

Hydrogeological Study Report

Proposed Residential Development 73/79 Sideroad 19

Township of Centre Wellington (Fergus), Ontario

Submitted to:

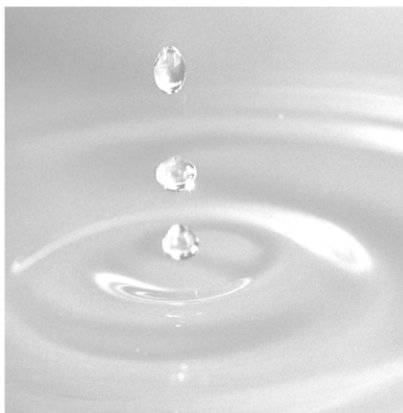
Wrightshaven Homes Ltd.
925 Gartshore St, Unit 1
Fergus, ON N1M 3V9

Submitted by:

GEI Consultants Canada Ltd.
650 Woodlawn Road W, Block C, Unit 2
Guelph, ON N1K 1B8
519.824.8150

January 28, 2026

Project No. 2402265 / 122025-1



Matthew Long, M.Eng., P.Eng.
Senior Project Engineer

Joanna Olesiuk, M.A.Sc., C.Tech., P.Geo.(Limited)
Project Geoscientist

Table of Contents

Certification	iv
Record of Revisions	v
Acronyms and Abbreviations	vi
1. Introduction	1
1.1. Purpose and Scope	1
2. Background	3
2.1. Site Location and Setting	3
2.2. Proposed Development	3
2.3. Local Relief and Drainage	4
2.4. Geology and Physiography	4
2.5. Local Use of Groundwater	5
2.5.1. Source Protection	5
2.5.2. Private Well Users	6
2.6. Relevant Local and Site-Specific Reports	6
2.6.1. Geotechnical Investigation – JLP Services Inc.	6
2.7. Identified Receptors	7
3. Field Investigation	9
3.1. Methodology	9
3.2. Site Reconnaissance	10
3.3. Groundwater Levels	10
3.3.1. Groundwater Gradients	11
3.4. Hydraulic Conductivity Testing	11
3.5. Groundwater Quality	12
3.6. Surface Water Quality	12
4. Hydrogeological Conceptual Model	14
5. Construction Dewatering Assessment	16
5.1. Dewatering Rates	16
5.2. Approvals Requirements	17
5.3. Zone of Influence	17
5.4. Water-Taking Methodology	18
5.5. Monitoring and Mitigation	18
5.5.1. Water-Taking	18
5.5.2. Discharge Management	20

6.	Impact Assessment	21
6.1.	Source Protection and Municipal Water Supplies	21
6.1.1.	Quantity	21
6.1.2.	Quality	22
6.2.	Private Water Wells	23
6.2.1.	Quantity	23
6.2.2.	Quality	24
6.3.	Ecological Receptors – Wetland Areas	25
6.3.1.	Quantity	25
6.3.2.	Quality	26
6.4.	Construction and Development	27
6.4.1.	Quantity	27
6.4.2.	Quality	27
7.	Monitoring and Mitigation	28
7.1.	Monitoring Activities – General	28
7.1.1.	On-Site Groundwater Level Monitoring	28
7.1.2.	Groundwater Quality Monitoring	28
7.1.3.	Surface Water Quality Monitoring	28
7.2.	Mitigation Activities – General	28
7.2.1.	Stormwater Management	28
7.2.2.	Long Term Drainage or Water Taking	28
7.3.	Monitoring and Mitigation Activities – Construction Dewatering	29
8.	Summary of Findings	30
9.	Conclusions and Recommendations	32
10.	Statement of Limitations	34
11.	References	35

Tables

Table 1.	Water Well Record Summary
Table 2.	Monitoring Well Details and Summary of Water Level Measurements
Table 3.	Summary of Groundwater Quality Analyses – Metals Parameters
Table 4.	Summary of Groundwater Quality Analyses – General Chemistry Parameters
Table 5.	Summary of Surface Water Quality Analyses – Metals Parameters
Table 6.	Summary of Surface Water Quality Analyses – General Chemistry Parameters

Figures

Figure 1. Site Location

Figure 2. Site Layout

Figure 3. Physiographic Landforms

Figure 4. Surficial Geology

Figure 5. MECP Water Well Records

Figure 6. Site Investigation Layout

Figure 7a. Groundwater Contours (April 2023)

Figure 7b. Seasonal High Groundwater Levels (up to November 2025)

Figure 8. Estimated Zone of Influence for Construction Dewatering

Figure 9. Well Monitoring Buffer

Appendices

Appendix A Zoning Maps from Township of Centre Wellington

Appendix B Proposed Site Plan

Appendix C Select MECP Water Well Records

Appendix D Source Protection Vulnerable Area Mapping

Appendix E Borehole Logs and Grain-Size Analyses

Appendix F Groundwater Hydrographs

Appendix G Certificates of Analysis for Groundwater and Surface Water Quality Testing

Appendix H Single Well Response Test Results

Appendix I Construction Dewatering Estimates

ML/ml

B:\Working\WRIGHTHAVEN HOMES\2402265 - 1220251 79 Sideroad 19 - Hydrogeology\5 Work in Progress\Reports_Manuals_Contracts\2402265 - 79 Sideroad 19
Hydrogeological Report (R04) 2026-01.docx

Certification

PREPARED BY:

GEI Consultants Canada Ltd.



Matthew Long, M.Eng., P.Eng.
Senior Project Engineer

CHECKED BY:

GEI Consultants Canada Ltd.



Joanna Olesiuk, M.A.Sc., C.Tech., P.Geo.
(Limited) Project Geoscientist

Record of Revisions

Identification	Date	Description of Issued and/or Revision
R01	July 3, 2024	Draft for Internal Review.
R02	August 2, 2024	Issued for Site Plan Approval.
R03	July 31, 2025	Revised due to change in concept. Issued for Site Plan Approval.
R04	January 28, 2026	Revised to respond to agency comments about groundwater flow patterns (Section 6.4.1), potential impacts to wetland water levels (Section 6.3.1), and interaction with the Irvine Creek Wetland Complex (Section 6.3).

Acronyms and Abbreviations

LID	Low Impact Development
masl	metres above sea level (geodetic datum)
mbgs	metres below ground surface
mbTOC	Metres below Top of Casing
mg/L	milligrams per litre
RMP	Risk Management Plan
SWM	Stormwater Management
<i>Technical Rules</i>	Refers to the <i>2021 Technical Rules Under the Clean Water Act</i> , published by the Ontario Ministry of the Environment, Conservation and Parks.
WWR	MECP water well record identification number
µg/L	micrograms per litre

1. Introduction

GEI Consultants Canada Ltd. (GEI) have been retained by Wrighthaven Homes Limited (the Client) to conduct a hydrogeological study regarding a proposed residential development involving properties located at 73 and 79 Sideroad 19 in the west portion of the Town of Fergus in the Township of Centre Wellington, Ontario (shown on Figure 1, hereafter referred to as the “Site”).

This report presents the findings of the hydrogeological study, which has gathered data from a review of background information and field investigations and provides an assessment of the expected requirements for construction dewatering.

1.1. Purpose and Scope

The purpose of this report is to gather information about the Site from existing sources as well as from Site-specific field investigation activities to characterize the hydrogeological conditions of the Site.

The study includes a desktop review of the Site and areas within 500 m of the Site (i.e., the “Study Area”, see Figure 2). Subsurface investigation and monitoring activities were also conducted on-site.

A brief overview of the scope of work is as follows:

1. Desktop study of materials from publicly available sources, including Ontario Geological Survey Maps, Ontario Water Wells database, Grand River Conservation Authority GIS, and the Ontario Source Protection Atlas.
2. Field investigation including:
 - a. Coordination of subsurface investigation including borehole drilling and monitoring well installation,
 - b. Measurement of groundwater levels in on-site monitoring wells, including via the deployment of datalogger pressure transducers
 - c. Collection of groundwater samples and submission for analysis to an accredited environmental laboratory, and,
 - d. Completion of single well response testing in select monitoring wells on-site.
3. Preparation of a hydrogeological study report (i.e., this document), including:
 - a. Presentation of the results of the desktop study,
 - b. Description of the methodology of the field investigation,
 - c. Presentation of the results of the field investigation,
 - d. Development of a hydrogeological conceptual model of the Site,
 - e. Preparation of an impact assessment with respect to the proposed development in its hydrogeological context,

- f. Preparation of a preliminary construction dewatering assessment to estimate expected water-taking and identify appropriate approval approaches, and,
- g. Provide recommendations with respect to monitoring, mitigation, or design (e.g., of stormwater management or other features of the development), as applicable.

A more detailed description of the field investigation activities is provided in Section 3.

2. Background

In this report, the term “north” shall refer to the direction along Highway 6 toward Sideroad 18. All other directions (e.g., east, south, west) are to be understood with respect to this definition of “north”.

2.1. Site Location and Setting

For the purposes of this study the Site is considered to be the properties located at 73 and 79 Sideroad 19 in the Township of Centre Wellington (Fergus) (Figure 1). The Site is roughly rectangular in shape with approximate dimensions of 190 m long and 60 m wide.

The Site is described as Part of Lot 19, Concession 15, Geographic Township of Nichol.

The Site is bordered by existing residential properties to the east and west of the Site, a wetland lies immediately southwest of, and slightly encroaches, the Site and Sideroad 19 road allowance lies to the north. Further to the north and south are residential properties. Generally, the land use in the area is residential.

Zoning maps from the Township of Centre Wellington (see Appendix A for copy) indicate that the Site is under residential use (R1A). An area identified for “environmental protection” overlaps with the southern part of the Site. The majority of properties surrounding the Site are zoned for residential (e.g., R1A, R1B, R1C). Lands zoned for commercial use (e.g., C2) lie approximately 330 m to the east of the Site, along the Highway 6 corridor.

Two existing dwellings are located in the northern part of the Site. In the southwesterly part of the Site there is a wooded area. The remainder of the Site is landscaped, and grass covered.

Within 10 m of the southerly property boundary lies a wetland area identified by GRCA (2024a) to be a “connected” wetland, indicating that it lies on a watercourse or stream feature.

Figure 1 shows the location of the Site on a regional scale and Figure 2 shows an aerial view of the Site and Study Area.

2.2. Proposed Development

The “Project” is intended to develop the Site as a residential subdivision.

The proposed site development will contain the following elements:

- A private road for site access, including parking spaces and a turnaround area at the end. The site access road features a 6.1m asphalt width, concrete curb and gutter along both sides and a 1.5m wide concrete sidewalk on one side.
- Ten (10) single-detached dwellings with associated yards and driveways fronting onto the north side of the site access road.

- Eight (8) bungalow units with associated yards and driveways fronting onto the south side of the site access road.
- One (1) single-detached dwelling with associated yard and driveway fronting onto Sideroad 19.
- Servicing and stormwater management infrastructure, including a stormwater management facility. The design of the stormwater management facility is presented in the Stormwater Management Design Report for 73/79 Sideroad 19 (GEI Consultants Canada Ltd).

The existing residence at civic address 73 Sideroad 19 will remain in place, though some grade alterations may be made to the rear lot area.

The proposed development will be serviced with municipal water and sanitary sewers.

The Site Servicing Plan enclosed in Appendix B shows the proposed layout of the development.

2.3. Local Relief and Drainage

Topographically, the relief of the Site is generally flat throughout, gently sloping down to lower-lying wooded/wetland areas in the southwesterly part of the Site (GRCA 2024). The ground elevation of the Site generally ranges from approximately 418.5 masl (northern part of Site) to approximately 415 masl (southwestern portion of the property, where the adjacent wetland encroaches the Site).

In the southern portion of the Site, a culvert and ditch receive runoff from lands to the east (i.e., Victoria Crescent) and conduct it across the Site toward the southerly property boundary.

On a sub-regional scale, drainage from the Site is southerly toward the Grand River, which lies south/southeast of the Site at a distance of approximately 1,500 m.

