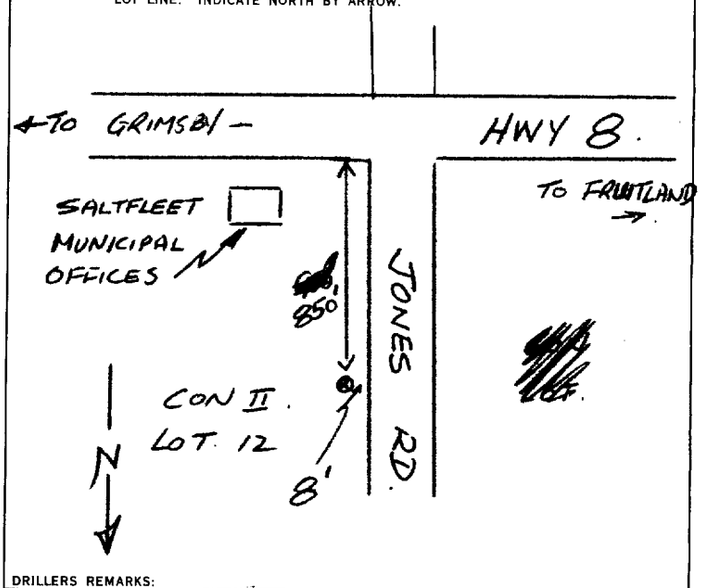
IF FLOWING, GIVE RATE (38-41)	PUMP INTAKE SET AT	WATER AT END OF TEST (42)
GPM.	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING (43-45)	RECOMMENDED PUMPING RATE (46-49)
☐ SHALLOW ☐ DEEP	~~N/A~~ FEET	~~N/A~~ GPM.

(50-53) 000.2 GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

54 FINAL STATUS OF WELL

1 ☐ WATER SUPPLY 2 ☒ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

(55-56) WATER USE 09

1 ☐ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☒ NOT USED

57 METHOD OF DRILLING

1 ☐ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: ONT. WATER RESOURCES COMM. | LICENCE NUMBER: DRILLED BY OWNER

ADDRESS: 135. ST CLAIR AVE W. TORONTO.

NAME OF DRILLER OR BORER: R.G. WILKINS. | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: R.G. Wilk | SUBMISSION DATE: DAY 2 MO. 12 YR. 70

OFFICE USE ONLY

DATA SOURCE 1 (58) | CONTRACTOR 9999 (59-62) | DATE RECEIVED 031270 (63-68) 80

DATE OF INSPECTION | INSPECTOR

REMARKS: CSS.S8 | P | WI

OWRC COPY

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

Town 49.

1. PRINT ONLY IN SPACES PROVIDED
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11 | 16808647 | MUNICIP. 68008 | CON. CON | 04

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Wentworth	Saltfleet	4	008

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Vineridge Farms Ltd	Vinemount P.O.	DAY 20 MO. Sept YR 73

ZONE | EASTING | NORTHING | BC | ELEVATION | BC | BASIN CODE | II | III | IV

6808647 17 607734 4783319 4 658 4 24 AUG 09, 1977 317

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Clay			0	8
Grey	Clay			8	26
Grey	Limestone			26	83
Red	Shale			83	88

31 | 0008605 | 0026205 | 0083215 | 0088717

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0083	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE	.188	0	88
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☐ BAILER

PUMPING RATE: 0001 GPM

DURATION OF PUMPING: HOURS MINS

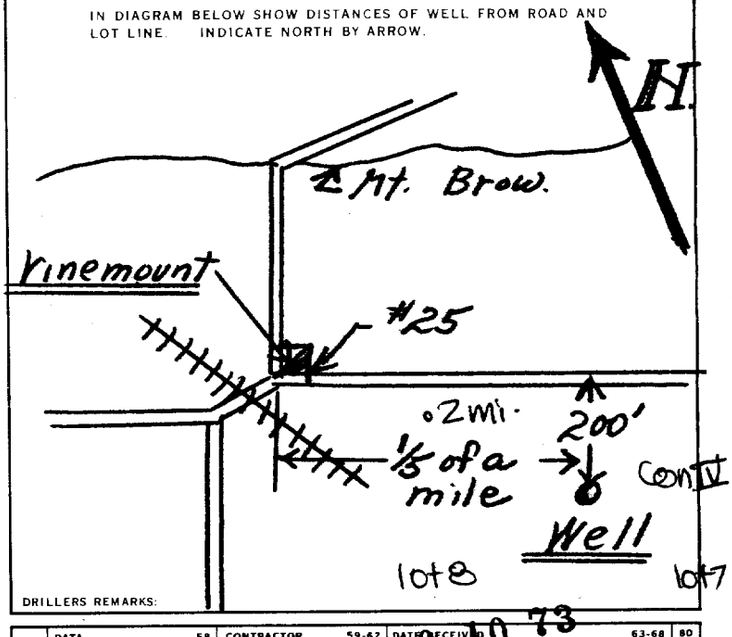
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☐ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
FEET	FEET	FEET	FEET	FEET	FEET

IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: 1 ☐ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☐ DEEP | RECOMMENDED PUMP SETTING: FEET | RECOMMENDED PUMPING RATE: GPM

LOCATION OF WELL 0783

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 5

1 ☐ WATER SUPPLY
2 ☐ OBSERVATION WELL
3 ☐ TEST HOLE
4 ☐ RECHARGE WELL
5 ☒ ABANDONED, INSUFFICIENT SUPPLY
6 ☐ ABANDONED, POOR QUALITY
7 ☐ UNFINISHED

Casing Pulled.

WATER USE

1 ☐ DOMESTIC
2 ☐ STOCK
3 ☐ IRRIGATION
4 ☐ INDUSTRIAL
☐ OTHER
5 ☐ COMMERCIAL
6 ☐ MUNICIPAL
7 ☐ PUBLIC SUPPLY
8 ☐ COOLING OR AIR CONDITIONING
9 ☐ NOT USED

METHOD OF DRILLING 1

1 ☒ CABLE TOOL
2 ☐ ROTARY (CONVENTIONAL)
3 ☐ ROTARY (REVERSE)
4 ☐ ROTARY (AIR)
5 ☐ AIR PERCUSSION
6 ☐ BORING
7 ☐ DIAMOND
8 ☐ JETTING
9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: C. J. Wallis | LICENCE NUMBER: 5917

ADDRESS: RR #2 Stoney Creek

NAME OF DRILLER OR BORER: same | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: D. J. Wallis | SUBMISSION DATE: DAY 7 MO. 12 YR 73

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 5417 | DATE RECEIVED 63-68: 30 10 73

DATE OF INSPECTION | INSPECTOR

REMARKS: CSS.58 | 1s/p

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 07-091

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

30m 49

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6808648 | MUNICIP. 68008 | CON. C&N | 04

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Wentworth	Saltfleet	4	008

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Vineridge Farms Ltd	Vinemount P.O.	DAY 24 MO. Sept YR. 73

ZONE	EASTING	NORTHING	RC.	ELEVATION	RC.	BASIN CODE	II	III	IV
17	607777	4783308	¼	658	4	24	AUG 09, 1977		317

6808648

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	TO
Br	Clay			0	9
Grey	Clay			9	25
Grey	limestone			25	84
Dark Grey	limestone			84	91
Red	shale			91	96

31 | 0009|05 | 0025|05 | 0084|15 | 0091|15 | 0096|17

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0064	1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	TO
6	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE	.188	0	25+2
6¼	4 ☒ OPEN HOLE		25+2	0026
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE			
	4 ☒ OPEN HOLE			0096
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☐ BAILER	~~6~~ gph. 0001 GPM	HOURS MINS

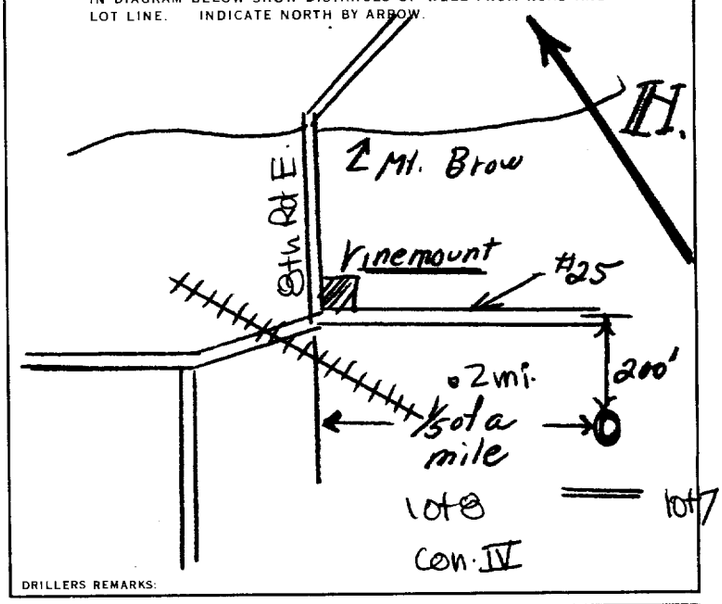
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
FEET	FEET	1 ☐ PUMPING 2 ☐ RECOVERY	FEET	FEET	FEET	FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☐ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☐ DEEP	FEET	GPM

LOCATION OF WELL 0783

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 5

1 ☐ WATER SUPPLY
2 ☐ OBSERVATION WELL
3 ☐ TEST HOLE
4 ☐ RECHARGE WELL
5 ☒ ABANDONED, INSUFFICIENT SUPPLY
6 ☐ ABANDONED, POOR QUALITY
7 ☐ UNFINISHED

WATER USE

1 ☐ DOMESTIC
2 ☐ STOCK
3 ☐ IRRIGATION
4 ☐ INDUSTRIAL
☐ OTHER
5 ☐ COMMERCIAL
6 ☐ MUNICIPAL
7 ☐ PUBLIC SUPPLY
8 ☐ COOLING OR AIR CONDITIONING
9 ☐ NOT USED

METHOD OF DRILLING 1

1 ☒ CABLE TOOL
2 ☐ ROTARY (CONVENTIONAL)
3 ☐ ROTARY (REVERSE)
4 ☐ ROTARY (AIR)
5 ☐ AIR PERCUSSION
6 ☐ BORING
7 ☐ DIAMOND
8 ☐ JETTING
9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	LICENCE NUMBER
C. J. Wallis	5417

ADDRESS	
RR #2 Stoney Creek	

NAME OF DRILLER OR BORER	LICENCE NUMBER
Same	

SIGNATURE OF CONTRACTOR	SUBMISSION DATE
Leo J Wallis	DAY 7 MO. 12 YR. 73

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	5417	30 10 73

DATE OF INSPECTION	INSPECTOR

REMARKS: CSS.S8 LS/P

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MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

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11 | 6808887 | MUNICIP. 6808 | CON. CON | 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Wentworth	Saltfleet	3	008

[redacted] 9. Vinemount Ont.

DATE COMPLETED: DAY 20 MO. June YR. 74

RC. | ELEVATION | RC. | BASIN CODE | II | III | IV

4183729 4 654 4 24 AUG 09, 1977 317

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Soil & stones			0	4
Grey	Limestone			4	36½

31 0004602|2 | 0037215

32

41 **WATER RECORD**

WATER FOUND AT - FEET	KIND OF WATER
0015½	1 ✓ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
0029	1 ✓ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 **CASING & OPEN HOLE RECORD**

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06 6/4	1 ✓ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0010
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 **PLUGGING & SEALING RECORD**

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 **PUMPING TEST**

PUMPING TEST METHOD: 1 ☐ PUMP 2 ✓ BAILER

PUMPING RATE: 0003 ½ GPM | DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ✓ PUMPING 2 ☐ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
006 FEET	030 FEET	030 FEET	030 FEET	030 FEET	030 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ✓ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ✓ DEEP	032 FEET	0002 GPM

50-53

FINAL STATUS OF WELL 54: 1

1 ✓ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 55-56: 01

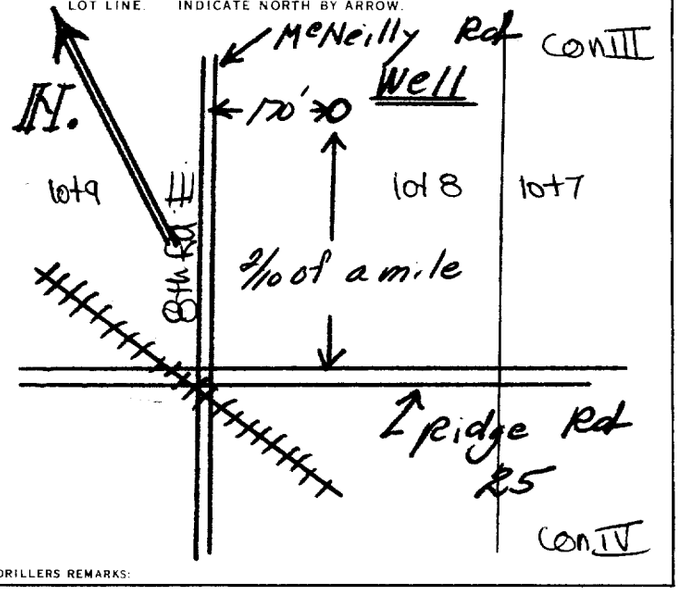
1 ✓ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; ☐ OTHER; 9 ☐ NOT USED

METHOD OF DRILLING 57: 1

1 ✓ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

LOCATION OF WELL 0783

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

CONTRACTOR

NAME OF WELL CONTRACTOR: G. J. Wallis | LICENCE NUMBER: 5417

ADDRESS: R.R. #2 Stony Creek

NAME OF DRILLER OR BORER | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: Geo. J. Wallis | SUBMISSION DATE: DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 5417 | DATE RECEIVED 63-68: 060874 | 80

DATE OF INSPECTION | INSPECTOR

REMARKS: CSS.SS

ls/p

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FORM 7 07-091

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

DW1 — 3 on 4g.