Locally, surface drainage is generally southerly toward the wetland area south of the Site. According to mapping from the GRCA (2024b), this wetland area drains in a westerly direction via culverts and streams towards a larger wetland area approximately 180 m east-southeast of the Site.

A provincially significant wetland referred to as the Irvine Creek Wetland Complex lies approximately 180 m to the west of the Site. However, based on mapping from the GRCA, the outlet stream that appears to carry drainage from the Site westerly does not appear to intersect the Irvine Creek Wetland Complex (i.e., it is not downstream of the Site).

2.4. Geology and Physiography

The Site is located within the physiographic region known as the Guelph Drumlin Field (Chapman and Putnam 1984). In the Guelph Drumlin Field, the local soils generally consist of stony tills and deep gravel terraces, the latter being typical of glacial meltwater spillways and the former being typical of drumlins and till plains (Chapman and Putnam 1984).

In terms of physiographic landforms, mapping from the Ontario Geological Survey (Chapman and Putnam 2007) indicates that the Site lies mostly within a Spillways landform and a small northerly portion of the

Site is within drumlinized Till Plains. Figure 3 shows the physiographic landforms present at and in the vicinity of the Site.

According to mapping from the Ontario Geological Survey (2010), the surficial geology of the Site is dominated by lacustrine, kame, and outwash sand deposits, with Wentworth Till (sandy silt to silty sand deposits) reported further north, south, and east of the Site (Figure 4).

The bedrock in the Study Area is the Guelph Formation dolostone, a tan to brown, fine-to medium-crystalline, fossiliferous, locally biohermal, sucrosic dolostone. Beneath the Guelph Formation is a discontinuous aquitard known as the Eramosa Formation, which contains argillaceous and bituminous material, which in turn is underlain by the Goat Island Formation, an aquifer of lower transmissivity which is noted for distinctive geochemistry with elevated sulphate and halite (Brunton 2009). The Goat Island Formation is underlain by the Gasport Formation (Brunton 2009).

Water well records attributed to locations near the Site provide observations of the stratigraphy in the Site vicinity (Appendix C, MECP 2022). A review of select records in the vicinity of the Site indicate variable soil conditions, with descriptions ranging from “clay” to “sand / stones”. This variability is noted to consistent with the surficial geological mapping description encompassing kame, lacustrine and outwash sediments.

Water well records in the study area indicate that the subcrop (i.e., the upper surface) of the bedrock generally lies at an average depth of 30.2 m (or between 17.1 m to 76.8 m below ground surface, depending on location).

Reviewing the water well records (MECP 2022a) in the close vicinity of the Site (within 125 m), the thickness of the overburden unit is reported as between approximately 22.3 m to 25.9 m.

2.5. Local Use of Groundwater

2.5.1. Source Protection

A review of source protection mapping available through Lake Erie Region Source Protection Committee (2022) indicates that the Site overlaps the following vulnerable area designations:

- Wellhead Protection Area (WHPA) “B”
 - Northerly portion of property - vulnerability 10
 - Southerly portion of property - vulnerability 8
- Significant Groundwater Recharge Area (SGRA), Intrinsic vulnerability level - High
- Wellhead Water Quantity Zone (WHPAQ), risk level “Significant”

Maps showing the locations of these vulnerable areas in the vicinity of the Site are provided in Appendix D.

The nearest municipal wellhead to the Site is located approximately 580 m to the southwest (Centre Wellington Well F7).

These designations under the Sourcewater Protection framework will guide the impact assessment of the dewatering activities insofar as potential impacts to municipal water sources are concerned.

2.5.2. Private Well Users

Though the Township of Centre Wellington by-laws prohibit the drilling of new water supply wells for private use within the settlement area of Fergus, it is known that some properties continue to obtain their water supply from private wells installed prior to the prohibition.

A search of the MECP water well records database (MECP 2022a) returned 165 water well records attributed to locations on Site and within the 500m Study Area.

Table 1 provides a summary of the information provided in the water well records. Figure 5a illustrates the locations of the water well records within the 500 m Study Area and well records are enclosed in Appendix C.

A brief summary of information collected from the water well records is as follows:

- Among well records belonging to overburden wells (106 well records):
 - By usage:
 - Abandoned: 13 records
 - Domestic: 23 records
 - Monitoring: 69 records
 - Unknown: 1 record
 - Average Static Water Level: 2.6 mbgs
- Among well records belonging to bedrock wells (46 well records):
 - By usage:
 - Abandoned: 6 records
 - Domestic: 39 records
 - Livestock: 1 record
 - Average Static Water Level: 19.9 mbgs
- Among well records identified as “Unknown” for bedrock or overburden classification:
 - By usage:
 - Abandoned: 12 records
 - Unknown: 1 record

Three well records are attributed to the Site itself; two of which correspond to overburden monitoring wells, and one to an overburden domestic supply well. One of the two monitoring wells (Well ID 7125424), installed to a depth of 7.6 mbgs, appears to have been plotted incorrectly in the database because no such well appears to exist on-site. Additionally, there is a comment on the well record that indicates the location of this well as “In front of #48”, which further suggests that this monitoring well is plotting on the Site in error.

2.6. Relevant Local and Site-Specific Reports

2.6.1. Geotechnical Investigation – JLP Services Inc.

A geotechnical investigation in respect of the proposed development was completed by JLP Services Inc. (JLP) as documented in a report “Geotechnical Investigation Proposed Residential Development 79-87 Side

Road 19 Township of Centre Wellington (Fergus), Ontario" (dated April 18, 2023). The report documents the findings of a field investigation that consisted of drilling of five boreholes, Boreholes 1 through 5 to depths from 3.66 to 8.23 mbgs on January 30 and 31, 2023. Monitoring wells were installed in all five boreholes (MW1 through MW5). Borehole IDs (Borehole #) and monitoring well IDs (MW#) are used interchangeably but refer to the same location (i.e. Borehole 1 is MW1) for consistency with the geotechnical investigation report.

Generally, based on conditions reported during borehole drilling, the stratigraphy of the subsurface materials was found to be as follows:

- **Fill** (sand and gravel with some silt), approximately 125 mm thick, at the surface of Borehole 2 and 4, and,
- **Topsoil** (black sandy silt, some organics) between 100 mm to 650 mm thick, below fill at Borehole 2 and 4, and at surface of remaining boreholes (thinnest at Borehole 5, thickest at Borehole 2), overlying,
- **Silt** with some sand, below the topsoil at all boreholes, to depths of approximately 1.0 to 2.3 m below grade, with,
 - Occasional coarse sand inclusions (Boreholes 1, 2 and 3)
 - Scattered organic seams and wood or plant fibres in upper portion (Boreholes 4 and 5), overlying,
- **Sand** with trace silt, to depths of approximately 3.5 and 7.6 m below grade in Boreholes 1, 3, 4, and 3 and to the termination depth of Borehole 2 at about 5.2 m below grade.
 - Scattered silty seams in Borehole 1 at about 5.0 m below grade.
- **Sandy Silt Till** with trace clay and occasional gravel inclusions, below sand in Boreholes 1, 3, 4, and 5 and extending to the termination depth of the boreholes at about 3.7 to 8.2 m below grade.

During drilling, saturated conditions were encountered within the silt layer at the boreholes for MW3, MW4 and MW5 and in the sand layer at all boreholes (i.e., for monitoring wells MW1 through MW5). Based on groundwater level measurements recorded in the monitoring wells MW1 to MW5 on April 5, 2023 groundwater levels were in the range of 415.56 masl to 417.07 masl.

Copies of the borehole logs and grain-size analyses of select soil samples are provided in Appendix E. The locations of the boreholes and monitoring wells are shown on Figure 6.

In the discussion and recommendations, JLP indicates that, due to the occurrence of saturated sand materials within the expected zone of excavation dewatering may be required and may be carried out "by means of pumping from sump within the excavation or by pumping from well-points".

2.7. Identified Receptors

Receptors are those entities which may be affected by the proposed development or its construction. They may include anthropogenic features, water users, or ecological features.

Receptors that may experience hydrogeological influence due to the proposed development or its construction include the following:

- Municipal water resources (per the Source Protection Plan),
- Private water wells on nearby sites,
- Construction activities and aspects of the development (e.g., dewatering requirements, basements), and,
- Natural/ environmental protection areas (e.g. wetland/woodland areas) to the south/southeast of the Site.

3. Field Investigation

3.1. Methodology

The hydrogeological field investigation involved the following activities:

- Water level monitoring (manually and by electronic datalogging pressure transducers);
- Hydraulic conductivity testing (single-well response testing);
- Groundwater and surface water quality sampling and analyses; and,
- Site reconnaissance.

Water levels were monitored by GEI at each of the five (5) existing on-site monitoring wells (MW1, MW2, MW3, MW4, and MW5). Water level data was collected by manual measurement using an electric water level tape and through the use of electronic datalogging pressure transducers. The pressure transducers were installed in select monitoring wells in March 2023 (MW3, MW4, and MW5). The logger in MW4 was subsequently moved to MW1 in June 2023 due to the need for more detailed groundwater level data near the frontage of the site to support construction dewatering at the anticipated tie-in to municipal services on Sideroad 19. Water level data and monitoring well details are presented in Table 2. Hydrographs of monitoring data are provided in Appendix F.

Samples of groundwater were collected from monitoring wells MW3, MW4 and MW5 on March 14, 2023; from MW1 on April 3, 2023; and from MW2 on June 7, 2023. Prior to sampling, each monitoring well was purged, using dedicated inertial pump tubes, of at least three (3) well volumes of water. Using the same dedicated pump tube, water quality samples were then collected into laboratory supplied bottles specific to the requested analysis. Samples for metals analysis were field filtered using 0.45 µm Waterra® inline disposable filter and preserved using laboratory prepared preservative.

A sample of surface water (SW-001) from the on-site drainage feature (i.e., ditch) was collected on March 14, 2023. Laboratory results are summarized in Tables 3 and 4 (groundwater) and Tables 5 and 6 (surface water). The laboratory-issued certificates of analyses are provided in Appendix G.

Environmental water samples were kept cool (between 0 and 10°C) and submitted to a CALA/SCC-accredited laboratory (Bureau Veritas Laboratories) under standard chain-of-custody protocols for analyses.

Single-well response tests (or “slug tests”) were conducted at MW3, MW4, and MW5 on March 14, 2023, and at MW1 on April 3, 2023. These tests were conducted in the rising-head mode. Preparation for the test began by taking a manual measurement of the static groundwater level and installing a datalogging pressure transducer to an appropriate depth in the well. A “slug” (disposable groundwater bailer) was inserted into the well and allowed to fill with approximately 1L of groundwater. After allowing the water level to return to equilibrium, the slug was removed from the well to cause a quasi-instantaneous decrease in the water level. The subsequent increase in water levels (“rising-head”) were measured with time as the water level in the well returned to equilibrium. The data collected from this test was then analyzed

using the Bouwer-Rice (1976) method to determine the hydraulic conductivity of the soil intersected by the well screen. Results of slug test data analysis are presented in Appendix H.

Site reconnaissance was made by GEI to visually observe the Site and confirm desktop study information. This occurred concurrently with other field activities, mainly in March and April 2023.

3.2. Site Reconnaissance

While attending the Site to undertake other fieldwork activities, GEI made reconnaissance observations to verify, where possible, findings from the desktop review.

The Site topography was confirmed to have a relatively flat to gently sloping upland area in the northern part of the Site and a moderate to steep slope in the south portion of the Site.

Surface drainage on-site is generally overland toward the rear of the property and eventually to wetland areas lying south and east of the Site. There is an existing municipal storm sewer on easement that discharges to the easterly part of the Site: that discharge also flows overland toward the rear of the property and subsequently to the wetland areas.

There were no apparent seepage features identified during the site reconnaissance. However, based on groundwater levels it appears that the water level in the drain may be closely related to groundwater levels: during periods of high groundwater, it appears that the groundwater surface intersects ground surface at the drain.