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2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6808888 | MUNICIP. 6,8,0,0,8 | CON. C,O,N | 0,3

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Wentworth	Saltfleet	3	007

DATE COMPLETED: DAY 17 MO. June YR. 74

[redacted] Cumberland Ave Burlington

RC. ELEVATION RC. BASIN CODE

6808888 17 607952 4783351 4 662 4 24 AUG 09, 1977 317

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Clay			0	12
Grey	Clay			12	31
Grey	Limestone			31	94
Red	shale			94	127

31 | 0012605 | 0031205 | 0094215 | 0127717

41 **WATER RECORD**

POUND ... - FEET	KIND OF WATER
10-13 Fail	1 ☐ FRESH 3 ☐ SULPHUR 14 / 2 ☐ SALTY 4 ☐ MINERAL
15-18	1 ☐ FRESH 3 ☐ SULPHUR 19 / 2 ☐ SALTY 4 ☐ MINERAL
20-23	1 ☐ FRESH 3 ☐ SULPHUR 24 / 2 ☐ SALTY 4 ☐ MINERAL
25-28	1 ☐ FRESH 3 ☐ SULPHUR 29 / 2 ☐ SALTY 4 ☐ MINERAL
30-33	1 ☐ FRESH 3 ☐ SULPHUR 34 80 / 2 ☐ SALTY 4 ☐ MINERAL

51 **CASING & OPEN HOLE RECORD**

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06 10-11	1 ☒ STEEL 12 / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE	.188	0	032 13-16
6¼				
17-18	1 ☐ STEEL 19 / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE			20-23
24-25	1 ☐ STEEL 26 / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE			27-30

SCREEN

SIZE(S) OF OPENING (SLOT NO.) 31-33	DIAMETER 34-38 INCHES	LENGTH 39-40 FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN 41-44 FEET	80

61 **PLUGGING & SEALING RECORD**

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	
26-29	30-33 80	

71 **PUMPING TEST**

PUMPING TEST METHOD 10 (1 ☐ PUMP 2 ☐ BAILER)	PUMPING RATE 11-14 GPM	DURATION OF PUMPING 15-16 HOURS 17-18 MINS

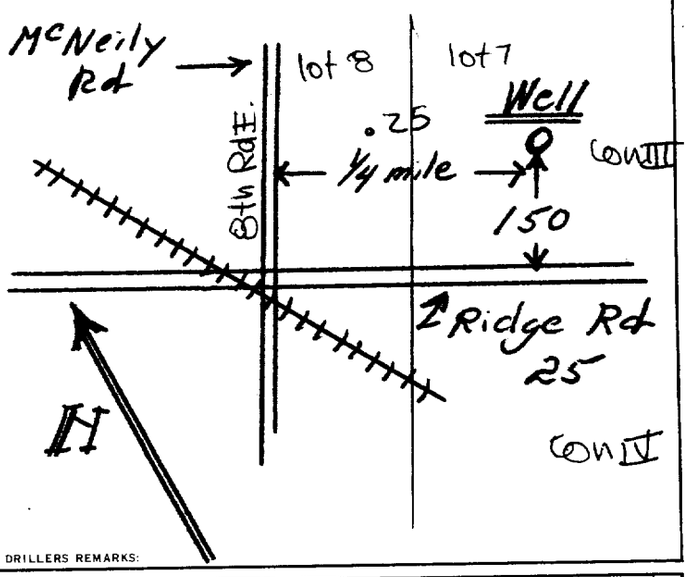
STATIC LEVEL	WATER LEVEL END OF PUMPING	25 WATER LEVELS DURING (1 ☐ PUMPING 2 ☐ RECOVERY)			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
19-21 FEET	22-24 FEET	26-28 FEET	29-31 FEET	32-34 FEET	35-37 FEET

IF FLOWING, GIVE RATE 38-41 GPM	PUMP INTAKE SET AT FEET	WATER AT END OF TEST 42 (1 ☐ CLEAR 2 ☐ CLOUDY)
RECOMMENDED PUMP TYPE (☐ SHALLOW ☐ DEEP)	RECOMMENDED PUMP SETTING 43-45 FEET	RECOMMENDED PUMPING RATE 46-49 GPM

50-53

LOCATION OF WELL 0783

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 54 — 5

1 ☐ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☑ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☑ UNFINISHED

WATER USE 55-56

1 ☐ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING 57 — 1

1 ☑ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	LICENCE NUMBER
	5417
ADDRESS	
NAME OF DRILLER OR BORER	LICENCE NUMBER
SIGNATURE OF CONTRACTOR: Leo J Wallis	SUBMISSION DATE: DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE 58: 1	CONTRACTOR 59-62: 5417	DATE RECEIVED 63-68: 060874 80
DATE OF INSPECTION	INSPECTOR	
REMARKS:		b/p

CSS.58

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 07-091

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6808889 | MUNICIP 68008 | CON. CON 04

COUNTY OR DISTRICT: Wentworth | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: SaltFleet | ON., BLOCK, TRACT, SURVEY, ETC. 4 (3) | LOT

OWNER (SURNAME FIRST) [redacted] | ADDRESS RR #1 Vinemount | DATE COMPLETED DAY 11 MO 06 YR 74

TWNG | RC. | ELEVATION | RC. | BASIN CODE

83702 | 4 | 650 | 4 | 24 | AUG 09, 1977 | 317

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Clay			0	17
Grey	Clay			17	43
Grey	Limestone			43	82

31 | 0017605 | 0043205 | 0082215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0078	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

OUTSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06 1/4	1 ☒ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE	188	0	0043
			43	82
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE			0082
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER | PUMPING RATE: 0003 GPM | DURATION OF PUMPING: 01 HOURS 00 MINS

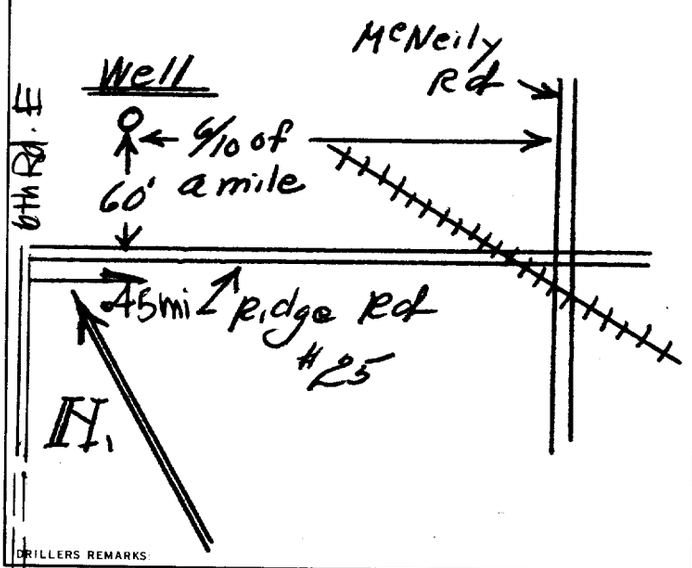
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
040 FEET	076 FEET		076 FEET	076 FEET	076 FEET	076 FEET

IF FLOWING, GIVE RATE GPM | PUMP INTAKE SET AT FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 076 FEET | RECOMMENDED PUMPING RATE: 0002 GPM

LOCATION OF WELL 0683

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 1: 1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 01: 1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING 1: 1 ☒ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: S J Wallis | LICENCE NUMBER: 5417

ADDRESS: RR #2 Stony Creek

NAME OF DRILLER OR BORER | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: Geo. J Wallis | SUBMISSION DATE DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 5417 | DATE RECEIVED 060874

DATE OF INSPECTION | INSPECTOR

REMARKS: CSS.S8 | 1>1P

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 07-091

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

Zone 4g

Ontario

1. PRINT ONLY IN SPACES PROVIDED
2: CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 — 6809132 — MUNICIP. 58008 — CON. CON — 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Wentworth	Saltfleet	3	

[redacted] 05 Queenston Rd Hamilton — DATE COMPLETED DAY 22 MO 05 YR. 73

RC. ELEVATION RC. BASIN CODE

6809132 11 606094 4783905 4 636 4 24 AUG 09, 1977 317

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Clay			0	7
Grey	Limestone			7	40

31 — 0007605 — 0040215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0038	1 ☒ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE	.188	0	0012
04	1 ☐ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☒ OPEN HOLE		12	40
	1 ☐ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☒ OPEN HOLE			0040
	1 ☐ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE — DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER — PUMPING RATE: 0003 GPM — DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
021 FEET	035 FEET		035 FEET	035 FEET	035 FEET	035 FEET

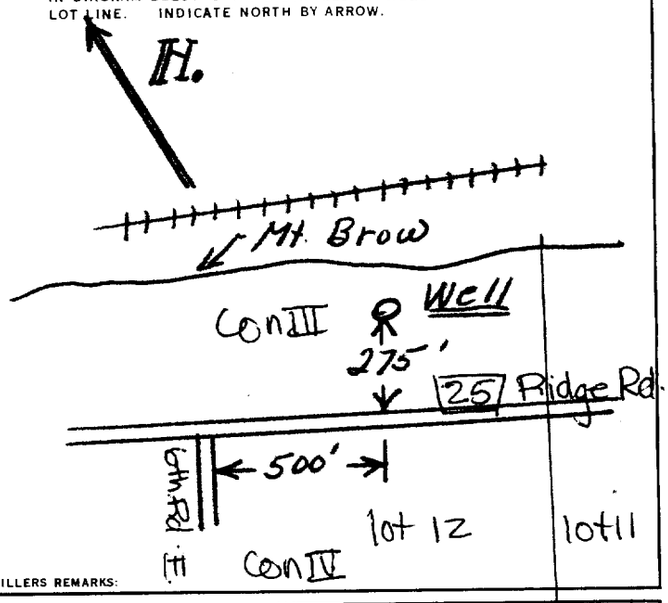
IF FLOWING, GIVE RATE — GPM — PUMP INTAKE SET AT — FEET — WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP — RECOMMENDED PUMP SETTING: 035 FEET — RECOMMENDED PUMPING RATE: 0002 GPM

GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL 0683

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 1

1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE 01

1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF DRILLING 1

1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: C. J. Wallis — LICENCE NUMBER: 5417

ADDRESS: RR #2 Stney Creek

NAME OF DRILLER OR BORER — LICENCE NUMBER

SIGNATURE OF CONTRACTOR: Geo J Wallis — SUBMISSION DATE DAY MO. YR.