The existing residences on the Site are privately serviced for sewage: the leaching beds are located south of the dwellings that they serve. Both of the existing residences are also privately serviced for water by water well: the water supply well for residence #73 is located in the front yard (i.e., to the north of the dwelling) while the well for #79 is located along the west property line south of the house.

3.3. Groundwater Levels

Hydrographs of the groundwater level data collected from the monitoring wells up to November 2025, equipped with loggers in March and April 2023 are plotted in Charts 1 through 5, respectively (Appendix F). A record of manual groundwater level measurements, along with other elevations and monitoring well details, is provided in Table 2.

Groundwater levels have been observed to fluctuate seasonally, with maximum recorded groundwater levels occurring in April 2023 and minimum recorded groundwater levels occurring in October 2024.

Maximum groundwater levels ranged from about 417.10 masl (MW1 in April 2023) to about 415.56 masl (MW5 in April 2023).

The range of fluctuation (i.e., difference between maximum and minimum recorded manual groundwater levels) is between 0.8 to 1.4 m at all monitoring wells, based on the water level data recorded on site between April 2023 and May 2025. The recorded data also indicates numerous brief periods of rise and fall in the groundwater level, indicative of influence of precipitation events on shallow groundwater levels.

Groundwater levels in early 2024 and 2025 appear not to have risen as high as they did in 2023. This is understood to be due to the relatively dry, warm winter of 2023/2024.

3.3.1. Groundwater Gradients

Groundwater contours based on groundwater level readings from April 5, 2023 have been plotted in Figure 7a. The Seasonal High Groundwater Level (SHGWL) contours based on water level data until May 6, 2025, have been plotted in Figure 7b. These contours have been determined through a numerical interpolation of the water level readings recorded at each of the monitoring wells. The contours do not account for other factors, such as ground topography, variation in soil types, or other conditions which may cause perturbations in the groundwater contours.

The orientation of the contours (Figure 7a) indicates that the lateral direction of groundwater flow is generally southerly to south-easterly, indicating flow generally away from Sideroad 19 towards the creek traversing the property in the southerly portion of the property.

The spacing of the contours indicates a lateral gradient of approximately 1% to 2%. From the layout of the contours, the lateral component of groundwater flow is interpreted to be in a south-southwesterly direction, generally toward the wetland area located southwest of the Site.

3.4. Hydraulic Conductivity Testing

The hydraulic conductivity of the soil intersected by the well screen was tested at monitoring wells MW1, MW3, MW4 and MW5 using the single-well response testing method. The testing was conducted at the monitoring wells in the rising-head mode.

Calculation spreadsheets showing the test data and the calculated hydraulic conductivity values are provided in Appendix H. Overall, the data collected from the tests were very conducive to analysis, with consistent trends in water level change with time.

Because each of the wells was installed into the “Sand” layer, the results of this testing provide estimates of the hydraulic conductivity of the “Sand” with trace to some silt layer. Below is a summary of the hydraulic conductivity test results obtained by analysis of the slug test data using the Bouwer-Rice (1976) method:

- MW1 3×10^{-6} m/s
- MW3 7×10^{-6} m/s
- MW4 7×10^{-5} m/s
- MW5 1×10^{-5} m/s

The geometric mean of the four test results is 1×10^{-5} m/s.

The analyses indicate that the hydraulic conductivity of the soils on-site is moderate to moderate-low. Higher hydraulic conductivity is associated with monitoring wells located in the southern portion of the Site (i.e., MW4 and MW5), suggesting coarser deposits in those areas. For example, at the location of

MW1, a higher proportion of silt within the sand layer, described as “trace to some silt” with “occasional silty seams” within the screened interval, was reported during drilling (JLP 2023).

3.5. Groundwater Quality

Samples of groundwater were collected from each of the five monitoring wells, MW1 through MW5.

Results of analyses are provided in Appendix G (laboratory certificate of analysis) and are summarized in Table 3 for metals parameters and Table 4 for general chemistry parameters.

Generally, the results of the analyses indicate that the quality of the groundwater in the shallow sand aquifer is compliant with Provincial Water Quality Objectives with exception of elevated total phosphorus. Qualitatively, the groundwater quality results are characterized by moderate mineralization, as indicated by the elevated hardness, calcium, and magnesium concentrations.

There is some evidence of anthropogenic impacts to the shallow aquifer, such as elevated nitrate (ranging from 1.47 to 7.56 mg/L, with the highest concentration having been recorded at MW2), sodium (49 to 110 mg/L), and chloride (26 to 190 mg/L).

Elevated nitrate concentrations are likely due to impacts from agricultural activities (i.e., application of nitrogenous fertilizers). The elevated sodium and chloride concentrations are likely due to the application of road salt.

Total phosphorus was elevated above the PWQO limit of 0.01 mg/L at the one location for which it was analyzed (MW1) though orthophosphate concentrations were reported to be below the laboratory detection limit at all locations.

As the analytical results are noted to be compliant with the PWQO, it is expected that groundwater taken up by construction dewatering activities would be suitable for discharge to land provided that appropriate erosion and sediment control practices are implemented to mitigate potential impacts associated with suspended solids which may be generated during excavation and in-trench work. The use of erosion and sediment control is also expected to mitigate concentrations of total phosphorus in the discharge water before release to the environment.

3.6. Surface Water Quality

A sample of surface water was collected for laboratory analysis of general chemistry parameters. This sample was collected from location SW-001 (see Figure 6), located on the flowing drainage feature in the southwestern part of the Site. It is understood that runoff from properties to the east of the Site (i.e., Victoria Crescent) drains toward and onto the Site via a culvert and that this culvert discharges into a ditch on-site. The ditch conveys the runoff in a southerly direction toward SW-001 and beyond toward the low-lying wetland area off-Site.

Results of analyses are provided in Appendix G (laboratory certificate of analysis) and are summarized in Table 5 for metals parameters and Table 6 for general chemistry parameters.

Generally, the results of the laboratory analyses indicate that the quality of the surface water in the drain traversing the Site is compliant with Provincial Water Quality.

Qualitatively, the surface water quality is similar to the groundwater quality on-site and is characterized by moderate mineralization, as indicated by the elevated hardness, calcium, and magnesium. There is also some evidence of anthropogenic impacts, such as elevated nitrate (4.95 mg/L), sodium (170 mg/L), and chloride (250 mg/L). Elevated nitrate concentrations are potentially due to impacts from agricultural activities (i.e., application of nitrogenous fertilizers). The elevated sodium and chloride concentrations are likely related to the application of road salt on municipal roadways in vicinity of the Site.

4. Hydrogeological Conceptual Model

A “conceptual model” of a Site describes its physical setting and provides an interpreted overview of the hydrogeological behavior of the Site. It provides a basis for general understanding of groundwater flows and other hydrogeological phenomena as well as a basis for the assessment of potential impacts.

The topography of the Site generally favours drainage to the southerly part of the property. A culvert-and-ditch drain convey runoff toward the low-lying area in the southern part of the property. The drain is interpreted to intersect the groundwater table during periods of high groundwater (i.e., spring freshet) but during other times of the year the groundwater table is understood to lie below the drain.

Runoff from the Site is understood to flow toward a wetland area beyond the southern property boundary. That wetland is part of a series of connected wetlands and drainage features conveying surface water toward the Grand River.

The main hydrostratigraphic units identified on-site are as follows:

- Glaciofluvial deposits, overlying
- Glacial Till, overlying
- Guelph Formation (bedrock)

The glaciofluvial deposits (kame, outwash/ spillway sediments) consist of a silt veneer (extending 1 to 1.8 mbgs) overlying sand (extending 4 to 7.6 mbgs). The sand is saturated and constitutes a shallow aquifer on-site.

The glacial till, due to its density and relatively large proportion of silt, is characterized as an aquitard. Based on the thickness of the till indicated in the local well records, the till is understood to provide a substantial degree of hydraulic separation from the underlying Guelph Formation aquifer.

The presence of the till aquitard is interpreted to govern the flow of groundwater on-site. Due to the low-hydraulic conductivity of the till, seepage into and through the till is expected to occur at a relatively low rate. Flow in the overlying glaciofluvial sand is interpreted to be primarily lateral. Based on groundwater levels and interpreted groundwater gradients and contours, the horizontal component of groundwater flow is in a southerly direction toward the drainage corridor in the “environmental protection”-zoned lands to the south of the Site.

The seasonal fluctuation of groundwater levels on-site is relatively small, with only about 0.8 to 1.4 m separating the maximum and minimum annual groundwater levels at a given location. This indicates that the shallow glaciofluvial aquifer is laterally extensive and conductive enough to maintain relatively consistent groundwater levels throughout the year.

Groundwater levels in the northern part of the Site remain well below ground surface throughout the year. However, in the low-lying areas in the southern part of the Site, groundwater levels approach ground surface during the spring freshet. At times, groundwater levels rise high enough to intersect the ditch in

the southern part of the Site, indicating that flows in the ditch in the springtime may be a seasonal expression of the groundwater table at surface.

Groundwater quality on-site is characteristic of shallow overburden groundwater in the Guelph-Wellington Area, with moderate mineralization indicated by elevated magnesium and calcium concentrations. Elevated sodium and nitrate concentrations indicate some moderate anthropogenic influence on the shallow groundwater on-site. No significant impacts to groundwater quality have been identified that would preclude construction dewatering, or that would require substantial treatment of groundwater during construction dewatering: erosion and sediment control is likely to be sufficient.

5. Construction Dewatering Assessment

Due to the occurrence of groundwater on-site within the range of proposed excavation for servicing and stormwater management facility construction, it is expected that some degree of dewatering will be necessary to facilitate construction.

Elevations of basements and building foundations are proposed to lie at elevations above seasonal high groundwater levels. However, some amount of dewatering may be needed to facilitate construction (i.e., ensure trafficability, provide firm subgrade during foundation construction).

5.1. Dewatering Rates

Dewatering is expected to be the greatest at the location of the tie-in to the existing sanitary sewer on Sideroad 19. This is because groundwater levels are highest in the northern part of the Site (cf. MW1 Chart 1 in Appendix F) and because the depth of proposed excavation is the greatest at that location. Additional dewatering is expected to occur at the stormwater management facility forebay because excavations there are expected to extend below groundwater.

Though basements are proposed to be set at elevations above groundwater, some minor dewatering may be required if it is necessary to reduce groundwater levels even further below the base of excavation to improve the ground, ensure trafficability in the excavation and facilitate construction. The maximum drawdown required for the dewatering of basements would be relatively small (~0.3 m).

Expected dewatering rates have been estimated using analytical models based on the Dupuit-Forchheimer assumptions for flow to wells and trenches in unconfined aquifers (Powers *et al.*, 2007). The calculations for dewatering rates are provided in Appendix I, including the mathematical formulae used as well as a description of the parameters entered into the analyses (e.g., static groundwater levels, target groundwater levels, hydraulic conductivity of soils, boundary conditions).

The results of the analysis indicate the following:

- Servicing (Sanitary Sewer)
 - Typical Expected Dewatering Rate: 24,000 L/d
 - Maximum Expected Dewatering Rate: 240,000 L/d
- Stormwater Management Facility
 - Typical Expected Dewatering Rate: 16,000 L/d
 - Maximum Expected Dewatering Rate: 75,000 L/d
- Basement
 - Typical Expected Dewatering Rate: 0 L/d
 - Maximum Expected Dewatering Rate: 29,000 L/d

For the dewatering estimates for the servicing and the stormwater management facility, the difference between the estimation approaches for the typical and maximum dewatering rates is in the selection of hydraulic conductivity, which has been identified to vary from location to location on-site. The typical estimate is based on the hydraulic conductivity obtained through analysis of single well response testing

at the monitoring well nearest to the point of interest: MW-1 for the sanitary sewer, as MW-1 is the nearest monitoring well to SR19 (i.e., the location of deepest excavation); MW-5 for the stormwater management facility, as MW-5 is also located toward the southern end of the Site. The maximum estimate is based on the highest hydraulic conductivity estimate obtained from single well response testing on-site (specifically at MW4).

For the basement dewatering, the difference between the estimation approaches for typical and maximum dewatering rates is in the selection of drawdown. In the typical case, it is expected that no drawdown would be required (and therefore no dewatering), whereas in the maximum case it is assumed that up to 0.3 m of drawdown would be required. The hydraulic conductivity was estimated at 5×10^{-6} m/s to represent the silt material in the shallow overburden in which the basement excavations would likely be located.

5.2. Approvals Requirements

Though in limited circumstances a Permit to Take Water is required for construction dewatering activities, the construction dewatering for this project (i.e., the proposed servicing and development of the Site) is regulated in Ontario under the *Environmental Protection Act*, Ontario Regulation 63/16, and the Environmental Activity and Sector Registry (EASR) program.

Therefore, due to the expected dewatering rates being in excess of 50,000 L/d, it is recommended that the construction dewatering activity be registered to the EASR.

Dewatering activities registered to the EASR must be conducted in accordance with a project-specific water-taking and discharge report prepared by a Qualified Person (e.g., engineer or geoscientist licensed to practice in Ontario). Ontario Regulation 63/16 lays out the terms of reference of the water-taking and discharge plan.

The water-taking and discharge plan must be prepared before the activity is registered, and the activity must be registered before water-taking begins.

5.3. Zone of Influence

The zone of influence for dewatering is determined by estimating the radius of influence, which is the distance from the water-taking area at which there is expected to be no measurable drawdown in the groundwater table.

The radius of influence (R_0) was estimated using the Sichart equation (see Appendix I) to be 114 m for the sanitary sewer construction and 57 m for the stormwater management facility construction.

The zone of influence is that area that is located within R_0 of the edge of excavation, where R_0 is the radius of influence of that excavation.

Based on the locations of the dewatering activities, the estimated zones of influence for the Stormwater management facility and the servicing dewatering work are illustrated in Figure 8. For basements, the

estimated zone of influence is very small (estimated to be 2 m from the edge of excavation): it does not extend off-site and is therefore not shown in Figure 8.

It is noted that the estimated zones of influence depicted in Figure 8 are maximum estimates of the size of the zone of influence. This is because the estimates are based on an upper limit estimate of the hydraulic conductivity as well as an upper limit estimate of drawdown. If construction dewatering occurs during summer or fall when groundwater levels are at their seasonal lows, the zone of influence would be expected to be smaller than depicted in Figure 8.

5.4. Water-Taking Methodology

All water-taking for construction dewatering shall be undertaken in accordance with a water-taking plan prepared according to the requirements of Ontario Regulation 63/16.

Based on the anticipated depth of excavation below groundwater, it may be beneficial to begin dewatering in advance of excavation using a wellpoint system. By drawing down the groundwater table to below the depth of excavation, the stability of soils would be improved, and it would be possible, according to the requirements of Ontario Regulation 213/91, to reduce excavation support requirements or to steepen the slopes of excavations (e.g., to 1H:1V for Type 3 soils).

However, if it is feasible to proceed with a wide excavation (i.e., 3H:1V for Type 4 soils) or with more intensive engineered shoring (e.g., sheet pile systems), then dewatering may be conducted using sump pumps.

5.5. Monitoring and Mitigation

Detailed monitoring and mitigation plans shall be specified in the water-taking and discharge report prepared according to O.Reg. 63/16. However, the following recommendations are provided for consideration in the development of that plan.

5.5.1. Water-Taking

Monitoring activities for water-taking shall include the daily measurement of the volume of water taken, settlement monitoring, and the undertaking of a well monitoring program.

Settlement Monitoring Program

The settlement monitoring program should establish a number of control points that will be continuously accessible throughout the project. It is recommended that settlement monitoring be conducted daily on any day when dewatering exceeds 50,000 L/d. The settlement monitoring program should establish a threshold at which mitigation should be implemented.

Well Monitoring Program

The initial stage of the well monitoring program would be to conduct a door-to-door well survey for all properties within a specified distance of the expected dewatering locations. For the purposes of this project, it is recommended that that distance be established to enclose the area within which dewatering-

induced drawdown would be expected to exceed 0.5 m. This distance can be determined using Cooper-Jacobs' assumptions of a log-linear proportionality between distance from the excavation and drawdown:

$$s(x) = s_{max} \left(\frac{\log(R_0) - \log(x)}{\log(R_0) - \log(r_w)} \right)$$

Where:

- $s(x)$ is the drawdown at distance x (set to be 0.5 m)
- s_{max} is the maximum drawdown (i.e., target drawdown at the excavation)
(4.1 m for the sewer, 1.9 m for the stormwater management facility)
- x is the distance from the excavation to the point of interest (to be determined)
- R_0 is the radius of influence of dewatering
(103 m for the sewer, 53 m for the stormwater management facility)
- r_w is the half width or equivalent radius of the excavation
(1.5 m for the sewer, 2.3 for the stormwater management facility).

The resulting buffer distances are 61 m for the sanitary sewer and 23 m for the stormwater management facility. The area within these buffers is referred to as the "Well Monitoring Buffer". The layout of the well monitoring buffer is illustrated in Figure 9.

The door-to-door well survey is therefore recommended to be conducted at each of the following properties which have been identified to be within the well monitoring buffer:

- Sideroad 19: 87, 86, 83, 80, 74, 70, 69, 66, 63
- Elizabeth Crescent: 231, 233, 235, 301, 303
- Victoria Crescent: 9, 15, 19, 23, 27, 29

Any property within the well monitoring buffer identified above that utilizes a private well shallower than 15 m shall be invited to participate in a well monitoring program. The well monitoring program would be conducted at the wells of those well owners who agree to join the monitoring program. The monitoring program shall seek to measure baseline groundwater levels in the participating wells prior to construction and also monitor for changes in groundwater levels over the course of construction.

Mitigation activities related to water-taking would be associated with potential settlement-related impacts or impacts to private wells.

With respect to settlement, possible mitigation options would be to attempt to optimize dewatering by shortening open trenches or implementing alternate shoring systems or construction methodologies (e.g., trenchless technologies) to reduce reliance on dewatering.

With respect to private wells, any complaints received from well owners shall be addressed in a timely manner. This includes committing to provide a temporary alternate source of drinking water in the event that the water supply available to their wells is affected during the dewatering activity.

5.5.2. Discharge Management

All discharge for construction dewatering shall be undertaken in accordance with a discharge report prepared according to the requirements of Ontario Regulation 63/16.

Based on the results of analysis of groundwater samples collected from the on-site monitoring wells, it is expected that groundwater quality will be suitable for discharge to the environment provided that appropriate erosion and sediment controls are provided.

The contractor undertaking the dewatering shall implement appropriate discharge management and erosion and sediment control measures such as filter bags, check-dam impoundments, and/or channel/surface armouring. All such measures shall be implemented in accordance with *Ontario Provincial Standard Specifications* (OPSS):

- *OPSS.MUNI 518: Construction Specification for Control of Water from Dewatering Operations*
- *OPSS.MUNI 805: Construction Specification for Temporary Erosion and Sediment Control Measures.*

Specific erosion and sediment control requirements, if applicable, shall be detailed in the discharge report prepared according to O.Reg 63/16.

Inspection of all components of the discharge management and erosion and sediment control system (e.g., hoses, fittings, pumps, check-dams, filter bags, sedimentation tanks etc.) shall be conducted daily.

Due to proximity to an off-Site wetland, it is recommended that the discharge water be tested daily for turbidity.

Turbidity of discharge water incident on the wetland should have a turbidity of less than 8 NTU above the “background” turbidity of the receiver. Therefore, background turbidity testing of the water in the wetland shall be completed before beginning dewatering. The discharge plan should provide recommendations on how to conduct background monitoring for this purpose.

6. Impact Assessment

A proposed development may result in hydrogeological impacts to water quality or to water quantity.

A given receptor may be impacted by both, either, or neither of these types of impacts depending on the potential severity of the effect, whether there is a pathway between the source and the receptor, and whether the receptor is sensitive to that type of impact.

Based on assessment of the Site and surrounding lands within the Study Area, the following receptors have been identified:

- Source Protection and Municipal Water Supplies
- Private Water Wells
- Ecological Receptors (i.e., nearby wetland areas)
- Construction and Development (i.e., structures proposed to form part of the development).

6.1. Source Protection and Municipal Water Supplies

The Site lies within a WHPA-B with vulnerability ranging from 10 (north part of the Site) to 8 (south part of the Site) (LERSPC, 2022).

The Site also lies within a “Significant” Wellhead Water Quantity Zone “Q1” (LERSPC, 2022).

The local Source Protection Plan (LERSPC, 2022) provides a list of policies applicable to these areas which are to be followed to avoid impacts to municipal water resources. Furthermore, the *2021 Technical Rules under the Clean Water Act* (MECP, 2021) identify certain activities as “significant drinking water threats” which must be avoided or addressed according to the Source Protection Plan policies, potentially through the development of a “Risk Management Plan” (RMP).

6.1.1. Quantity

Generally, the activities associated with the development that may affect the quantity of groundwater available to municipal water supplies are:

1. Water-taking for construction dewatering
2. Potential reduction of recharge to an aquifer (i.e., due to increased impervious area and paving associated with development)

The proposed water-taking for construction dewatering is not considered a “significant drinking water threat” under the *Technical Rules* because it is an activity that does not require a Permit to Take Water. Therefore, no RMP is required for this activity.

However, the potential reduction of recharge to an aquifer is identified by the *Technical Rules* as being a “significant drinking water threat” by virtue of the Site being located within a “Significant” WHPA-Q. Source Protection policy WC-MC-23.5 (LERSPC, 2022) applies, requiring the proponent to:

- Provide a water balance for the proposed development;
- Maintain pre-development recharge quantities to the greatest extent feasible through implementation of best management practices and “low impact development” (LID) features; and
- Where pre-development recharge cannot be maintained on-site, maximize off-site recharge enhancement to compensate for the expected decrease in recharge.

A water balance has been prepared under separate cover as part of the Stormwater Management Design Report for the proposed development (GEI, 2026). The water balance calculations indicate that the proposed development would result in a decrease in total groundwater recharge on-site of approximately -1,397 m³/year, corresponding to a decrease of about 50% relative to existing conditions.

The Stormwater Management Design Report (GEI, 2026) also provides an analysis of the proposed development and the potential to install LID features (e.g., bioswales, infiltration galleries) to mitigate the change in recharge that is anticipated to occur post-development. That analysis indicates that, due to the existing high groundwater levels on-site, it is not feasible to provide substantial enhanced recharge through the construction of LID structures. This is primarily because design guidance and municipal requirements specify a minimum clearance of 1.0 m between the underside of the LID structure and the seasonal high groundwater levels at that location. As discussed in the Stormwater Management Design Report (GEI, 2026), this clearance is not feasible to achieve at the Site.

Hydrogeologically, it is expected that the change in recharge will not have a significant impact on groundwater levels or on overall recharge to municipal groundwater resources. The primary rationale is that recharge that occurs on-site is largely constrained from influencing the municipal source aquifer (e.g., bedrock aquifers, such as the Guelph Formation) due to the substantial thickness of dense, fine-textured glacial till that separates the surficial glaciofluvial aquifer from the municipal source aquifer. Much of the recharge on-site ultimately remains in the surficial aquifer, flowing through the subsurface toward the rear property line and along the connected wetland features beyond the southern boundary of the Site. Furthermore, it is noted that there has been extensive development elsewhere in the catchment area (e.g., lands to the east on Victoria Crescent) and groundwater levels remain very high at the Site. Therefore, the effect of development of the Site is not expected to be significant.

6.1.2. Quality

The *Technical Rules* identify several activities that would be considered a “significant drinking water threat” within a WHPA-B(10) zone. Some of these activities will not be occurring on-site (e.g., de-icing of aircraft, storage or application of agricultural source material, disposal of sewage, landfilling) and are not necessary to address in detail.