OFFICE USE ONLY

DATA SOURCE 1 — CONTRACTOR 5417 — DATE RECEIVED 300575

DATE OF INSPECTION — INSPECTOR

REMARKS: P S WI

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 07-091

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

Ontario

3089/49

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11 | 0019563 | MUNICIP. 68 008 | CON. [illegible] 04

COUNTY OR DISTRICT: Reg. Mun. Hamilton-Wentworth | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: SALTFLEET | CON., BLOCK, TRACT, SURVEY, ETC.: 12 | LOT: 006

[redacted] 76 HEATHER ST. HAMILTON | DATE COMPLETED: 04 05 76

[illegible] 183100 | ELEVATION: 0654 | BASIN CODE: 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
	TOPSOIL			0	4
BROWN	CLAY			4	6
GREY	LIME ROCK			6	66

31 0004 02 | 0006605 | 0062215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0012	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0012
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0001 GPM	03 HOURS 00 MINS

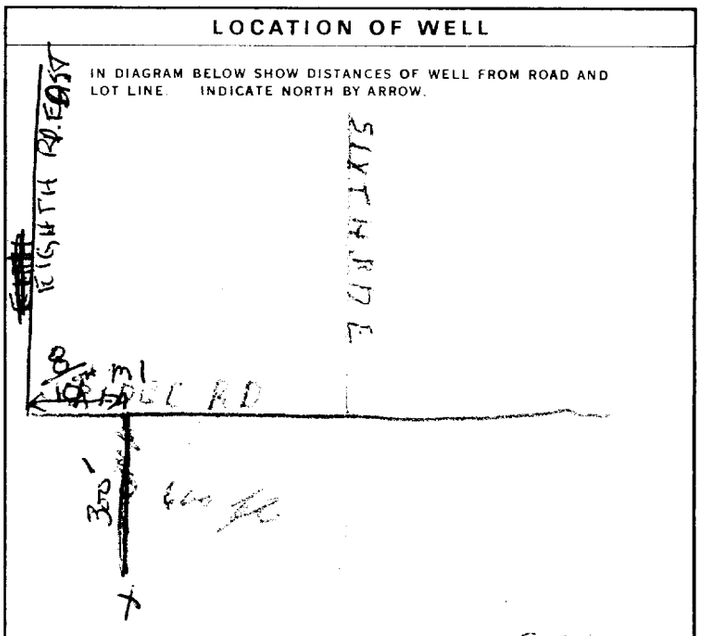
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
010 FEET	006 FEET		051 FEET	041 FEET	031 FEET	020 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY	☐ SHALLOW ☒ DEEP	064 FEET	0001 GPM

GPM. / FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 54: 1 ☐ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE 55-56: 1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED ☐ OTHER

METHOD OF DRILLING 57: 1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: Frank Ince Ltd. | LICENCE NUMBER: 2803

ADDRESS: 175 Alderwood Ave. Hamilton

NAME OF DRILLER OR BORER | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: Frank Ince | SUBMISSION DATE: DAY ____ MO. ____ YR. ____

MINISTRY OF THE ENVIRONMENT COPY

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 2803 | DATE RECEIVED 63-68: 240877 | 80

DATE OF INSPECTION: May 11/77 | INSPECTOR: EA

REMARKS: CSS.SS

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FORM 7 MOE 07-091

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

30m1/4g

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 — 6809824 — MUNICIP 68008 — CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC	LOT
WENTWORTH	SALTFLEET	CON. 3	006

[redacted] 72 SANFORD AVE N.
HAMILTON ONT.

DATE COMPLETED: DAY 20 MO 8 YR 78

UTM 17 — 583380 — RC 4 — ELEVATION 0670 — RC 44 — BASIN CODE 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	GRAVELY CLAY		LOOSE	0	12
GREY	CLAY		LOOSE	12	35
GREY	LIMESTONE		HARD	35	60

31 — 0.01 2605 7277 — 0035 2057 7 — 0.060215

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0057	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	+1	0057
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		57	0060
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE — DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0024 GPM	02 HOURS 00 MINS

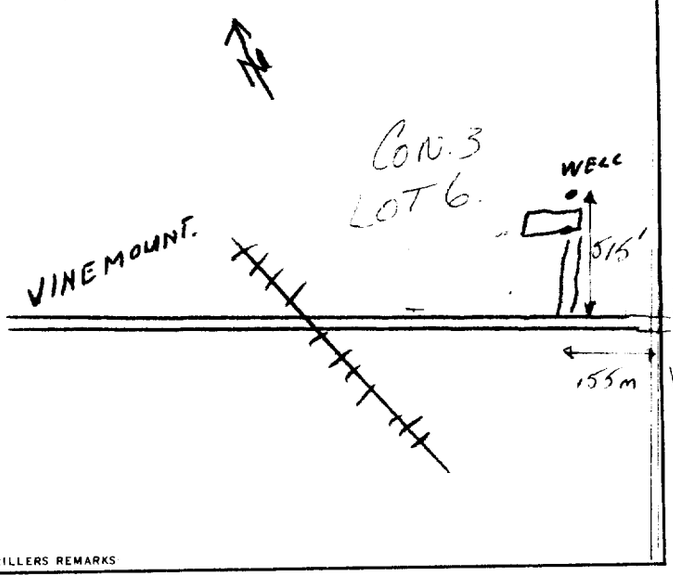
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
030 FEET	040 FEET	1 ☐ PUMPING 2 ☐ RECOVERY	030 FEET	030 FEET	030 FEET	030 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	056 FEET	0010 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.



DRILLERS REMARKS

FINAL STATUS OF WELL 1	1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED
WATER USE 01	1 ☐ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED
METHOD OF DRILLING 1	1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	LICENCE NUMBER
O'CONNOR WELL DRILLING LTD.	4005

ADDRESS: RR # 1 MILLGROVE ONT. L0R 1V0

NAME OF DRILLER OR BORER	LICENCE NUMBER
W. HOWE	

SIGNATURE OF CONTRACTOR: J B O'Connor

SUBMISSION DATE: DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	4005	161078

DATE OF INSPECTION: May 15 '80 — INSPECTOR:

REMARKS: C-15

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FORM NO. 0506 4-77

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Ministry of the Environment

Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 6809972 MUNICIP 68008 CON CON 03

COUNTY OR DISTRICT [redacted] TOWNSHIP, ~~BOROUGH, CITY, TOWN, VILLAGE~~ SALTFLEET CON., ~~BLOCK, TRACT, SURVEY, ETC.~~ III LOT 012

[redacted] BOX 4006 STN. D HAMILTON DATE COMPLETED DAY 03 MO ~~JULY~~ YR 79

21 [redacted] 17 [redacted] 18 [redacted] 24 83840 25 4 26 0640 30 4 31 24 47

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	CLAY			0	12
		LIMESTONE		12	58

31 001 26 05 01058 15

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0055	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0016
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0020 GPM	03 HOURS 00 MINS

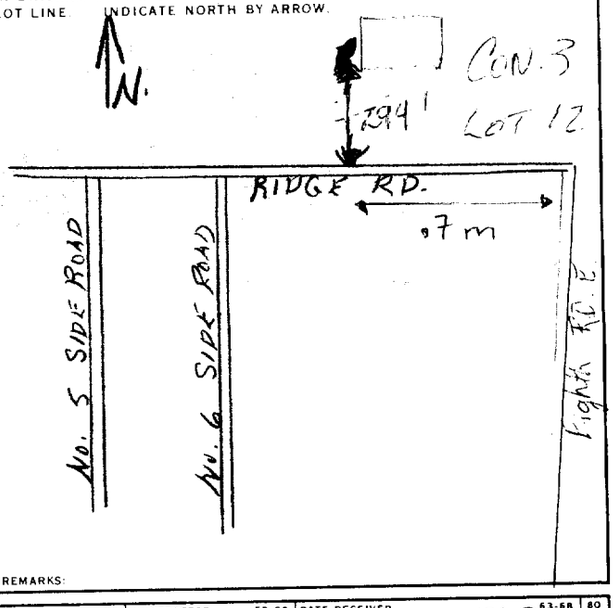
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
025 FEET	025 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	025 FEET	025 FEET	025 FEET	025 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☐ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	056 FEET	0020 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 54: 1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 55-56: 03 — 1 ☐ DOMESTIC; 2 ☐ STOCK; 3 ☒ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING 57: 1 ☒ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: CROSS BROS. — LICENCE NUMBER: 1620

ADDRESS: 38 KENNEDY AVE. HAMILTON

NAME OF DRILLER OR BORER: ARTHUR CROSS — LICENCE NUMBER: 1620

SIGNATURE OF CONTRACTOR: Howard Cross — SUBMISSION DATE: DAY 7 MO JULY YR 79

OFFICE USE ONLY

DATA SOURCE 58: 1 — CONTRACTOR 59-62: 1620 — DATE RECEIVED 63-68: 300779

DATE OF INSPECTION: May 5 '80 — INSPECTOR:

REMARKS: 12-14R CSS.

FORM NO. 0506--4--77

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Ontario

The Ontario Water Resources Act

WATER WELL RECORD

30m/48

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11 6810313 MUNICIP 68008 CON. CON 03

COUNTY OR DISTRICT [redacted] | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE Saltfleet | CON., BLOCK, TRACT, SURVEY, ETC. 3 | LOT 012

[redacted] 57 Ridge Rd | DATE COMPLETED DAY 30 MO Nov YR 81

RING 183880 RC 4 ELEVATION 0640 RC 4 BASIN CODE 24

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH FEET FROM	DEPTH FEET TO
brown	clay		packed	0	10½
brown	shale		broken layered	10½	16
grey	limestone		layered	16	40

31 0011605791 0016617171 0040215741

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0038	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH FEET FROM	DEPTH FEET TO
06	1 ☒ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE	188	0	0018 (17½)
06	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE	1½	17½	0040
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING SLOT NO.	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER | PUMPING RATE: 0014 GPM | DURATION OF PUMPING: 01 HOURS 00 MINS

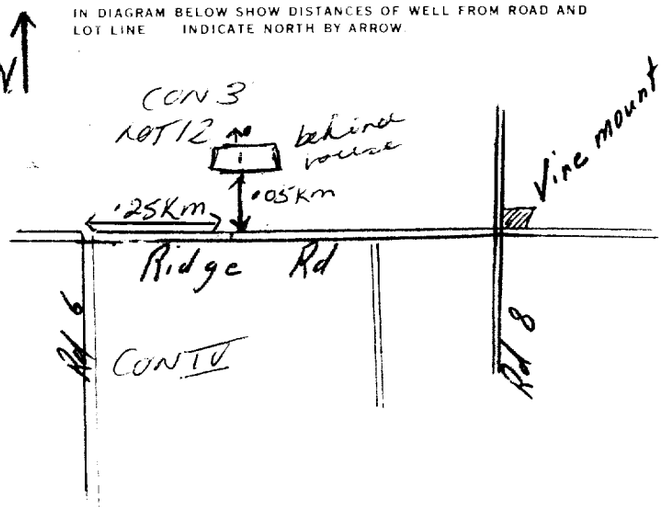
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☒ PUMPING 2 ☐ RECOVERY) 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
017 FEET	025 FEET	025 FEET	025 FEET	025 FEET	025 FEET

IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 037 FEET | RECOMMENDED PUMPING RATE: 0010 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS

FINAL STATUS OF WELL 1

1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 01

1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING 1

1 ☒ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: Donald Merritt | LICENCE NUMBER: 3640

ADDRESS: RR #1 Smithville

NAME OF DRILLER OR BORER: Donald Merritt | LICENCE NUMBER: 3640

SIGNATURE OF CONTRACTOR: Donald Merritt | SUBMISSION DATE: DAY 30 MO Nov. YR 81

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 3640 | DATE RECEIVED 08 12 81

DATE OF INSPECTION | INSPECTOR May 3/82

REMARKS: CSS.58

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

6811140

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON.	BLOCK, TRACT, SURVEY, ETC	LOT
Wentworth	Saltfleet	3		8

[redacted] Kerman Ave Grimsby Ont.

DATE COMPLETED: DAY 16 MO Sept YR 86

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Clay			0	10
Grey	Clay			10	29
Grey	Limestone			29	77

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
68	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE	¼88	0 33	33 77
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE:

DEPTH TO TOP OF SCREEN FEET:

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	2 GPM	HOURS MINS

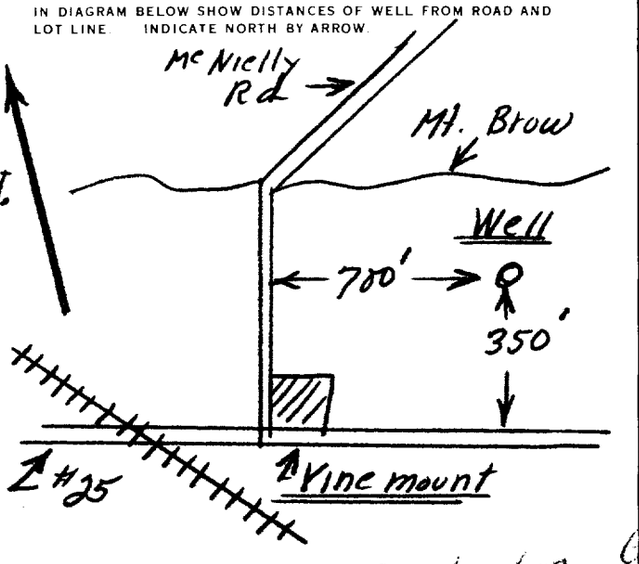
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
30 FEET	70 FEET	1 ☐ PUMPING 2 ☐ RECOVERY	70 FEET	70 FEET	70 FEET	70 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	74 FEET	1½ GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS: Roma Construction

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY 5 ☐ ABANDONED, INSUFFICIENT SUPPLY
2 ☐ OBSERVATION WELL 6 ☐ ABANDONED, POOR QUALITY
3 ☐ TEST HOLE 7 ☐ UNFINISHED
4 ☐ RECHARGE WELL

WATER USE

1 ☒ DOMESTIC 5 ☐ COMMERCIAL
2 ☐ STOCK 6 ☐ MUNICIPAL
3 ☐ IRRIGATION 7 ☐ PUBLIC SUPPLY
4 ☐ INDUSTRIAL 8 ☐ COOLING OR AIR CONDITIONING
☐ OTHER 9 ☐ NOT USED

METHOD OF DRILLING

1 ☒ CABLE TOOL 6 ☐ BORING
2 ☐ ROTARY (CONVENTIONAL) 7 ☐ DIAMOND
3 ☐ ROTARY (REVERSE) 8 ☐ JETTING
4 ☐ ROTARY (AIR) 9 ☐ DRIVING
5 ☐ AIR PERCUSSION

CONTRACTOR

NAME OF WELL CONTRACTOR: G.J. Wallis — LICENCE NUMBER: 5417

ADDRESS: RR#2 Stoney Creek

NAME OF DRILLER OR BORER — LICENCE NUMBER

SIGNATURE OF CONTRACTOR: George J Wallis — SUBMISSION DATE: DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: 110387

DATE OF INSPECTION | INSPECTOR

REMARKS: CSS.ES

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 — 6811271 — MUNICIP — CON.