Activities that are or may reasonably be expected to occur on-site during or post-construction are as follows:

- Fuel handling and storage
- Road salt application
- Snow storage
- Dense Non-Aqueous Phase Liquid (DNAPL) handling and storage

Fuel Handling and Storage

Fuel handling and storage, in relation to the proposed development, would only be considered a “significant drinking water threat” in circumstances where the fuel storage vessels exceed 250 L in capacity and where fuel handling and storage is conducted at a “facility” as defined in O.Reg. 217/01 (i.e., retail fuel outlets or a private fuel outlet) or 213/01 (an installation where fuel oil is handled).

The latter circumstance is not expected to apply as fuel oil is not expected to be used at the property.

However, the use of mobile fuel tanks to fill construction vehicles may be considered an instance of a “private fuel outlet”. The municipality may require a Risk Management Plan if fuel tanks exceeding 250 L in capacity are to be used on-site, such as for the purposes of refueling construction equipment.

Road Salt Application

Road salt application in a WHPA-B is considered to be a “significant drinking water threat” where impervious area exceeds 30% in a WHPA-B.

A Salt Management Plan is recommended to be completed and implemented for the proposed development. The plan should address salt management during construction as well as post-construction conditions (i.e., long-term maintenance of roads).

Snow Storage

Per the *Technical Rules*, snow storage is not considered to constitute a “significant drinking water threat” in a WHPA-B if the land use is residential. Therefore, snow storage is not considered to be a “significant drinking water threat” and no RMP is required.

DNAPL Handling and Storage

According to the *Technical Rules*, the “DNAPL handling and storage” activity applies only to certain industrial and commercial settings and uses, such as manufacturing and chemical processing facilities. However, the Site will be under residential use.

As such, it is considered that, in the context of Source Protection, the DNAPL handling and storage activity will not occur at the Site during construction or operation. Therefore, there is no “significant drinking water threat” associated with DNAPL handling or storage at the Site.

6.2. Private Water Wells

Private water wells may be in use at some properties in Fergus, mainly for residential use. The potential for impacts to those wells must therefore be considered.

6.2.1. Quantity

In terms of water quantity, the primary stressor is construction dewatering. Due to the shallow depth of the excavations to be dewatered and the correspondingly small drawdowns, shallow (<15 m) overburden

wells being the most likely to be affected. Deeper wells, wells in the bedrock aquifer, or wells located outside the established drawdown buffer zone (i.e., 61 m from the sanitary sewer and 23 m from the stormwater management facility forebay) are not likely to be affected because the construction dewatering activities will not impart substantial or proportionally large drawdowns on those wells.

Within the well monitoring buffer, three MECP water well records have been identified to be overburden wells:

- WWR 6704003 – this well is attributed to the Site and is understood to be the well servicing the existing 79 Sideroad 19 residence.
- WWR 6704017 – this well is located to the east of the Site and appears to be attributed to the property at 23 Victoria Crescent
- WWR 6704751 – this well is located to the north of the Site and appears to be attributed to the property at 66 Sideroad 19.

Though only three overburden wells have been identified by review of the MECP Water Well Record Database, it is noted that some water well users may have shallow wells or old wells which were not required to have water well records submitted to the MECP.

Therefore, it is recommended that a door-to-door water well survey be completed prior to construction and that certain wells identified be invited to join a well monitoring program for the duration of construction dewatering. The recommendations regarding the door-to-door water well survey and well monitoring program are provided in Section 5.5.1 above.

6.2.2. *Quality*

Water quality is not expected to be affected by the proposed development as the proposed development does not constitute a substantial change in land use and the activities associated with the proposed development are not considered to pose a high risk of generating or releasing contaminants into groundwater.

The application of road salt has been identified as a potential “significant drinking water threat” in the context of municipal Source Protection. A Salt Management Plan is recommended to be prepared and implemented to mitigate potential risks associated with road salt application and salt contamination of municipal water resources: this same Salt Management Plan is also expected to mitigate impacts to water quality for other well users.

Construction dewatering is not expected to influence the water quality available to private wells because it is primarily a physical process (i.e., transfer of groundwater to surface). The management of construction dewatering discharge will involve physical processes (e.g., sedimentation, filtration) and is not expected to cause substantial changes to the chemistry of the water handled by the dewatering system, nor would the discharge water be expected to influence the quality of groundwater in the vicinity of the Site.

6.3. Ecological Receptors – Wetland Areas

Wetland areas have been identified downgradient of the Site to the south and west.

It is expected that the discharge from the stormwater management pond on-site will eventually enter the wetlands as overland flow.

Recharge that occurs on-site is also likely to contribute to the wetland areas as groundwater flow.

It is noted that the Irvine Creek Provincially Significant Wetland lies approximately 180 m to the west of the Site, it is not directly on-line with the drainage route that carries drainage from the Site. Therefore, the Irvine Creek Provincially Significant Wetland Complex is considered not to be directly downgradient of the Site and is not expected to be impacted by the proposed development.

The following discussion will therefore be focused on the small wetland that intersects the site.

6.3.1. Quantity

Activities with the potential to affect the water quantity available to the nearby wetland areas include the stormwater management facilities and construction dewatering activities on-site.

Construction dewatering is not expected to impact the wetland areas because the most intensive dewatering activities will occur at the north end of the Site, indicating that the drawdown influence at the wetland will be minor to negligible. Furthermore, the dewatering activities will be temporary and the slight water level change that might occur due to dewatering would subside shortly after the conclusion of dewatering.

One aspect of minimizing hydrogeological impacts associated with stormwater management is to ensure that the water balance does not significantly alter the quantity of groundwater recharge.

Water balance calculations prepared by GEI in the Stormwater Management Design Report (GEI, 2026; under separate cover) addressing the entire wetland catchment area, which comprises mainly lands external to the Site, such as already developed properties on Victoria Crescent, Elizabeth Crescent, and Burnett Court. The water balance calculations indicate that the change in total water surplus (recharge and runoff) within the wetland catchment will be an increase of approximately 1,094 m³, or 2.4%.

It is noted that the wetland areas on-site and downgradient of the site form a local drainage route for stormwater. The change in water surplus within the wetland catchment can be used to estimate the change in hydroperiod in the wetland that intersects the site. Applying Darcy's law and noting that flow is proportional to gradient, the increase in flow of 2.4% (i.e., the increased water surplus based on the water balance calculation) would correspond to a similar increase in gradient (i.e., 2.4%). The existing hydraulic gradient from groundwater measurements made on-site is approximately 0.02 (see Figure 7, which indicates a head loss of approximately 0.75 m over a 35 m distance in the southerly portion of the Site). Multiplying the existing gradient (0.02) by the percent change (2.4%) yields an incremental change in gradient of 5×10^{-4} m/m. Multiplying incremental change by the distance (approximately 130 m) between from the upgradient side of the wetland (i.e., where discharges from the Site will be received, whether as

recharge from the pervious area of the Site or as runoff from the SWM pond) and the culvert at Burnett Court (which is the nearest overflow outlet from the wetland), yields a change in water level of 0.07 m at the wetland. This can be interpreted as the average change in water level in the wetland.

Comparing against the hydrograph of MW5, and noting that the wetland boundary generally corresponds to an elevation of approximately 415.4 masl, an increase in water level of 0.07 m is not expected to substantially affect the hydroperiod of the wetland: the general character of the wetland hydrology (i.e., several weeks of inundation in the spring followed by dry periods in the summer and fall) is expected to be preserved.

Therefore, the proposed development is not expected to cause significant impacts to the wetland function or hydroperiod. Surface water and runoff contributions will continue to maintain moisture conditions in the wetland areas. Therefore, negative impacts to the water balance of the wetland areas is not expected to occur as a result of the proposed development.

Another aspect of water quantity impacts is the rate of flow: excessive flows may result in flooding of downgradient receivers. However, the stormwater management pond has been designed to mitigate peak flows to ensure that excessive flooding will not occur in the receiving wetland areas.

Erosion is an additional concern that is related to water quantity. High quantities of water discharge correspond to higher flow velocities which may cause entrainment of soils and sediments, which could impact receiving wetlands and stream channels. The construction dewatering activities are not expected to generate high quantities of water (i.e., less than 400,000 L/d) and the potential for erosion to be caused by construction dewatering discharge will be minimized through the implementation of erosion and sediment control. Similarly, the stormwater management design will include appropriate measures to attenuate the rate of stormwater discharges from the stormwater management pond on-site, which will reduce potential for excessive erosion in the receiving environment.

Therefore, given the design and mitigation proposed, the proposed development is not expected to negatively impact the nearby wetland areas.

6.3.2. Quality

In terms of water quality, water quality associated with construction dewatering discharge is not expected to cause impacts to downgradient wetlands because of the erosion and sediment controls that will be implemented.

The stormwater management facility is proposed to be designed in accordance with the MECP *Stormwater Management Planning and Design Manual* to provide a level of treatment to stormwater runoff before it is discharged from the stormwater management facility. This will mitigate potential impacts to the wetland in terms of water quality.

Water quality impacts to the wetland areas are therefore not expected.

6.4. Construction and Development

Construction dewatering aspects have been addressed in Section 5. This section will therefore be related to the potential for impacts to the structures that are proposed to be built.

6.4.1. Quantity

The primary impacts associated with quantity are inflow and infiltration into sewers or other structures on-site.

Because of the relatively high hydraulic conductivity of the soil materials on-site, breaches or leaks in sewer pipe may result in significant rates of inflow and infiltration. Wrapping of pipe joints should be considered as a way to minimize the potential for inflow and infiltration at any joint located more than 0.3 m below the seasonal high groundwater level.

To prevent services from becoming preferential flow paths for groundwater, it is recommended that all services installed at elevations below the identified seasonal high groundwater level surface be furnished with clay collars or trench plugs at regular spacing.

Basements for the proposed buildings of the Site will be set at elevations above seasonal high groundwater level. Therefore, impacts to basements with respect to groundwater seepage is not expected.

Due to the elevation of basements above groundwater levels and to the provision of trench plugs along linear infrastructure installed below groundwater, it is expected that the proposed development will not negatively affect existing groundwater flow patterns.

It is noted that a construction dewatering estimate has been provided for the excavation of basements and construction of foundations. However, this is not to be taken as an expectation of permanent dewatering. Dewatering during construction may sometimes be required to lower groundwater levels and ensure trafficability and firm subgrade conditions while the soil is exposed. Once the foundation is constructed and backfilled, it is expected that no further drainage would be necessary.

6.4.2. Quality

The proposed development will be deriving its water supply from the existing municipal water supply system and not from private wells. Therefore, the water quality available to the users of the proposed development will therefore be controlled and no impacts are expected.

7. Monitoring and Mitigation

Based on the results of the impact assessment, the following monitoring and mitigation measures are recommended for the development.

7.1. Monitoring Activities – General

This section addresses monitoring as it pertains to the development itself in its operation (i.e., post-development). Construction dewatering monitoring has been addressed in other sections (5.5, 7.3).

7.1.1. On-Site Groundwater Level Monitoring

Groundwater level monitoring is recommended to continue at the existing monitoring wells until site plan approval has been obtained, or until municipal requirements have been met.

Once they are no longer needed for continued monitoring, the monitoring wells shall be decommissioned by a licensed water well drilling contractor and in accordance with the requirements of Ontario Regulation 903.

7.1.2. Groundwater Quality Monitoring

Groundwater quality monitoring is not proposed as impacts to groundwater quality are not expected.

7.1.3. Surface Water Quality Monitoring

Surface water quality monitoring is not proposed as impacts to surface water quality are not expected due to the mitigation measures proposed by the stormwater management plan.

7.2. Mitigation Activities – General

7.2.1. Stormwater Management

Stormwater management facilities will be designed according to the MECP *Stormwater Management Planning and Design Manual*. The design will therefore include elements to mitigate potential impacts associated with water quality (i.e., treatment of runoff during retention before discharge) and quantity (i.e., attenuation of peak flows to minimize erosion and potential for flooding).

7.2.2. Long Term Drainage or Water Taking

Dwellings are being proposed with basements above the seasonal high groundwater level which will eliminate the need for long-term taking of groundwater by foundation drains.