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Wentworth	Saltfleet	4	9

[redacted] 91 Ridge Rd Vinemount

DATE COMPLETED: DAY 10 MO July YR 87

HOLE DEPTH — RC — ELEVATION — RC — BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Br	Clay			0	14
Grey	Clay			14	37
Grey	Limestone			37	55

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
48	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE	.188	0	37½
			37½	55
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE			
	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER (INCHES)	LENGTH (FEET)

MATERIAL AND TYPE — DEPTH TO TOP OF SCREEN (FEET)

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: 18 GPM

DURATION OF PUMPING: HOURS MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☐ RECOVERY) 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
30 FEET	35 FEET	35 FEET	35 FEET	35 FEET	35 FEET

IF FLOWING, GIVE RATE: GPM

PUMP INTAKE SET AT: FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

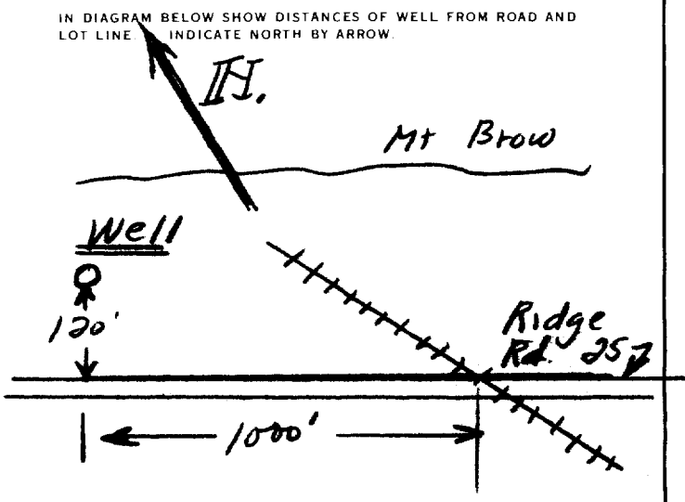
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP

RECOMMENDED PUMP SETTING: 47 FEET

RECOMMENDED PUMPING RATE: 10 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED POOR QUALITY; 7 ☐ UNFINISHED

WATER USE

1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING

1 ☒ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: G. J. Wallis — LICENCE NUMBER: 5417

ADDRESS: RR #3 Stoney Creek

NAME OF DRILLER OR BORER: Same — LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: George J Wallis — SUBMISSION DATE: DAY MO. YR.

MINISTRY OF THE ENVIRONMENT COPY

OFFICE USE ONLY

DATA SOURCE — CONTRACTOR — DATE RECEIVED: SEP 01 1987

DATE OF INSPECTION — INSPECTOR

REMARKS

CSS.ES

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resource

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 6811516 MUNICIP 6,8,0,0,8 CON.

COUNTY OR DISTRICT [redacted] | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE Saltfleet. | CON. 3 | BLOCK, TRACT, SURVEY, ETC | LOT 8

[redacted] 682 Arvin Ave Stoney Creek | DATE COMPLETED DAY 13 MO June YR 88

ELEVATION | RC | BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Grey	Limestone			0	60

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
34-55	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC	.188	0	20
			20	60
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	1¼ GPM	1 HOURS ___ MINS

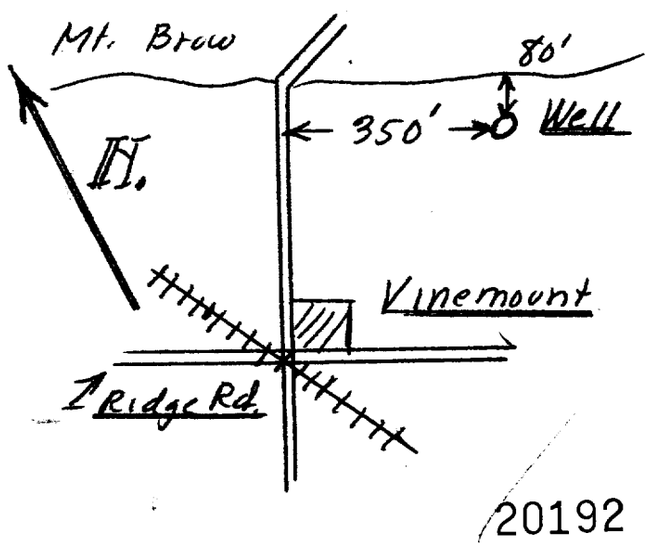
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☐ RECOVERY)	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
28 FEET	55 FEET		55 FEET	55 FEET	55 FEET	55 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☐ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☐ DEEP	FEET	GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.



20192

DRILLERS REMARKS

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 8 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED 9 ☐ DEWATERING

WATER USE

1 ☐ DOMESTIC 2 ☒ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF CONSTRUCTION

1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: G. J. Wallis | WELL CONTRACTOR'S LICENCE NUMBER: 5417

ADDRESS: R.R. #2 Stoney Creek

NAME OF WELL TECHNICIAN | WELL TECHNICIAN'S LICENCE NUMBER

SIGNATURE OF TECHNICIAN/CONTRACTOR: George J Wallis | SUBMISSION DATE DAY ___ MO. ___ YR. ___

MINISTRY OF THE ENVIRONMENT COPY

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR 5417 | DATE RECEIVED SEP 07 1988

DATE OF INSPECTION | INSPECTOR

REMARKS

CSS.ES

FORM NO. 0506 (11/86) FORM 9

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 | 6812080 | MUNICIP. 68008 | CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT 25-27
[redacted]	of Stoney creek	Conc 3	8 -

[redacted] l Ridge Rd., Vinemount, Ont L0R-3G0

DATE COMPLETED 48-53: DAY 27 MO 08 YR 91

HING | RC. | ELEVATION | RC. | BASIN CODE | II | III | IV

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	TO
Brown	Clay		Loose	0	12
Grey	Clay		Loose	12	31
Grey	Limestone		Hard	31	90
Red	Shale		Hard	90	105
Grey	Limestone		Hard	105	109
Red	Shale		Hard	109	130
Blue	Shale		Hard	130	140

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
10-13	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
15-18	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
20-23	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
25-28	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
30-33	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	1	31
6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC		31	140
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.) | DIAMETER INCHES | LENGTH FEET
MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	4GAL/Hr xx	1 HOURS 0 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
75 FEET	138 FEET	138 FEET	138 FEET	138 FEET	138 FEET

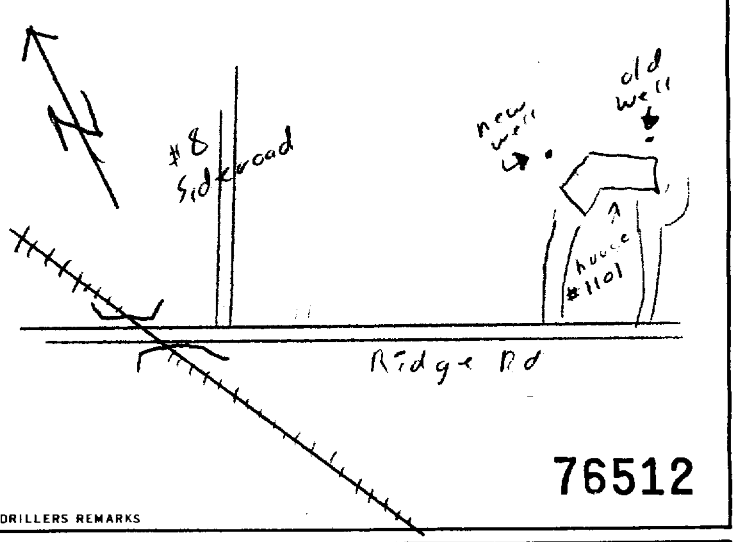
WATER LEVELS DURING: 1 ☐ PUMPING 2 ☐ RECOVERY

IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: 1 ☐ CLEAR 2 ☒ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☐ DEEP | RECOMMENDED PUMP SETTING: FEET | RECOMMENDED PUMPING RATE: GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



76512

DRILLERS REMARKS

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY
2 ☐ OBSERVATION WELL
3 ☐ TEST HOLE
4 ☐ RECHARGE WELL
5 ☐ ABANDONED, INSUFFICIENT SUPPLY
6 ☐ ABANDONED, POOR QUALITY
7 ☐ UNFINISHED
☐ DEWATERING

WATER USE

1 ☒ DOMESTIC
2 ☐ STOCK
3 ☐ IRRIGATION
4 ☐ INDUSTRIAL
☐ OTHER
5 ☐ COMMERCIAL
6 ☐ MUNICIPAL
7 ☐ PUBLIC SUPPLY
8 ☐ COOLING OR AIR CONDITIONING
9 ☐ NOT USED

METHOD OF CONSTRUCTION

1 ☐ CABLE TOOL
2 ☐ ROTARY (CONVENTIONAL)
3 ☐ ROTARY (REVERSE)
4 ☐ ROTARY (AIR)
5 ☒ AIR PERCUSSION
6 ☐ BORING
7 ☐ DIAMOND
8 ☐ JETTING
9 ☐ DRIVING
☐ DIGGING
☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: O'Connor well Drilling Ltd
WELL CONTRACTOR'S LICENCE NUMBER: 4005
ADDRESS: RR#1 Millgrove, Ont., L0R-1V0
NAME OF WELL TECHNICIAN: J.B. O'Connor
WELL TECHNICIAN'S LICENCE NUMBER: T-0148
SIGNATURE OF TECHNICIAN/CONTRACTOR: John W O'Connor
SUBMISSION DATE: DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR 4005 | DATE RECEIVED SEP 12 1991
DATE OF INSPECTION | INSPECTOR
REMARKS: CSS.ES

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

6812209

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

MUNICIP 26008 CON. S.C.R. NW 02

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC	LOT
[redacted]	Glanbrook	Conc 2 North west of Stoney creek	12

Billed to: Domtar mines #5 Mine
Box 250 Caledonia, NoA-1A0

DATE COMPLETED: DAY 21 MO 04 YR 92

21 | M | RC | ELEVATION | RC | BASIN CODE | II | III | IV

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Topsoil		Loose	0	0.5
Brown	Clay		loose	0.5	22
Grey	Clay		Hard	22	74
Grey	Limestone		Hard	74	95

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
89	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	+1	74
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC		74	95
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	12 GPM	0 HOURS 30 MINS

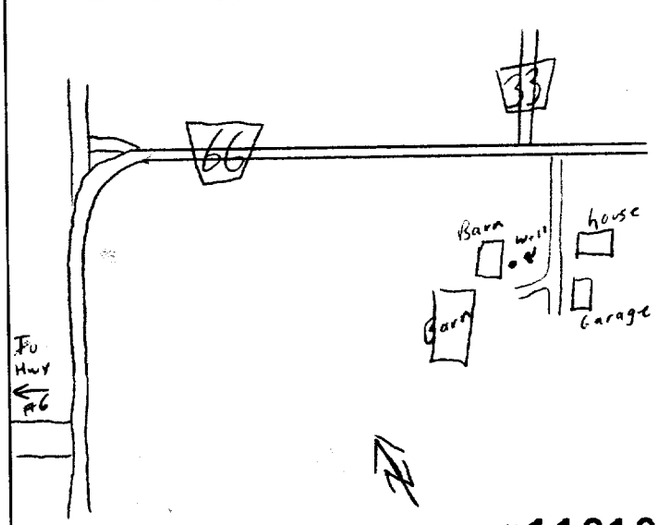
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☒ PUMPING 2 ☐ RECOVERY)			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
66 FEET	66.5 FEET	66.5 FEET	66.5 FEET	FEET	FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☐ CLEAR 2 ☒ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	91 FEET	10 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS

118132

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED ☐ DEWATERING

WATER USE

1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF CONSTRUCTION

1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☒ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: O'Connor Well Drilling Ltd.
WELL CONTRACTOR'S LICENCE NUMBER: 4005
ADDRESS: RR#1 Millgrove, Ont., L0R-1V0
NAME OF WELL TECHNICIAN: W. Howe
WELL TECHNICIAN'S LICENCE NUMBER: T-0518
SIGNATURE OF TECHNICIAN/CONTRACTOR: John W O'Connor
SUBMISSION DATE: DAY ____ MO ____ YR ____

MINISTRY OF THE ENVIRONMENT COPY

OFFICE USE ONLY

DATA SOURCE
CONTRACTOR: 4005
DATE RECEIVED: MAY 12 1992
DATE OF INSPECTION
INSPECTOR
REMARKS

CSS.ES

FORM NO. 0506 (11/86) FORM 9

Ontario **Ministry of the Environment**

The Ontario Water Resources Act

WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

6813767

68008 CON 03

WENTWORTH

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
			11

[redacted]

Address	Date completed day	month	year
			02

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To

WATER RECORD

Water found at - feet	Kind of water
	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals ☐ Gas

CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
	☑ Steel ☐ Galvanized ☐ Concrete ☐ Open hole ☐ Plastic			
	☐ Steel ☐ Galvanized ☐ Concrete ☑ Open hole ☐ Plastic			
	☐ Steel ☐ Galvanized ☐ Concrete ☐ Open hole ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet
Material and type	Depth at top of screen feet	

PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at - feet From	Depth set at - feet To	Material and type (Cement grout, bentonite, etc.)

PUMPING TEST

Pumping test method	Pumping rate	Duration of pumping
☑ Pump ☐ Bailer	GPM	Hours Mins

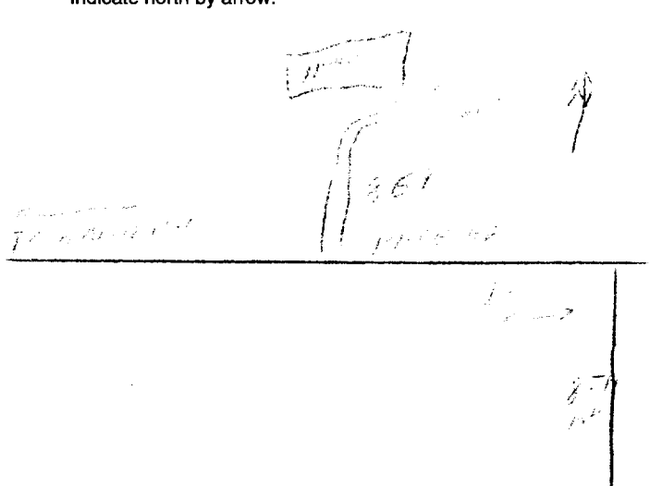
Static level	Water level end of pumping	Water levels during ☐ Pumping ☑ Recovery			
		15 minutes	30 minutes	45 minutes	60 minutes
feet	feet	feet	feet	feet	feet

If flowing give rate	Pump intake set at	Water at end of test
GPM	feet	☐ Clear ☐ Cloudy

Recommended pump type	Recommended pump setting	Recommended pump rate
☐ Shallow ☐ Deep	feet	GPM

LOCATION OF WELL

In diagram below show distances of well from road and lot line.
Indicate north by arrow.



241409

FINAL STATUS OF WELL

☑ Water supply ☐ Observation well ☐ Test hole ☐ Recharge well
☐ Abandoned, insufficient supply ☐ Abandoned, poor quality ☐ Abandoned (Other) ☐ Dewatering
☐ Unfinished ☐ Replacement well

WATER USE

☑ Domestic ☐ Stock ☐ Irrigation ☐ Industrial
☐ Commercial ☐ Municipal ☐ Public supply ☐ Cooling & air conditioning
☐ Not use ☐ Other

METHOD OF CONSTRUCTION

☐ Cable tool ☐ Rotary (conventional) ☐ Rotary (reverse) ☐ Rotary (air)
☑ Air percussion ☐ Boring ☐ Diamond ☐ Jetting
☐ Driving ☐ Digging ☐ Other

Name of Well Contractor	Well Contractor's Licence No.
Address	
Name of Well Technician	Well Technician's Licence No.
Signature of Technician/Contractor	Submission date day mo yr

MINISTRY USE ONLY

4005 DEC 10 2002

CSS.ES2

3 - OWNER'S COPY

Ontario **Ministry of Environment and Energy**

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 **6813862** Municipality 68008 Con. CON 03

County or District [redacted] | Township/Borough/City/Town/Village: Salt Fleet | Con, block, tract, survey, etc.: Con 3 | Lot: 6

Address of Well Location: 1181 Ridge Rd | Date completed: 25 day 8 month 03 year

21 | UTM: Zone | Easting | Northing | RC | Elevation | RC | Basin Code | ii | iii | iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
			hand dug well	0	25
			previously drilled	25	46
	concrete		bottom dug hole	25	24½
	hole plug			24½	24
	screenings			24	11
	hole plug			11	10
	screenings	dug well plugged to 5'		10	5

31

32

41 WATER RECORD

Water found at - feet	Kind of water
28	1 ☑ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
45	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6¼	1 ☑ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	0	25
5¾	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☑ Open hole 5 ☐ Plastic		25	46
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet
Material and type	Depth at top of screen feet	

61 PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at - feet From	Depth set at - feet To	Material and type (Cement grout, bentonite, etc.)

PUMPING TEST

71 Pumping test method: 1 ☐ Pump 2 ☑ Bailer | Pumping rate: 6 GPM | Duration of pumping: 1 Hours ... Mins

25 Water levels during: 1 ☐ Pumping 2 ☐ Recovery

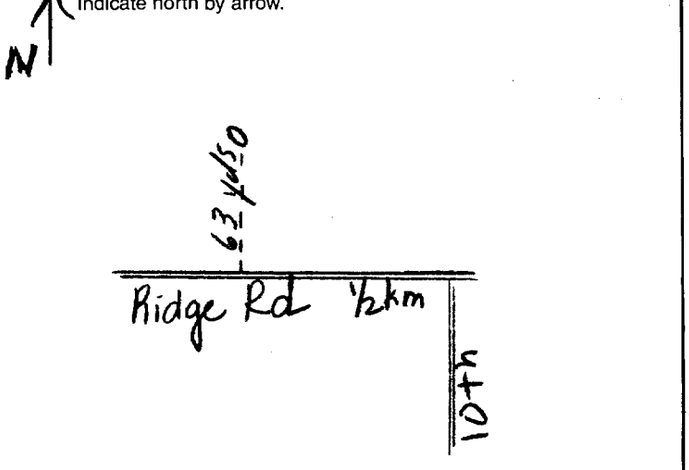
Static level	Water level end of pumping	15 minutes	30 minutes	45 minutes	60 minutes
32 feet	feet	feet	feet	feet	feet

If flowing give rate: GPM | Pump intake set at: feet | Water at end of test: ☐ Clear ☐ Cloudy

Recommended pump type: ☐ Shallow ☑ Deep | Recommended pump setting: 43 feet | Recommended pump rate: 5 GPM

LOCATION OF WELL

In diagram below show distances of well from road and lot line. Indicate north by arrow.



260445

FINAL STATUS OF WELL

1 ☑ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE

1 ☑ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not use 10 ☐ Other

METHOD OF CONSTRUCTION

1 ☑ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air) 5 ☐ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting 9 ☐ Driving 10 ☐ Digging 11 ☐ Other

Name of Well Contractor	Well Contractor's Licence No.
Donald Merritt	3640
Address	
RR#1 Smithville	
Name of Well Technician	**Well Technician's Licence No.**
Donald Merritt	T372
Signature of Technician/Contractor	**Submission date**
Donald Merritt	26 8 03

MINISTRY USE ONLY

Data source	Contractor	Date received
	3640	SEP 0 8 2003
Date of inspection	Inspector	
Remarks		

2 - MINISTRY OF ENVIRONMENT AND ENERGY COPY

0506 (06/02) Front Form 9

Ontario Ministry of the Environment

Well Tag No. (Write in the number below) A010784

A010784

Row-A 04068
June 21/04
[redacted]

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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- 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 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

MUN 68008 CON LOT

Well Owner's Information and Location of Well Information

[redacted]

Address of Well Location (County/District/Municipality) 706 Highway 8 Stoney Creek

Township

Lot

Concession

RR#/Street Number/Name

City/Town/Village Stoney Creek

Site/Compartment/Block/Tract etc.

GPS Reading NAD 83 Zone 17 Easting 605732 Northing 4785438

Unit Make/Model

Mode of Operation: ☐ Undifferentiated ☐ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To (Metres)
Grey	Crushed limestone	Gravle		0	0.60
Red	Shale			0.60	7.60

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
0	7.60	15

Water Record

Water found at 3 Metres / Kind of Water

☐ ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

☐ ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

☐ ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was
☐ Clear and sediment free
☐ Other, specify

Chlorinated ☐ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
5	☐ Steel ☐ Fibreglass ☑ Plastic ☐ Concrete ☐ Galvanized	0.7	0	4.50
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam 6.4	☐ Steel ☐ Fibreglass ☑ Plastic ☐ Concrete ☐ Galvanized	Slot No. 10	4.50	7.60
No Casing or Screen				
	☐ Open hole			

Test of Well Yield

Pumping test method	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping ___hrs +___ min	2		2	
Final water level end of pumping ___metres	3		3	
Recommended pump type. ☐ Shallow ☐ Deep	4		4	
Recommended pump depth. ___metres	5		5	
Recommended pump rate. (litres/min)	10		10	
	15		15	
If flowing give rate - (litres/min)	20		20	
	25		25	
If pumping discontinued, give reason.	30		30	
	40		40	
	50		50	
	60		60	

Plugging and Sealing Record ☐ Annular space ☐ Abandonment

Depth set at - Metres From	Depth set at - Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
3.30	0	Bentonite	

Method of Construction

☐ Cable Tool ☐ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☐ Air percussion ☐ Jetting ☐ Other
☐ Rotary (reverse) ☑ Boring ☐ Driving

Water Use

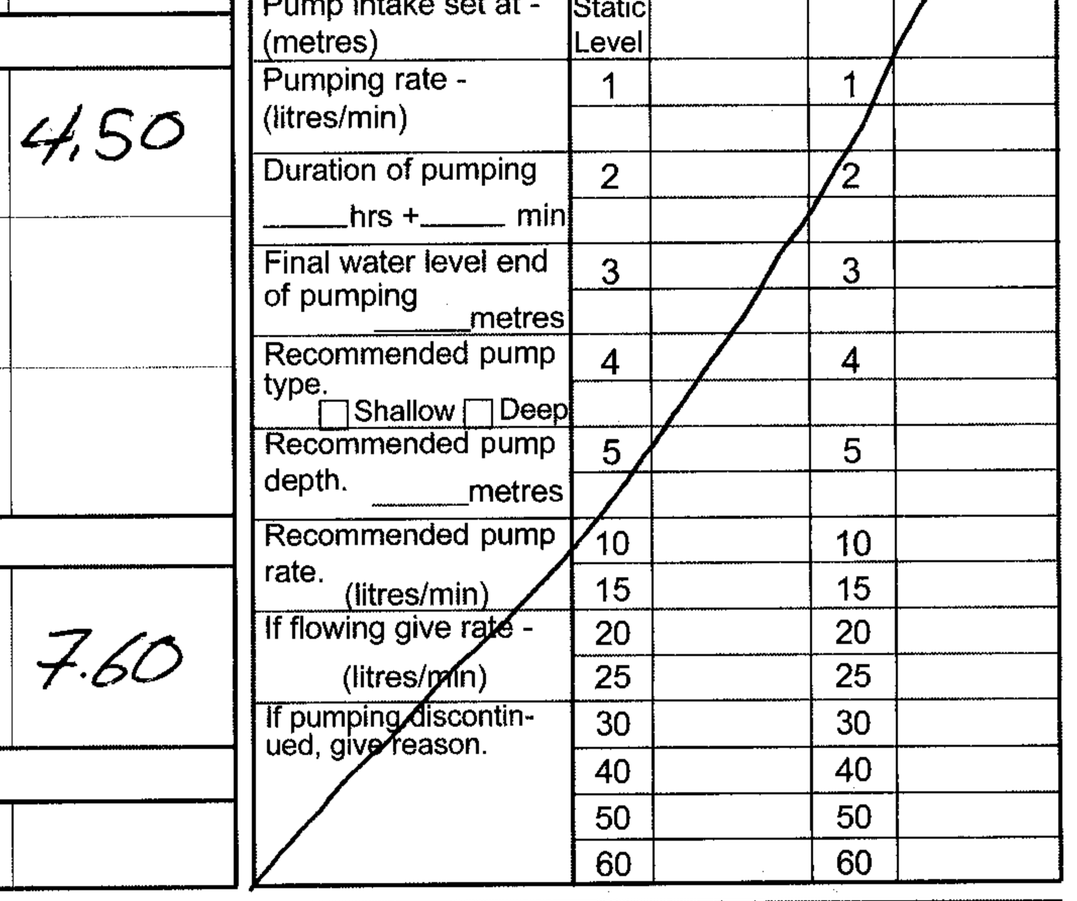
☐ Domestic ☐ Industrial ☐ Public Supply ☑ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

☐ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☑ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Location of Well

In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.