Sewers proposed for elevations more than 0.3 m below the seasonal high groundwater level are recommended to be constructed with waterproof wrapping at all joints and connections. The intent of this

measure is to limit groundwater loss and drainage as well as to minimize inflow and infiltration which may result in excessive drainage loads on sanitary and/or storm sewers.

7.3. Monitoring and Mitigation Activities – Construction Dewatering

Monitoring and mitigation regarding construction dewatering has been addressed in Section 5.5.

It is noted that the construction dewatering activities undertaken on-site are recommended to be registered to EASR.

As such, the details regarding construction dewatering monitoring and mitigation must be provided in a water-taking and discharge report which, per O.Reg. 63/16, is required to be prepared and implemented for construction dewatering activities registered to EASR.

8. Summary of Findings

A hydrogeological study has been completed with respect to a proposed residential development to be constructed at 73 and 79 Sideroad 19, Township of Centre Wellington. The following is a summary of the findings of the study:

- The Site is approximately 1.1 ha in size.
- Municipal water services are available in the area but some residents may rely on private water wells for water supply.
- The proposed development will be municipally serviced for water and sewage.
- The topography of the Site consists of a relatively flat to gently sloping upland area in the northern part of the Site. In the southern part of the Site there is a slope down to a low-lying area, with wetland areas identified to the south and southwest of the Site.
- The Site is in the watershed of the Grand River and the River itself is located approximately 1,600 m south of Site.
- The Site is situated within the Guelph Drumlin Field physiographic region, with the northerly portion of the Site located within a Till Plain physiographic landform and the southerly portion of the Site within a Spillway landform.
- The hydrostratigraphy of the Site consists of:
 - Glaciofluvial deposits (silt veneer overlying sand; total thickness up to 7.6 m), overlying
 - Glacial Till, overlying
 - Bedrock (Guelph Formation)
- Groundwater level measurements made in shallow (total depth less than 7 m) monitoring wells on-site indicate groundwater elevations reaching 417.35 masl during “high” season (i.e., late winter and into spring), with higher elevations being observed in the northerly part of the Site and lower elevations being observed in the southerly part of the Site.
- Groundwater gradients indicate that the lateral component of groundwater flow is generally southerly (e.g. toward the low-lying area and off-site wetlands). The vertical component of groundwater flow is interpreted to be downward (i.e., recharge conditions) but downward seepage is constrained due to the presence of the low hydraulic conductivity till.
- Locally, groundwater resources supply both the municipal system and private water well users.
- In terms of source protection vulnerable areas the Site is located within a WHPA-B (8,10), Significant Groundwater Recharge Area, and WHPA-Q (Significant).
- Centre Wellington municipal supply well F7 is located approximately 580 m southwest of the Site.
- Hydraulic testing of overburden soils indicates that the average hydraulic conductivity of the surficial glaciofluvial sand unit ranges from 3×10^{-6} m/s to 7×10^{-5} m/s, indicating moderate to moderate-low hydraulic conductivity.
- Groundwater quality testing indicates compliance with the Provincial Water Quality Objectives despite evidence of minor influence of anthropogenic activities (e.g. elevated sodium and chloride due to road salt application; elevated nitrate and phosphorus due to fertilizer application).
- Surface water quality (as determined from analysis of a sample collected at the on-site drainage feature) generally meets the Provincial Water Quality Objectives with several elevated metal

parameters as well as sodium and chloride inferred to be related to road salt application in the surrounding area.

- Construction dewatering is expected to be required for this site for the construction of servicing and the stormwater management facility. For approvals purposes the following dewatering rates have been estimated:
 - Servicing (Sanitary Sewer)
 - Typical Expected Dewatering Rate: 24,000 L/d
 - Maximum Expected Dewatering Rate: 240,000 L/d
 - Stormwater Management Facility
 - Typical Expected Dewatering Rate: 16,000 L/d
 - Maximum Expected Dewatering Rate: 75,000 L/d
 - Basements
 - Typical Expected Dewatering Rate: 0 L/d
 - Maximum Expected Dewatering Rate: 29,000 L/d
- The zone of influence of dewatering has been estimated to be those areas within 114 m of the sanitary sewer, within 57 m of the forebay of the stormwater management facility, and within 2 m of basement excavations.
- Based on the estimated dewatering rates, the construction dewatering activity is recommended to be registered to the Environmental Activity and Sector Registry.
- Recommendations for monitoring and mitigation during construction dewatering have been provided, including with respect to erosion and sediment control/ discharge management as well as well monitoring and settlement monitoring. It is noted that a more detailed monitoring and mitigation plan will be required to be developed in the preparation of a water-taking and discharge report according to Ontario Regulation 63/16 to support the EASR registration.
- The following have been identified as potential receptors of hydrogeological impacts which may occur as a result of the development: private well users, municipal water supply (i.e., source protection), ecological receptors (i.e., off-site wetland areas), and structures built as part of the development (i.e., basements, sewers).
- Though it is estimated that the proposed development will result in a decrease in groundwater recharge on-site, due to other factors (i.e., hydraulic separation between the surface and the municipal source aquifer; the hydrological function of the wetland areas as receivers of surface water runoff) this decrease is not expected to have negative impacts on receptors in the Study Area.
- A general impact assessment has been completed regarding the proposed development, and it is expected that the proposed mitigation measures, such as stormwater management pond, erosion and sediment control, and construction dewatering mitigation activities, will be sufficient to prevent the occurrence of negative impacts to the identified receptors.
- A salt management plan was developed by GEI and is included under a separate cover (GEI, 2026).

9. Conclusions and Recommendations

Having undertaken the hydrogeological study for the proposed residential development of 73 and 79 Sideroad 19, Township of Centre Wellington, GEI have identified no major obstacles that would preclude the development from proceeding.

GEI provide the following recommendations:

1. Construction dewatering rates are expected to exceed 50,000 L/d and therefore the construction dewatering activities shall be registered on the Environmental Activity and Sector Registry (EASR). A water-taking and discharge report shall be prepared according to Ontario Regulation 63/16 to support the EASR registration and all construction dewatering activities shall be conducted in accordance with that report. That report shall include considerations for the following monitoring and mitigation measures (see Section 5.5 for more information):
 - a. Erosion and sediment control to minimize potential for discharge water to impact local surface water and receiving drainage features;
 - b. Turbidity monitoring of dewatering discharge;
 - c. Settlement monitoring;
 - d. Door-to-door well survey to properties within 61 m of the sanitary sewer or within 23 m of the stormwater management facility forebay:
 - Sideroad 19: 87, 86, 83, 80, 74, 70, 69, 66, 63;
 - Elizabeth Crescent: 231, 233, 235, 301, 303;
 - Victoria Crescent: 9, 15, 19, 23, 27, 29.
 - e. Well monitoring program for all private wells identified by the door-to-door well survey that meet the following criteria:
 - i. Well is constructed in the overburden;
 - ii. Total depth of the well is less than 15 m.
2. Prior to the start of construction dewatering, the dewatering activities shall be registered to the Environmental Activity and Sector Registry with the following source information:
 - a. Assuming that the stormwater management facility and sanitary servicing will require dewatering concurrently:

▪ Source 1: Servicing Trenches	
• Maximum Estimated Dewatering	240,000 L/d
• Typical Estimated Dewatering	24,000 L/d
▪ Source 2: Stormwater Management Facility	
• Maximum Estimated Dewatering	75,000 L/d
• Typical Estimated Dewatering	16,000 L/d
▪ Source 3: Basements	
• Maximum Estimated Dewatering	29,000 L/d
• Typical Estimated Dewatering	0 L/d
 - b. Assuming that the stormwater management facility and sanitary servicing will require dewatering concurrently (areas of influence are expected to overlap):

- Source 1: Excavations
 - Maximum Estimated Dewatering 344,000 L/d
 - Typical Estimated Dewatering 40,000 L/d
- 3. A Risk Management Plan may be necessary to be developed for implementation during construction if construction equipment will be refueled on-site using tanks with fuel capacity exceeding 250 L. It is therefore recommended that, if feasible, refueling of on-site equipment be completed using jerricans and portable containers having capacity less than 250 L. The Contractor shall have a spill management plan and maintain a spill management kit on-site to address potential fuel releases that may occur during construction.
- 4. Groundwater levels shall continue to be monitored in on-site monitoring wells until site plan approval has been obtained, or until municipal requirements have been met.
- 5. Once the requirement for groundwater level monitoring has been achieved, the monitoring wells shall be decommissioned by a licensed water well drilling contractor and in accordance with the requirements of O.Reg. 903.
- 6. Due to the occurrence of groundwater levels above sewer inverts, it is recommended that waterproof wrapping be applied to all sewer joints where the pipe invert is greater than 0.3 m below the seasonal high groundwater level.
- 7. To prevent services from becoming preferential flow paths for groundwater, clay collars or trench plugs shall be installed along all services to be constructed below the seasonal high groundwater level surface.

10. Statement of Limitations

The information in this report is intended for the sole use of WrightHaven Homes Limited. GEI Consultants Canada Ltd. accepts no liability for use of this information by third parties. Any decisions made by third parties on the basis of information provided in this report are made at the sole risk of the third parties.

GEI Consultants Canada Ltd. cannot guarantee the accuracy or reliability of information provided by others. GEI Consultants Canada Ltd. does not accept liability for unknown, unidentified, undisclosed, or unforeseen surface or sub-surface conditions that may be later identified.

The conclusions pertaining to the condition of soils and/or groundwater identified at the site are based on the visual observations at the locations of the investigative boreholes/monitoring wells and on the reported laboratory results for the selected soil and/or groundwater samples. GEI Consultants Canada Ltd. cannot guarantee the condition of soil and/or groundwater that may be encountered at the site in locations that were not specifically investigated as part of this investigation. This report is considered to be representative of the condition of the Site as of November 4, 2025.

11. References

Bouwer, H., and Rice, R.C. 1976. A slug test method for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells. *Water Resources Research*, 12:3, pp. 423-428.

Brunton, F.R. 2009. Update of revisions of the Early Silurian stratigraphy of the Niagara Escarpment: integration of sequence stratigraphy, sedimentology, and hydrogeology to delineate hydrogeologic units: in Summary of Field Work and Other Activities 2009, Ontario Geological Survey, Open File Report 6240, p. 25-1 to 25-20.

Chapman, L.J. and Putnam, D.F. 2007. Physiography of Southern Ontario. Ontario Geological Survey, Miscellaneous Release, Data 228.

Chapman, L.J. and Putnam, D.F. 1984. Physiography of Southern Ontario – 3rd Edition. Ontario Geological Survey. Special Volume 2.

Credit Valley Conservation (CVC) and Toronto and Region Conservation Authority (TRCA). 2010. Low Impact Development Stormwater Management Planning and Design Guide. Version 1.0.

GEI Consultants Canada Ltd. (GEI). 2026. Stormwater Management Design Report Proposed Residential Development 73/79 Sideroad 19, Township of Centre Wellington (Fergus). Dated January 2026

GEI Consultants Canada Ltd. (GEI). 2026. Letter to Chantalle Pellizzari of Township of Centre Wellington – Salt Management Plan, 73/79 Sideroad 19, Fergus Ontario. Dated January 2026.

Grand River Conservation Authority (GRCA). 2024. Interactive Mapping Application. Accessed online at: [GRCA Web Map](#)

Grand River Conservation Authority (GRCA). 2024a. “Wetland” Layer in GRCA WebMap GIS. Accessed online at <https://maps.grandriver.ca/web-gis/public/?theme=General&bbox=548502,4839666,549147,4840038>.

Grand River Conservation Authority (GRCA). 2024b. “Watercourse” Layer in GRCA WebMap GIS. Accessed online at <https://maps.grandriver.ca/web-gis/public/?theme=General&bbox=548502,4839666,549147,4840038>

JLP Services Inc. 2023. Geotechnical Investigation Proposed Residential Development 79-87 Side Road 19 Township of Centre Wellington (Fergus), Ontario.

Ontario Geological Survey. 2010. Surficial Geology of Southern Ontario; Ontario Geological Survey. Miscellaneous Release, Data 128 – Rev.