706 highway 8

Audit No. Z 14499

Date Well Completed YYYY 04 MM 06 DD 21

Was the well owner's information package delivered? ☐ Yes ☐ No

Date Delivered YYYY MM DD

Well Contractor/Technician Information

Name of Well Contractor: GEO Environmental Drilling

Well Contractor's Licence No.: 6607

Business Address (street name, number, city etc.): 340 Market Dr. Milton, Ont

Name of Well Technician (last name, first name): Justin DesRoches

Well Technician's Licence No.: 03-969

Signature of Technician/Contractor: X [signature]

Date Submitted YYYY 04 MM 06 DD 21

Ministry Use Only

Data Source

Contractor 6607

Date Received JUL 21 2004 YYYY MM DD

Date of Inspection YYYY MM DD

Remarks

Well Record Number 6814037

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐

Cette formule est disponible en français

S&P 540519 [redacted] May 6/04

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below)
A011798
A011798

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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- Please print clearly in blue or black ink only.

Ministry Use Only
MUN 68008 CON LOT

Well Owner's Information and Location of Well Information

[redacted]

Address of Well Location (County/District/Municipality): Stoney Creek | Township | Lot | Concession

RR#/Street Number/Name: 1052 South Service Rd | City/Town/Village: Stoney Creek | Site/Compartment/Block/Tract etc.

GPS Reading: NAD 83 | Zone 17 | Easting 608930 | Northing 4786290 | Unit Make/Model | Mode of Operation: ☐ Undifferentiated ☐ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To (Metres)
Grey	Granite			Ø	.60
Brown	Till			.60	4.50
Grey	dry clay			4.50	6.0

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
6.0	Ø	15

Water Record

Water found at 2 Metres / Kind of Water
☐ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
☐ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
☐ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was
☐ Clear and sediment free
☐ Other, specify
Chlorinated ☐ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
5	☐ Steel ☐ Fibreglass ☑ Plastic ☐ Concrete ☐ Galvanized	.7	3.0	Ø
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam		Slot No.		
6.4	☐ Steel ☐ Fibreglass ☑ Plastic ☐ Concrete ☐ Galvanized	10	6.0	3.0
No Casing or Screen				
☐ Open hole				

Test of Well Yield

Pumping test method	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping _____hrs +_____ min	2		2	
Final water level end of pumping _____metres	3		3	
Recommended pump type. ☐ Shallow ☐ Deep	4		4	
Recommended pump depth. _____metres	5		5	
Recommended pump rate. (litres/min)	10		10	
	15		15	
If flowing give rate - (litres/min)	20		20	
	25		25	
If pumping discontinued, give reason.	30		30	
	40		40	
	50		50	
	60		60	

Plugging and Sealing Record ☐ Annular space ☐ Abandonment

Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.0	2.0	Sand	
2.0	Ø	Bentonite	

Method of Construction

☐ Cable Tool ☐ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☐ Air percussion ☐ Jetting ☐ Other
☐ Rotary (reverse) ☑ Boring ☐ Driving

Water Use

☐ Domestic ☐ Industrial ☐ Public Supply ☑ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

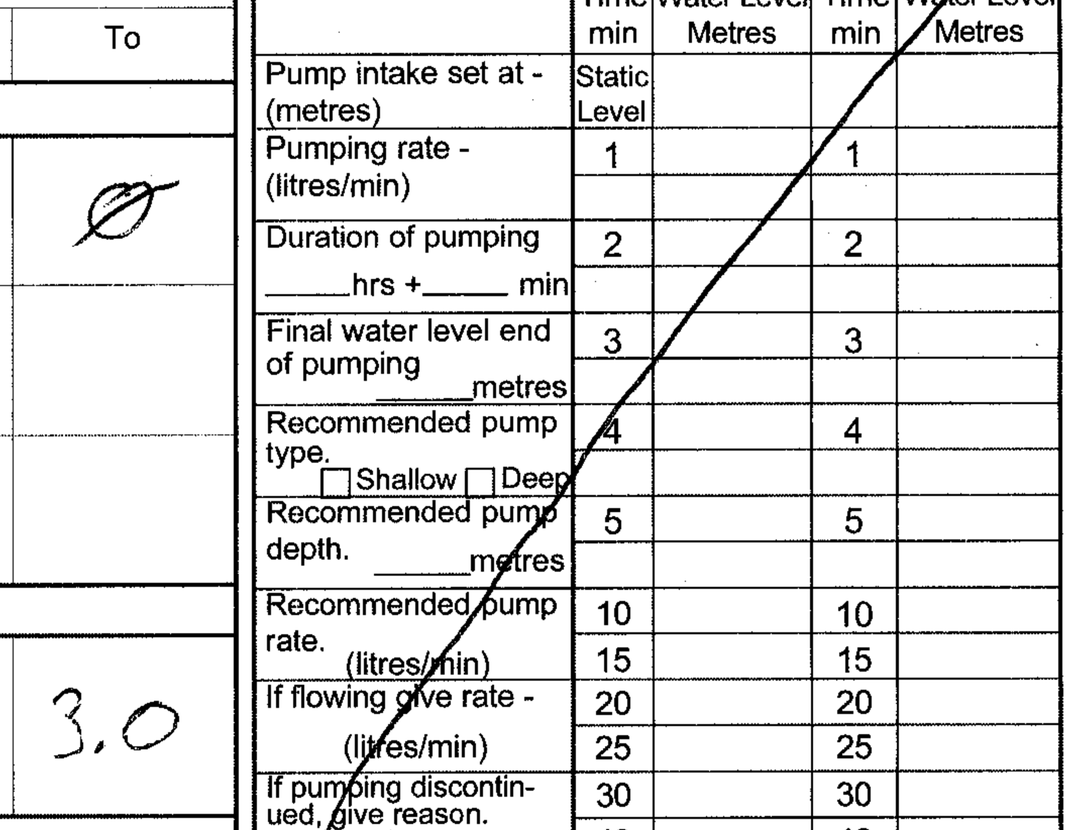
☐ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☑ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Well Contractor/Technician Information

Name of Well Contractor: Geo-Environmental | Well Contractor's Licence No.: 6607
Business Address (street name, number, city etc.): 340 Market Dr. Milton
Name of Well Technician (last name, first name): Justin Desforches | Well Technician's Licence No.: 03-969
Signature of Technician/Contractor: X [signature] | Date Submitted YYYY MM DD: 2004 03 06

Location of Well

In diagram ~~below~~ show ~~distances~~ of ~~well~~ ~~from road~~, ~~lot line, and building~~.
Indicate north by arrow.

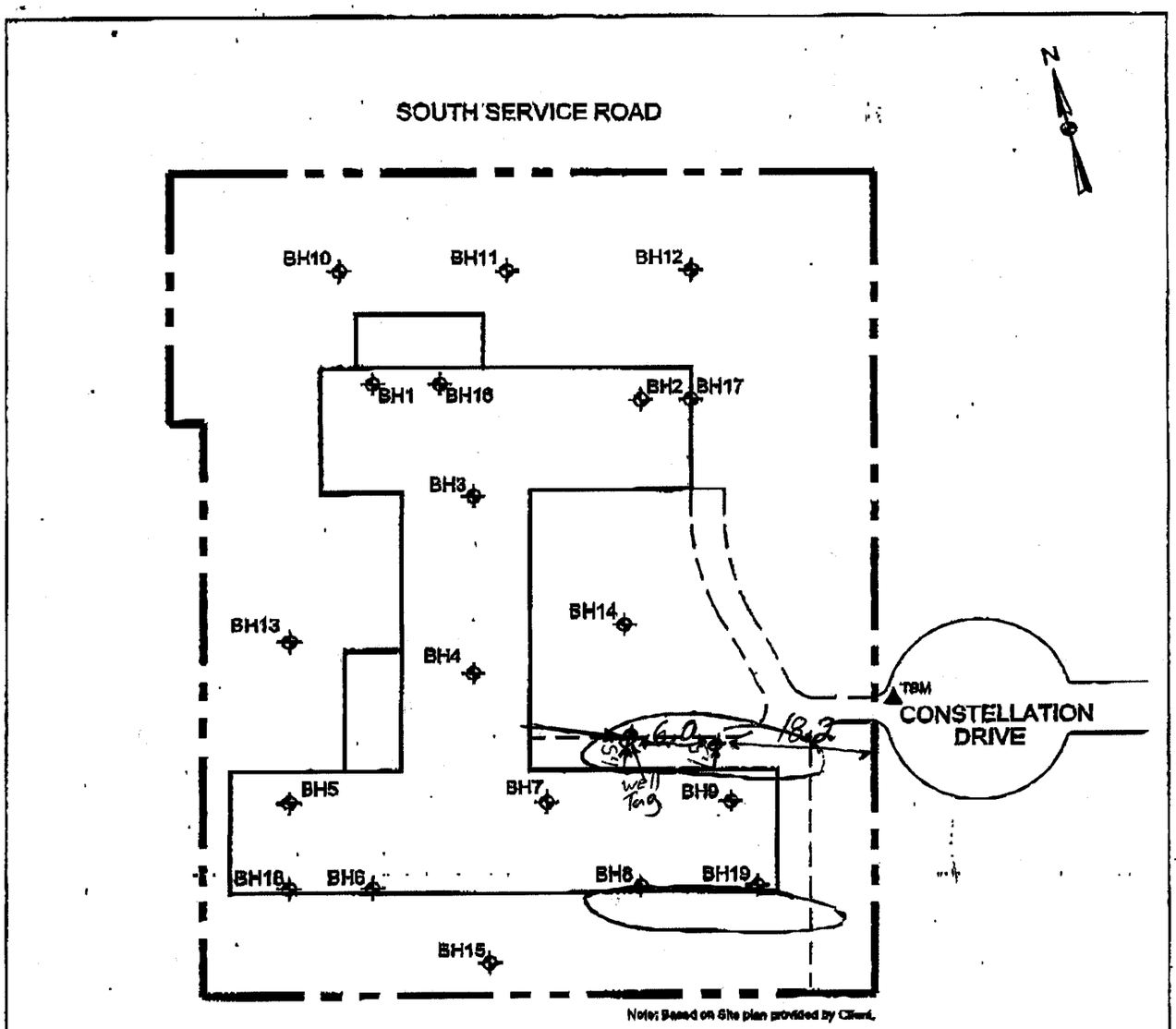


Audit No. Z 11853 | Date Well Completed YYYY MM DD: 04 05 06
Was the well owner's information package delivered? ☐ Yes ☐ No | Date Delivered YYYY MM DD

Ministry Use Only

Data Source | Contractor: 6607
Date Received YYYY MM DD: SEP 23 2004 | Date of Inspection YYYY MM DD
Remarks | Well Record Number: 6814096

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐ *Cette formule est disponible en français*



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- PROPOSED BUILDING LOCATION
- EXISTING ROADWAY
- PROPOSED ROADWAY
- BH3 BOREHOLE (AMEC, DECEMBER 2002 & January 2003)
- TBM TEMPORARY BENCH MARK (PK Nail 1, Elevation = 82.612 m)

6607 Z11853 SEP 2 3 2004

APPROXIMATE SCALE

amec Earth & Environmental	Date: January 2003	Approximate Scale: 1 : 1,750	Project No.: TB02018G
Vacant Property South Service Road Stoney Creek, Ontario	Drawn by: KH	Approved by: JC	Figure No.: 2 Borehole Location Plan

Ontario Ministry of the Environment

Well A011132 (number below)
A011132

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

MUN 6 63 6 6 CON LOT

[redacted]

Address of Well Location (County/District/Municipality): 8605

Township | Lot | Concession

RR#/Street Number/Name: SERVICE RD

City/Town/Village: STONEY CREEK

Site/Compartment/Block/Tract etc.

GPS Reading | NAD: 83 | Zone: 17T | Easting: 0667442 | Northing: 4786733

Unit Make/Model

Mode of Operation: ☐ Undifferentiated ☐ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To
GREY BROWN	FILL	SAND GRAVEL		0	5'
BROWN RED	FILL	SAND GRAVEL		5'	22'

Hole Diameter

Depth From	Depth To	Diameter Centimetres
	4' 11"	

Water Record

Water found at ___ Metres / Kind of Water

- ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
- ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
- ___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

N/A

After test of well yield, water was
☐ Clear and sediment free
☐ Other, specify

Chlorinated ☐ Yes ☐ No

Construction Record

Casing

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To
2"	☐ Steel ☐ Fibreglass ☑ Plastic ☐ Concrete ☐ Galvanized		7'	0'
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			

Screen

Outside diam	Material	Slot No.	Depth From	Depth To
2"	☐ Steel ☐ Fibreglass ☑ Plastic ☐ Concrete ☐ Galvanized	10	22'	7'

No Casing or Screen

☐ Open hole

Test of Well Yield

Pumping test method	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping ___hrs +___ min	2		2	
Final water level end of pumping ___metres	3		3	
Recommended pump type. ☐ Shallow ☐ Deep	4		4	
Recommended pump depth. ___metres	5		5	
Recommended pump rate. (litres/min)	10		10	
If flowing give rate - (litres/min)	15		15	
If pumping discontinued, give reason.	20		20	
	25		25	
	30		30	
	40		40	
	50		50	
	60		60	

Plugging and Sealing Record

☑ Annular space ☐ Abandonment

Depth set at - Metres From	Depth set at - Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
5'	0'	BENTONITE HOLEPLUG	

Method of Construction

☐ Cable Tool ☐ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☐ Air percussion ☐ Jetting ☑ Other
☐ Rotary (reverse) ☐ Boring ☐ Driving

Water Use

☐ Domestic ☐ Industrial ☐ Public Supply ☑ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

☐ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☐ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☑ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Well Contractor/Technician Information

Name of Well Contractor: CANTECH DRILLING SERVICE INC. | Well Contractor's Licence No.: 6809

Business Address (street name, number, city etc.): 3661 NIT ALBERT RD, SHARON ONT

Name of Well Technician (last name, first name): DAVE BOOK | Well Technician's Licence No.: T2494

Signature of Technician/Contractor: X | Date Submitted: YYYY 04 MM 11 DD 10

Location of Well

In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.

SEE ATTACHED

Audit No. Z 11098

Date Well Completed: YYYY ___ MM ___ DD ___

Was the well owner's information package delivered? ☐ Yes ☐ No

Date Delivered: YYYY ___ MM ___ DD ___

Ministry Use Only

Data Source

Contractor: 6809

Date Received: YYYY NOV MM 25 DD 2004

Date of Inspection: YYYY ___ MM ___ DD ___

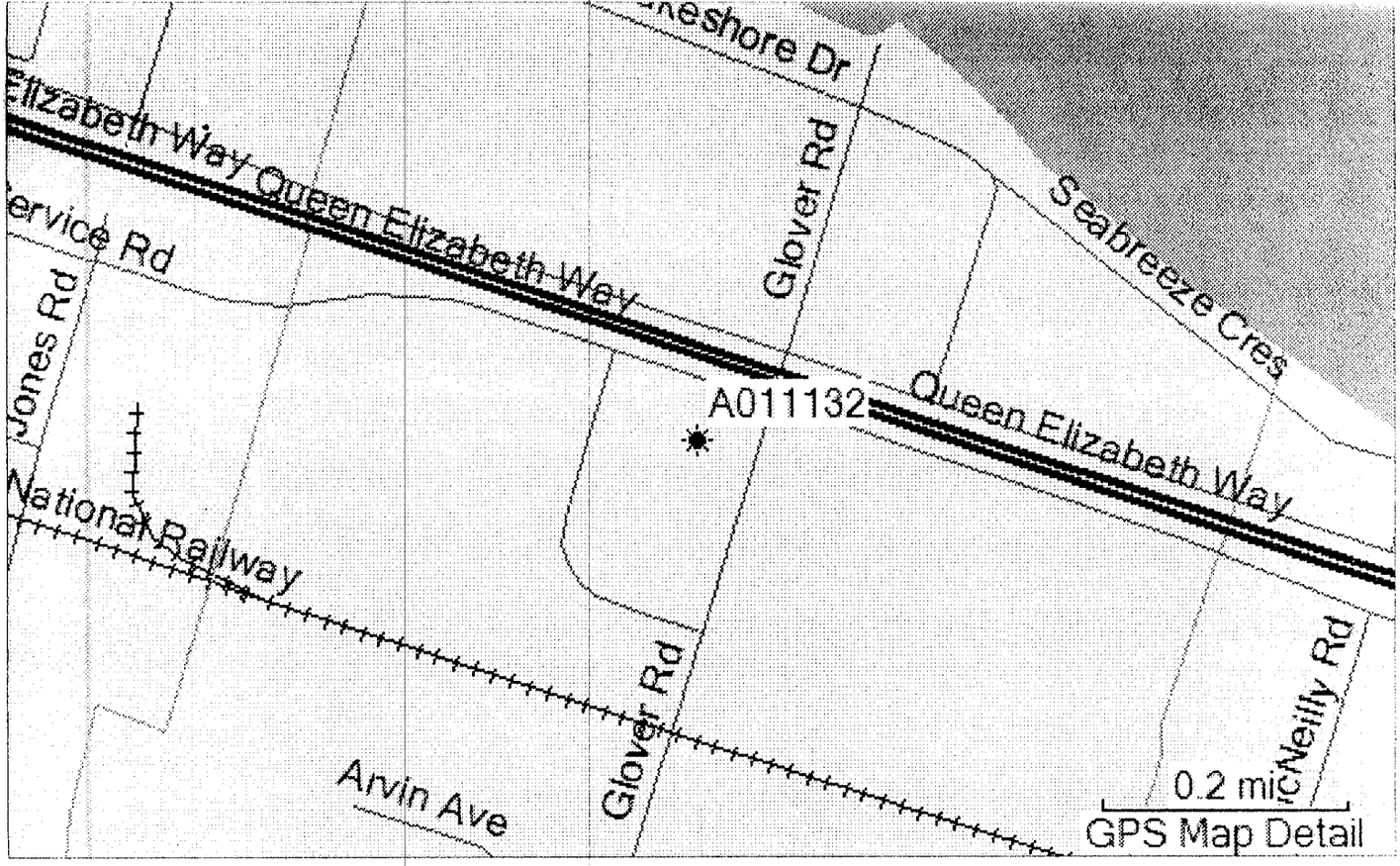
Remarks: D.W.C. via fax 2004/11/10

Well Record Number: 6814134

0506E (09/03)

Contractor's Copy ☐ Ministry's Copy ☑ Well Owner's Copy ☐

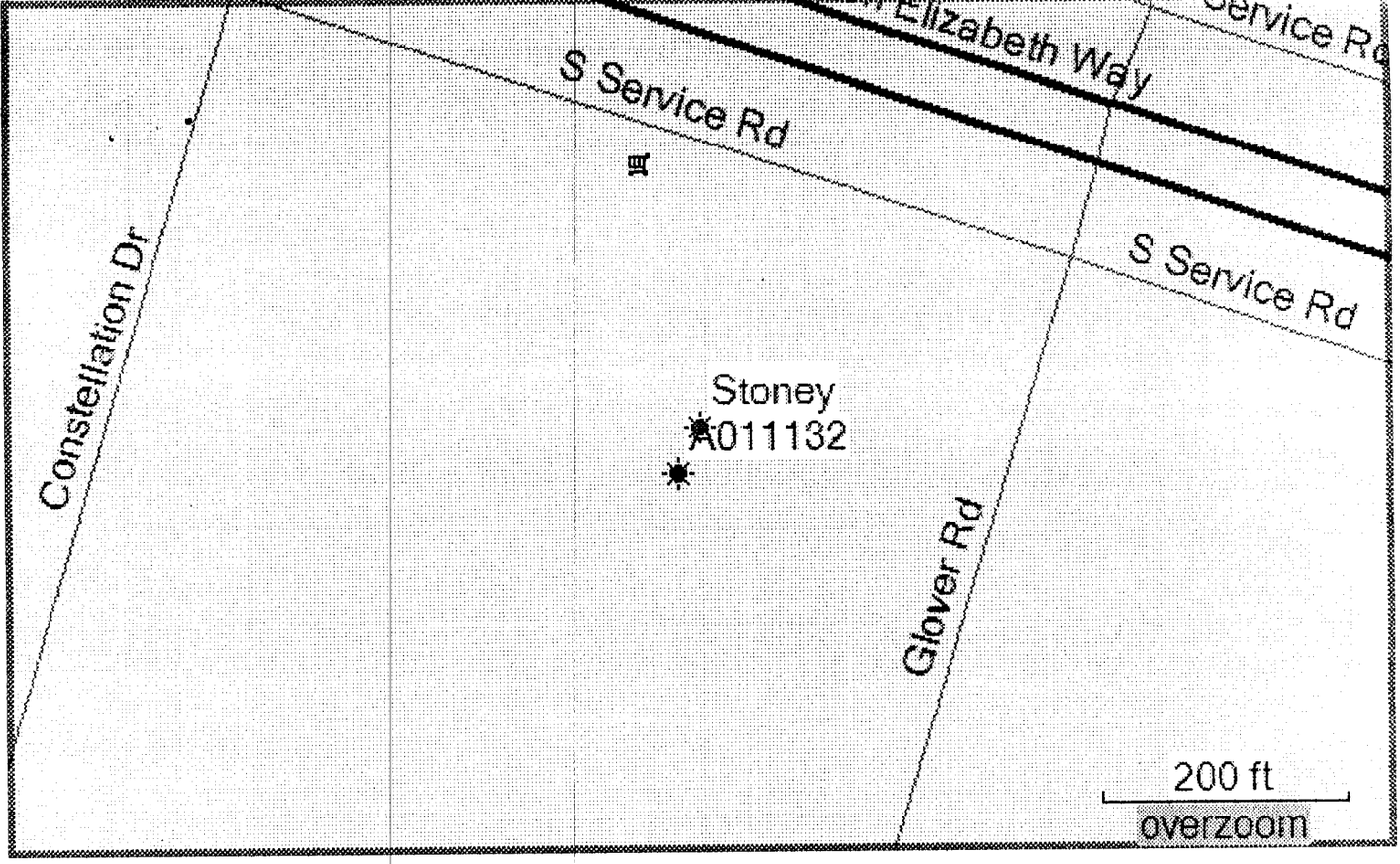
Cette formule est disponible en français



Z11098

6809

NOV 25 2004



NOV 25 2004

Z 110918

6809

UTM Z E
9 R N
Elev. 9 R
Basin 2 4

ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario

RECEIVED
APR 26 1951
GEOLOGICAL BRANCH
DEPARTMENT OF MINES

68 No.

Water Well Record

[redacted] Village, Town or City Half Moon Bay
[redacted] own or City Queen Elizabeth Way Beachsore
Winona Beach

Date Completed 21 (day) Nov (month) 1950 (year) Cost of Well (excluding pump)

Pipe and Casing Record

Casing diameter(s) 6 inch
Length(s) of casing(s) 48 ft
Type of screen —
Length of screen —
Distance from top of screen to ground level —
Is well a gravel-wall type? no

Pumping Test

Date Nov 20 / 1950
Static level 7 ft
Pumping level Could bail dug replacement this
Pumping rate Would supply approximately 5 gals
Duration of test Takes a long time to
Distance from cylinder or bowls to ground level We did not install pumping system

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) not to hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? Domestic uses
bath & shower facilities
How far is well from possible source of contamination? 50 ft
What is the source of contamination? septic system
Enclose a copy of any mineral analysis that has been made of water

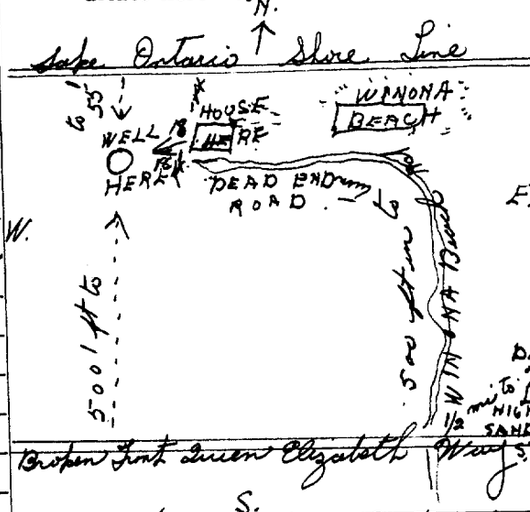
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
46 ft	fresh	39 ft

Well Log

Overburden and Bedrock Record	From	To
Black sandy loam	0 ft.	2 ft.
Brown clay with stones	2'	12'
Blue clay	12'	42'
Fine sand with some coarse gravel	42	44
Coarse gravel with some very large stones containing water	44	46
Red shale rock would commence at 49 to 50 ft. depths or level but water supply would be unsuitable because of salt.		