Ontario Geological Survey. 2011. 1:250,000 Scale Bedrock Geology of Ontario. Ontario Geological Survey, Miscellaneous Release, Data 126 - Rev. 1

Ontario Ministry of the Environment, Conservation, and Parks (MECP). 2021. 2021 Technical Rules Under the Clean Water Act. Accessed online at <https://www.ontario.ca/page/2021-technical-rules-under-clean-water-act>

Ontario Ministry of the Environment, Conservation and Parks (MECP). 2022. Ontario Water Well Information System – Map: Well Records. Accessed online at <https://www.ontario.ca/page/map-well-records>

Lake Erie Region Source Protection Committee (LERSPC). 2022. Chapter 7 County of Wellington *In* Grand River Source Protection Area Approved Source Protection Plan: Volume II. Dated February 9, 2022.

Powers, J.P., Corwin, A.B., Schmall, P.C., and Kaeck, W.E. 2007. Construction Dewatering and Groundwater Control: New Methods and Applications. Third Edition. Wiley.

Tables

Table 1. Water Well Record Summary

Table 2. Monitoring Well Details and Summary of Water Level Measurements

Table 3. Summary of Groundwater Quality Analyses – Metals Parameters

Table 4. Summary of Groundwater Quality Analyses – General Chemistry Parameters

Table 5. Summary of Surface Water Quality Analyses – Metals Parameters

Table 6. Summary of Surface Water Quality Analyses – General Chemistry Parameters

Table 1
Well Records Summary

1/6

Well ID	Completed	Depth (m)	Depth to Bedrock (m)	Static Water Level (mbgs)	Bedrock / Overburden	Well Use	Notes
Wells Attributed to the Site							
6704003	8/31/1971	5.5	-	3	Overburden	Domestic	It is inferred that this well plots on site in error. MECP Well record states "infront of #48"
7125424	6/4/2009	7.6	-	-	Overburden	Monitoring	
7370767	9/24/2020	4.9	-	-	Overburden	Monitoring	
Wells Attributed to Off-Site Locations							
6703120	4/23/1968	47.2	17.1	8.2	Bedrock	Domestic	
6703437	7/15/1969	38.4	24.4	7.3	Bedrock	Livestock	
6704017	9/22/1971	5.5	-	3	Overburden	Domestic	
6704053	1/22/1971	5.2	-	3	Overburden	Domestic	
6704054	1/25/1971	5.2	-	2.7	Overburden	Domestic	
6704374	9/30/1972	5.5	-	1.8	Overburden	Domestic	
6704746	7/31/1973	7	-	2.1	Overburden	Domestic	
6704747	8/1/1973	6.1	-	1.8	Overburden	Domestic	
6704748	8/7/1973	6.7	-	1.8	Overburden	Domestic	
6704751	8/15/1973	6.4	-	1.8	Overburden	Domestic	
6704752	8/15/1973	6.1	-	0.9	Overburden	Domestic	
6704757	8/16/1973	7.6	-	2.1	Overburden	Domestic	
6704780	9/12/1973	6.1	-	1.2	Bedrock	Domestic	
6705305	9/25/1974	72.5	72.2	23.8	Bedrock	Domestic	
6705317	10/10/1974	45.1	18	5.5	Bedrock	Domestic	
6705699	9/8/1975	7.6	-	1.8	Overburden	Domestic	
6706607	10/19/1977	4.6	-	1.5	Overburden	Domestic	
6707078	9/8/1979	9.1	-	3.7	Overburden	Domestic	
6708059	7/7/1983	55.2	23.2	18.3	Bedrock	Domestic	
6708481	6/24/1986	47.2	25	7.9	Bedrock	Domestic	
6710312	5/30/1990	43	27.1	22.6	Bedrock	Domestic	
6709226	11/2/1987	79.2	24.4	25.3	Bedrock	Domestic	
6709360	6/24/1988	74.7	24.7	18.3	Bedrock	Domestic	
6709436	9/28/1988	74.7	24.7	18.3	Bedrock	Domestic	
6709626	3/11/1988	44.2	21.9	14.6	Bedrock	Domestic	

Table 1
Well Records Summary

2/6

Well ID	Completed	Depth (m)	Depth to Bedrock (m)	Static Water Level (mbgs)	Bedrock / Overburden	Well Use	Notes
6709841	7/4/1989	103.6	70.1	29.6	Bedrock	Domestic	
6709871	8/12/1989	74.7	22.9	23.2	Bedrock	Domestic	
6710053	11/4/1989	4	-	2.7	Overburden	Domestic	
6710176	12/6/1989	97.8	22.3	24.4	Bedrock	Domestic	
6710274	11/15/1989	74.7	53.3	30.2	Bedrock	Domestic	
6711253	6/29/1993	41.1	23.5	10.7	Bedrock	Domestic	
6710558	8/31/1990	85	25.9	18.3	Bedrock	Domestic	
6710780	10/22/1991	93	76.8	15.2	Bedrock	Domestic	
6710877	7/8/1991	96	25.9	25.3	Bedrock	Domestic	
6710879	7/15/1991	54.9	26.8	10.7	Bedrock	Domestic	
6711273	9/24/1993	6.1	-	2.4	Overburden	Domestic	
6711379	1/25/1994	5.8	-	2.7	Overburden	Domestic	
6711428	6/14/1994	91.7	22.6	20.7	Bedrock	Domestic	
6711725	5/17/1995	4.6	-	3	Overburden	Domestic	
6711726	5/17/1995	3.7	-	1.8	Overburden	Domestic	
6712633	8/7/1998	54.3	23.2	24.4	Bedrock	Domestic	
6712675	10/13/1998	54.9	28	20.4	Bedrock	Domestic	
6712757	11/23/1998	67.1	26.5	20.4	Bedrock	Domestic	
6712767	10/30/1998	24.7	19.5	12.2	Bedrock	Domestic	
6712890	1/20/1999	96.9	73.2	36	Bedrock	Domestic	
6713080	8/17/1999	54.9	27.7	14	Bedrock	Domestic	
6714246	10/6/2002	56.4	25.6	29.6	Bedrock	Domestic	
6714247	10/9/2002	74.7	22.6	28	Bedrock	Domestic	
6714852	3/10/2004	9.4	-	1.5	Overburden	Domestic	
6714908	2/24/2004	51.9	23.8	40.0	Bedrock	Domestic	
6715686	3/31/2006	3.6	-	-	Overburden	Abandoned	
6715711	3/31/2006	3.6	-	-	Overburden	Abandoned	
6715931	9/8/2006	3	-	-	Overburden	Abandoned	
6716005	9/27/2006	101.2	24.1	25.6	Bedrock	Domestic	
7041270	1/18/2007	6.1	-	-	Overburden	Unknown	
7103575	10/25/2007	83.8	24.7	27.1	Bedrock	Domestic	
7122270	2/7/2009	4	-	1.7	Overburden	Monitoring	

Table 1
Well Records Summary

Well ID	Completed	Depth (m)	Depth to Bedrock (m)	Static Water Level (mbgs)	Bedrock / Overburden	Well Use	Notes
7122270	2/27/2009	4	-	1.7	Overburden	Monitoring	
7122270	2/27/2009	4	-	1.7	Overburden	Monitoring	
7125424	6/4/2009	7.6	-	-	Overburden	Monitoring	
7131004	5/26/2008	9.1	-	2.1	Overburden	Monitoring	
7140726	12/22/2009	4.6	-	-	Overburden	Monitoring	
7145093	4/27/2010	7.6	-	2.0	Unknown	Abandoned	
7145117	4/27/2010	3.7	-	2.8	Overburden	Monitoring	
7146695	5/7/2010	56.1	25.9	23.6	Bedrock	Domestic	
7140726	12/22/2009	4.6	-	-	Overburden	Monitoring	
7149988	7/26/2010	-	-	-	Unknown	Abandoned	
7145093	4/27/2010	9.1	-	2.4	Overburden	Abandoned	
7145117	4/27/2010	6.9	-	2.8	Overburden	Monitoring	
7145117	4/27/2010	5.5	-	2.3	Overburden	Monitoring	
7157841	11/23/2010	-	-	-	Unknown	Abandoned	
7158774	11/30/2010	-	-	-	Unknown	Abandoned	
7158777	11/30/2010	-	-	-	Unknown	Abandoned	
7158780	12/9/2010	47.5	22.6	20.4	Bedrock	Domestic	
7166539	6/24/2011	5.5	-	-	Overburden	Monitoring	
7166540	6/24/2011	4.3	-	-	Overburden	Monitoring	
7166541	6/24/2011	4.3	-	-	Overburden	Monitoring	
7166542	6/24/2011	4.3	-	-	Overburden	Monitoring	
7166643	7/2/2011	7.6	-	-	Overburden	Monitoring	
7166644	7/8/2011	5.3	-	-	Overburden	Monitoring	
7166645	7/8/2011	5.3	-	-	Overburden	Monitoring	
7166646	7/8/2011	5.3	-	-	Overburden	Monitoring	
7170667	9/12/2011	4.6	-	-	Overburden	Monitoring	
7170668	9/12/2011	4.6	-	-	Overburden	Monitoring	
7170669	9/12/2011	4.6	-	-	Overburden	Monitoring	
7170670	9/12/2011	4.6	-	-	Overburden	Monitoring	
7170671	9/12/2011	4.6	-	-	Overburden	Monitoring	
7170672	9/12/2011	4.6	-	-	Overburden	Monitoring	
7170673	9/13/2011	4.8	-	-	Overburden	Monitoring	

Table 1
Well Records Summary

4/6

Well ID	Completed	Depth (m)	Depth to Bedrock (m)	Static Water Level (mbgs)	Bedrock / Overburden	Well Use	Notes
7170674	9/13/2011	4.5	-	-	Overburden	Monitoring	
7171671	8/27/2011	4	-	-	Overburden	Monitoring	
7171672	8/27/2011	4.5	-	-	Overburden	Monitoring	
7171673	8/27/2011	4.5	-	-	Overburden	Monitoring	
7171674	8/27/2011	4.5	-	-	Overburden	Monitoring	
7171675	8/27/2011	4.5	-	-	Overburden	Monitoring	
7171676	8/27/2011	4.5	-	-	Overburden	Monitoring	
7171677	8/27/2011	4.5	-	-	Overburden	Monitoring	
7172708	10/14/2011	-	-	-	Unknown	Abandoned	
7174062	10/4/2011	4.5	-	-	Overburden	Monitoring	
7174063	10/4/2011	4.5	-	-	Overburden	Monitoring	
7174064	10/3/2011	4.5	-	-	Overburden	Monitoring	
7174065	10/5/2011	6.1	-	-	Overburden	Monitoring	
7174138	10/5/2011	9.1	-	-	Overburden	Monitoring	
7174139	10/5/2011	5.3	-	-	Overburden	Monitoring	
7174140	10/5/2011	5.3	-	-	Overburden	Monitoring	
7174141	10/5/2011	5.3	-	-	Overburden	Monitoring	
7174142	10/14/2011	4.5	-	-	Overburden	Monitoring	
7174143	10/4/2011	6.1	-	-	Overburden	Monitoring	
7175378	10/24/2011	12.2	-	-	Overburden	Monitoring	
7175379	10/24/2011	7.6	-	-	Overburden	Monitoring	
7175380	10/21/2011	5.5	-	-	Overburden	Monitoring	
7175377	10/22/2011	7.7	-	-	Overburden	Monitoring	
7175381	10/21/2011	5.5	-	-	Overburden	Monitoring	
7175382	1/19/2011	5.2	-	-	Overburden	Monitoring	
7175383	10/25/2011	9.1	-	-	Overburden	Monitoring	
7175384	10/21/2011	5.2	-	-	Overburden	Monitoring	
7175385	10/26/2011	4.6	-	-	Overburden	Monitoring	
7175386	10/31/2011	9.1	-	-	Overburden	Monitoring	
7175387	11/1/2011	4.5	-	-	Overburden	Monitoring	
7179051	11/1/2011	9.1	-	-	Overburden	Monitoring	
7193783	<null>	9.4	-	4	Overburden	Domestic	