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? Well is on upland at Lake Ont. Shore
Drilling Firm Robert Armstrong
Address R.R. #2 Hamilton Ont. Village Ont.
Name of Driller Robert Armstrong Address R.R. #2 Hamilton Ont.
Date Nov 21 / 1950 Licence Number

Signature of Licensee

FORM 5

CSS.S8

UTM Z E
R N

Elev. R

Basin 124

The Ontario Water Resources Commission Act

WATER WELL RECORD

GROUND WATER BRANCH
68 28 No 3 4473
ONTARIO WATER RESOURCES COMMISSION

County or District Wentworth Township, Village, Town or City Saltfleet

Lot 7 Date completed 9 (day) May (month) 63 (year)

[redacted] ess. 128 Kimberly Drive Hamilton

Casing and Screen Record

Inside diameter of casing 6¼"
Total length of casing 48'
Type of screen —
Length of screen —
Depth to top of screen —
Diameter of finished hole 6¼"

Pumping Test

Static level 12'
Test-pumping rate 1¼ G.P.M.
Pumping level 37'
Duration of test pumping 1 hour
Water clear or cloudy at end of test clear
Recommended pumping rate 1 G.P.M.
with pump setting of 44' feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Br Clay	0	15		
Blue Clay	15	46		
Clay Sand + Gravel	46	47	46	Fresh

For what purpose(s) is the water to be used?
Domestic

Is well on upland, in valley, or on hillside? Upland

Drilling or Boring Firm G. J. Wallis

Address RR#2 Stoney Creek

Licence Number 896

Name of Driller or Borer Same

Address

Date May 10/63

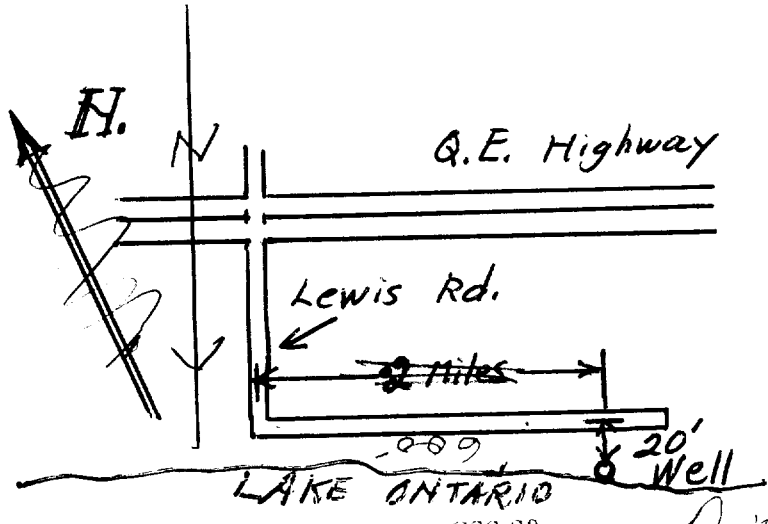
George J. Wallis
(Signature of Licensed Drilling or Boring Contractor)

Form 7 10M-62-1152

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



CSS.S8

UTM Z E
9 R 6 N
Elev. 9 R
Basin 24 Lot - 13

ONTARIO

The Water-well Drillers Act, 1954
Department of Mines

68 No 4474

GROUND WATER BRANCH
MAY 24 1957
ONTARIO WATER RESOURCES COMMISSION

Water-Well Record

County or Territorial District Wentworth Township, Village, Town or City Salt Fleet
Con B.F. Lot 13 Street and Number (if in Village, Town or City)
Owner [redacted] Address 14 Isham Ave
Date completed 26 (day) April (month) 57 (year)

Pipe and Casing Record

Casing diameter(s) 5 5/8"
Length(s) 63'
Type of screen —
Length of screen —

Pumping Test

Static level 30'
Pumping rate 9 g.p.m.
Pumping level 60'
Duration of test 30 minutes

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Black top soil	0'	1'			
light Brown clay	1'	11'			
Grey clay	11'	44'			
Fine running sand	44'	57'	44'	—	—
Grey clay	57'	60'			
Red shale	60'	90½'	68'	40½'	Salty & very Bitter

For what purpose(s) is the water to be used?
House hold & (drink)
Is water clear or cloudy? clear
Is well on upland, in valley, or on hillside? upland

Drilling firm George J. Wallis
Address R.R. #5 Hamilton

Name of Driller Same
Address —

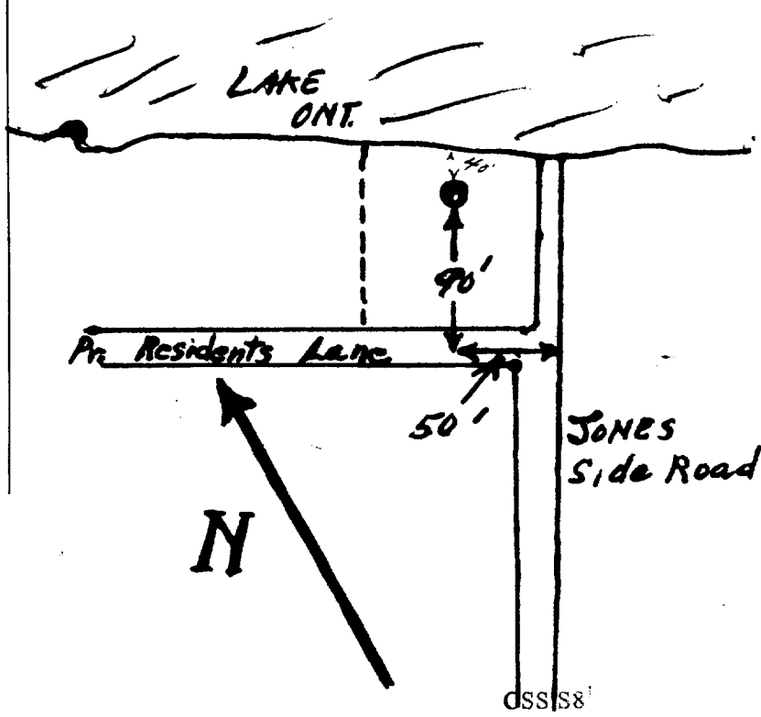
Licence Number 1098

I certify that the foregoing statements of fact are true.

Date April 26/57 George J. Wallis
Signature of Licensee

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 5

DSS|S8

Appendix C

Report Limitations

Report Limitations

1. The work performed in the preparation of this report and the conclusions presented herein are subject to the following:
   a) The contract between Wood and the Client, including any subsequent written amendment or Change Order dully signed by the parties (hereinafter together referred as the "Contract");
   b) Any and all time, budgetary, access and/or site disturbance, risk management preferences, constraints or restrictions as described in the contract, in this report, or in any subsequent communication sent by Wood to the Client in connection to the Contract; and
   c) The limitations stated herein.
2. **Standard of care:** Wood has prepared this report in a manner consistent with the level of skill and are ordinarily exercised by reputable members of Wood's profession, practicing in the same or similar locality at the time of performance, and subject to the time limits and physical constraints applicable to the scope of work, and terms and conditions for this assignment. No other warranty, guaranty, or representation, expressed or implied, is made or intended in this report, or in any other communication (oral or written) related to this project. The same are specifically disclaimed, including the implied warranties of merchantability and fitness for a particular purpose.
3. **Limited locations:** The information contained in this report is restricted to the site and structures evaluated by Wood and to the topics specifically discussed in it, and is not applicable to any other aspects, areas or locations.
4. **Information utilized:** The information, conclusions and estimates contained in this report are based exclusively on: i) information available at the time of preparation, ii) the accuracy and completeness of data supplied by the Client or by third parties as instructed by the Client, and iii) the assumptions, conditions and qualifications/limitations set forth in this report.
5. **Accuracy of information:** No attempt has been made to verify the accuracy of any information provided by the Client or third parties, except as specifically stated in this report (hereinafter "Supplied Data"). Wood cannot be held responsible for any loss or damage, of either contractual or extra-contractual nature, resulting from conclusions that are based upon reliance on the Supplied Data.
6. **Report interpretation:** This report must be read and interpreted in its entirety, as some sections could be inaccurately interpreted when taken individually or out-of-context. The contents of this report are based upon the conditions known and information provided as of the date of preparation. The text of the final version of this report supersedes any other previous versions produced by Wood.
7. **No legal representations:** Wood makes no representations whatsoever concerning the legal significance of its findings, or as to other legal matters touched on in this report, including but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.
8. **Decrease in property value:** Wood shall not be responsible for any decrease, real or perceived, of the property or site's value or failure to complete a transaction, as a consequence of the information contained in this report.
9. **No third party reliance:** This report is for the sole use of the party to whom it is addressed unless expressly stated otherwise in the report or Contract. Any use or reproduction which any third party makes of the report, in whole or in part, or any reliance thereon or decisions made based on any information or conclusions in the report is the sole responsibility of such third party. Wood does not represent or warrant the accuracy, completeness, merchantability, fitness for purpose or

usefulness of this document, or any information contained in this document, for use or consideration by any third party. Wood accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on this report or anything set out therein. including without limitation, any indirect, special, incidental, punitive or consequential loss, liability or damage of any kind.

10. **Assumptions**: Where design recommendations are given in this report, they apply only if the project contemplated by the Client is constructed substantially in accordance with the details stated in this report. It is the sole responsibility of the Client to provide to Wood changes made in the project, including but not limited to, details in the design, conditions, engineering or construction that could in any manner whatsoever impact the validity of the recommendations made in the report. Wood shall be entitled to additional compensation from Client to review and assess the effect of such changes to the project.

11. **Time dependence**: If the project contemplated by the Client is not undertaken within a period of 18 months following the submission of this report, or within the time frame understood by Wood to be contemplated by the Client at the commencement of Wood's assignment, and/or, if any changes are made, for example, to the elevation, design or nature of any development on the site, its size and configuration, the location of any development on the site and its orientation, the use of the site, performance criteria and the location of any physical infrastructure, the conclusions and recommendations presented herein should not be considered valid unless the impact of the said changes is evaluated by Wood, and the conclusions of the report are amended or are validated in writing accordingly.

    Advancements in the practice of geotechnical engineering, engineering geology and hydrogeology and changes in applicable regulations, standards, codes or criteria could impact the contents of the report, in which case, a supplementary report may be required. The requirements for such a review remain the sole responsibility of the Client or their agents.

    Wood will not be liable to update or revise the report to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.

12. **Limitations of visual inspections:** Where conclusions and recommendations are given based on a visual inspection conducted by Wood, they relate only to the natural or man-made structures, slopes, etc. inspected at the time the site visit was performed. These conclusions cannot and are not extended to include those portions of the site or structures, which were not reasonably available, in Wood's opinion, for direct observation.

13. **Limitations of site investigations**: Site exploration identifies specific subsurface conditions only at those points from which samples have been taken and only at the time of the site investigation. Site investigation programs are a professional estimate of the scope of investigation required to provide a general profile of subsurface conditions.

    The data derived from the site investigation program and subsequent laboratory testing are interpreted by trained personnel and extrapolated across the site to form an inferred geological representation and an engineering opinion is rendered about overall subsurface conditions and their likely behaviour with regard to the proposed development. Despite this investigation, conditions between and beyond the borehole/test hole locations may differ from those encountered at the borehole/test hole locations and the actual conditions at the site might differ from those inferred to exist, since no subsurface exploration program, no matter how comprehensive, can reveal all subsurface details and anomalies.

Final sub-surface/bore/profile logs are developed by geotechnical engineers based upon their interpretation of field logs and laboratory evaluation of field samples. Customarily, only the final bore/profile logs are included in geotechnical engineering reports.

Bedrock, soil properties and groundwater conditions can be significantly altered by environmental remediation and/or construction activities such as the use of heavy equipment or machinery, excavation, blasting, pile-driving or draining or other activities conducted either directly on site or on adjacent terrain. These properties can also be indirectly affected by exposure to unfavorable natural events or weather conditions, including freezing, drought, precipitation and snowmelt.

During construction, excavation is frequently undertaken which exposes the actual subsurface and groundwater conditions between and beyond the test locations, which may differ from those encountered at the test locations. It is recommended practice that Wood be retained during construction to confirm that the subsurface conditions throughout the site do not deviate materially from those encountered at the test locations, that construction work has no negative impact on the geotechnical aspects of the design, to adjust recommendations in accordance with conditions as additional site information is gained and to deal quickly with geotechnical considerations if they arise.

Interpretations and recommendations presented herein may not be valid if an adequate level of review or inspection by Wood is not provided during construction.

14. **Factors that may affect construction methods, costs and scheduling**: The performance of rock and soil materials during construction is greatly influenced by the means and methods of construction. Where comments are made relating to possible methods of construction, construction costs, construction techniques, sequencing, equipment or scheduling, they are intended only for the guidance of the project design professionals, and those responsible for construction monitoring. The number of test holes may not be sufficient to determine the local underground conditions between test locations that may affect construction costs, construction techniques, sequencing, equipment, scheduling, operational planning, etc.

    Any contractors bidding on or undertaking the works should draw their own conclusions as to how the subsurface and groundwater conditions may affect their work, based on their own investigations and interpretations of the factual soil data, groundwater observations, and other factual information.

15. **Groundwater and Dewatering**: Wood will accept no responsibility for the effects of drainage and/or dewatering measures if Wood has not been specifically consulted and involved in the design and monitoring of the drainage and/or dewatering system.

16. **Environmental and Hazardous Materials Aspects**: Unless otherwise stated, the information contained in this report in no way reflects on the environmental aspects of this project, since this aspect is beyond the Scope of Work and the Contract. Unless expressly included in the Scope of Work, this report specifically excludes the identification or interpretation of environmental conditions such as contamination, hazardous materials, wild life conditions, rare plants or archeology conditions that may affect use or design at the site. This report specifically excludes the investigation, detection, prevention or assessment of conditions that can contribute to moisture, mould or other microbial contaminant growth and/or other moisture related deterioration, such as corrosion, decay, rot in buildings or their surroundings. Any statements in this report or on the boring logs regarding odours, colours, and unusual or suspicious items or conditions are strictly for informational purposes.

17. **Sample Disposal**: Wood will dispose of all uncontaminated soil and rock samples after 30 days following the release of the final geotechnical report. Should the Client request that the samples

be retained for a longer time, the Client will be billed for such storage at an agreed upon rate. Contaminated samples of soil, rock or groundwater are the property of the Client, and the Client will be responsible for the proper disposal of these samples, unless previously arranged for with Wood or a third party.