Table 1
Well Records Summary

5/6

Well ID	Completed	Depth (m)	Depth to Bedrock (m)	Static Water Level (mbgs)	Bedrock / Overburden	Well Use	Notes
7193784	<null>	9.1	-	3.3	Overburden	Domestic	
7194462	12/21/2012	-	-	-	Unknown	Abandoned	
7194463	12/12/2012	3.3	-	-	Unknown	Abandoned	
7194464	12/11/2012	3.3	-	-	Unknown	Abandoned	
7201197	4/29/2013	4.2	-	-	Overburden	Monitoring	
7201200	4/29/2013	3.9	-	-	Overburden	Monitoring	
7204618	5/27/2013	4.9	-	-	Overburden	Abandoned	
7213430	11/22/2013	4.6	-	-	Overburden	Monitoring	
7221589	5/29/2014	3.9	-	-	Unknown	Abandoned	
7221590	5/29/2014	4.2	-	-	Unknown	Abandoned	
7241640	4/10/2015	56.4	-	-	Bedrock	Abandoned	
7243283	5/26/2015	3.6	-	-	Overburden	Abandoned	
7265817	6/16/2016	4.6	-	-	Overburden	Monitoring	
7265818	6/16/2016	4.6	-	-	Overburden	Monitoring	
7268299	6/3/2016	4	-	-	Overburden	Abandoned	
7270847	8/24/2016	5.8	-	-	Overburden	Abandoned	
7270848	8/24/2016	97.5	-	-	Bedrock	Abandoned	
7300234	11/14/2017	28.9	-	-	Bedrock	Abandoned	
7300235	11/14/2017	5.2	-	-	Overburden	Abandoned	
7303552	12/27/2017	65.5	24.4	22.9	Bedrock	Domestic	
7310979	3/19/2018	-	-	2.4	Overburden	Domestic	
7319318	6/27/2017	4	-	2.1	Overburden	Abandoned	
7330871	2/14/2019	6.1	-	4.6	Overburden	Monitoring	
7330872	2/14/2019	6.1	-	4.6	Overburden	Monitoring	
7330873	2/14/2019	6.1	-	4.6	Overburden	Monitoring	
7338945	6/10/2019	3.1	-	-	Overburden	Abandoned	
7338946	6/10/2019	6.1	-	4.5	Overburden	Abandoned	
7344068	9/18/2019	3.3	-	-	Overburden	Monitoring	
7344061	9/19/2019	3.9	-	1.5	Overburden	Monitoring	
7344097	9/19/2019	3.9	-	1.5	Overburden	Monitoring	
7346404	8/27/2019	5.5	-	4.0	Overburden	Abandoned	
7346405	8/27/2019	7.9	-	3.0	Unknown	Abandoned	

Table 1
Well Records Summary

6/6

Well ID	Completed	Depth (m)	Depth to Bedrock (m)	Static Water Level (mbgs)	Bedrock / Overburden	Well Use	Notes
7350271	11/6/2019	50.3	28.6	12.8	Bedrock	Domestic	
7357949	10/10/2018	47.2	27.4	9.1	Bedrock	Domestic	
7367523	5/8/2020	23.8	-	9	Bedrock	Abandoned	
7368359	7/29/2020	70.1	-	-	Bedrock	Abandoned	
7368438	5/7/2020	49.4	27.1	39.3	Bedrock	Domestic	
7368733	9/15/2020	51.9	-	-	Bedrock	Abandoned	
7370766	9/24/2020	4.7	-	-	Overburden	Monitoring	
7372104	10/9/2020	-	-	-	Unknown	Unknown	
7372761	10/27/2020	-	-	-	Bedrock	Domestic	

Table 2
Monitoring Well Details and Summary of Manual Water Level Measurements

Well	NORTHING	EASTING	TOC Elevation (m)	GS Elevation (m)	Depth to water (mbTOC) 14-Mar-2023	Groundwater Elevation 14-Mar-2023	Depth to water (mbTOC) 3-Apr-2023	Groundwater Elevation 3-Apr-2023	Depth to water (mbTOC) 5-Apr-2023	Groundwater Elevation 5-Apr-2023	Depth to water (mbTOC) 7-Jun-2023	Groundwater Elevation 7-Jun-2023	Depth to water (mbTOC) 14-Jun-2023	Groundwater Elevation 14-Jun-2023
MW1	4839992.6	548683.0	419.124	419.211	NA	-	2.022	417.102	2.054	417.070	-	-	2.625	416.499
MW2	4839945.8	548717.1	417.000	417.100	NA	-	0.025	416.975	0.025	416.975	1.035	415.965	-	-
MW3	4839948.0	548783.9	417.629	416.939	1.898	415.731	1.326	416.303	1.296	416.333	-	-	2.122	415.507
MW4	4839915.1	548749.9	417.057	416.302	1.434	415.623	0.949	416.108	0.953	416.104	-	-	1.809	415.248
MW5	4839889.2	548799.2	416.810	415.859	1.618	415.192	1.277	415.533	1.246	415.564	-	-	1.827	414.983
SW001	-	-	-	-	-	-	-	-	-	415.489	-	-	-	-

Notes:
NA - well not accessible on the date of reading water levels (JLP 2023)
or not found due to snow cover
mbTOC - metres below top of well casing elevation
GS - ground surface
SW001 - surface water level in onsite creek surveyed on April 5, 2023

Table 2
Monitoring Well Details and Summary of Manual Water Level Measurements

Well	NORTHING	EASTING	TOC Elevation (m)	GS Elevation (m)	Depth to water (mbTOC) 13-Oct-2023	Groundwater Elevation 13-Oct-2023	Depth to water (mbTOC) 28-Mar-2024	Groundwater Elevation 28-Mar-2024	Depth to water (mbTOC) 10-Jul-2024	Groundwater Elevation 10-Jul-2024	Depth to water (mbTOC) 2-Oct-2024	Groundwater Elevation 2-Oct-2024	Depth to water (mbTOC) 5-Feb-2025	Groundwater Elevation 5-Feb-2025
MW1	4839992.6	548683.0	419.124	419.211	2.878	416.246	2.353	416.771	2.645	416.479	2.926	416.198	NA	NA
MW2	4839945.8	548717.1	417.000	417.100	1.316	415.684	0.533	416.467	1.021	415.979	1.394	415.606	1.130	415.870
MW3	4839948.0	548783.9	417.629	416.939	2.289	415.340	1.636	415.993	1.905	415.724	2.364	415.265	2.141	415.488
MW4	4839915.1	548749.9	417.057	416.302	1.829	415.228	1.222	415.835	1.452	415.605	1.901	415.156	1.653	415.404
MW5	4839889.2	548799.2	416.810	415.859	1.968	414.842	1.470	415.340	1.954	414.856	2.020	414.790	1.861	414.949
SW001	-	-	-	-	Dry	-	-	-	-	-	-	-	-	-

Notes:
NA - well not accessible on the date of reading water levels (JLP 2023)
or not found due to snow cover
mbTOC - metres below top of well casing elevation
GS - ground surface
SW001 - surface water level in onsite creek surveyed on April 5, 2023

Table 2
Monitoring Well Details and Summary of Manual Water Level Measurements

Well	NORTHING	EASTING	TOC Elevation (m)	GS Elevation (m)	Depth to water (mbTOC) 6-May-2025	Groundwater Elevation 6-May-2025	Depth to water (mbTOC) 4-Nov-2025	Groundwater Elevation 4-Nov-2025
MW1	4839992.6	548683.0	419.124	419.211	2.415	416.709	3.090	NA
MW2	4839945.8	548717.1	417.000	417.100	0.676	416.324	1.513	415.487
MW3	4839948.0	548783.9	417.629	416.939	1.319	416.310	2.433	415.196
MW4	4839915.1	548749.9	417.057	416.302	1.783	415.274	1.964	415.093
MW5	4839889.2	548799.2	416.810	415.859	1.544	415.266	2.046	414.764
SW001	-	-	-	-	-	-	-	-

Notes:
NA - well not accessible on the date of reading water levels (JLP 2023)
or not found due to snow cover
mbTOC - metres below top of well casing elevation
GS - ground surface
SW001 - surface water level in onsite creek surveyed on April 5, 2023

Table 3
Summary of Groundwater Quality Analyses - Metals Parameters

<i>Parameter</i>	<i>PWQOs¹</i>	<i>Units</i>	<i>RDL</i>	MW1 04-03-23 02:00 PM	MW2 06-07-23 05:20 PM	MW3 03-14-23 12:30 PM	MW4 03-14-23 01:25 PM	MW5 03-14-23 12:45 PM
Metals								
Dissolved Aluminum (Al)	75	ug/L	4.9	<4.9	<4.9	<4.9	<4.9	<4.9
Dissolved Antimony (Sb)	20	ug/L	0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Arsenic (As)	5	ug/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Barium (Ba)		ug/L	2.0	73	37	47	63	43
Dissolved Beryllium (Be)	11	ug/L	0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Dissolved Boron (B)	200	ug/L	10	22	34	59	49	23
Dissolved Cadmium (Cd)	0.5	ug/L	0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Dissolved Calcium (Ca)		ug/L	200	130000	120000	130000	140000	140000
Dissolved Chromium (Cr)		ug/L	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dissolved Cobalt (Co)	0.9	ug/L	0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Copper (Cu)	5	ug/L	0.90	1.5	1.4	2	1.4	3.9
Dissolved Iron (Fe)	300	ug/L	100	<100	<100	<100	<100	<100
Dissolved Lead (Pb)	5	ug/L	0.50	<0.50	0.58	<0.50	<0.50	<0.50
Dissolved Magnesium (Mg)		ug/L	50	26000	26000	22000	28000	26000
Dissolved Manganese (Mn)		ug/L	2.0	44	<2.0	33	17	33
Dissolved Molybdenum (Mo)	40	ug/L	0.50	<0.50	<0.50	1.3	<0.50	0.6
Dissolved Nickel (Ni)	25	ug/L	1.0	1	<1.0	1.3	<1.0	2.3
Dissolved Phosphorus (P)		ug/L	100	<100	<100	<100	<100	<100
Dissolved Potassium (K)		ug/L	200	1300	1200	2300	1700	1300
Dissolved Selenium (Se)	100	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Silicon (Si)		ug/L	50	5100	5200	5500	4900	4000
Dissolved Silver (Ag)	0.1	ug/L	0.090	<0.090	<0.090	<0.090	<0.090	<0.090
Dissolved Sodium (Na)		ug/L	100	110000	51000	49000	94000	54000
Dissolved Strontium (Sr)		ug/L	1.0	240	210	220	260	250
Dissolved Thallium (Tl)	0.3	ug/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Titanium (Ti)		ug/L	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dissolved Uranium (U)	5	ug/L	0.10	1.1	0.44	1.4	0.89	2.6
Dissolved Vanadium (V)	6	ug/L	0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Zinc (Zn)	30	ug/L	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dissolved Bismuth (Bi)		ug/L	1.0	<1.0	<1.0	-	-	-
Dissolved Lithium (Li)		ug/L	5.0	<5.0	<5.0	-	-	-
Dissolved Tellurium (Te)		ug/L	1.0	<1.0	<1.0	-	-	-
Dissolved Tin (Sn)		ug/L	1.0	<1.0	<1.0	-	-	-
Dissolved Tungsten (W)	30	ug/L	1.0	<1.0	<1.0	-	-	-
Dissolved Zirconium (Zr)	4	ug/L	1.0	<1.0	<1.0	-	-	-

Legend	
Exceeds one Criteria	Result
Criteria 1	Provincial Water Quality Objectives

Table 4
Summary of Groundwater Quality Analyses - General Chemistry Parameters

<i>Parameter</i>	<i>PWQOs¹</i>	<i>Units</i>	<i>RDL</i>	MW1 04-03-23 02:00 PM	MW2 06-07-23 05:20 PM	MW3 03-14-23 12:30 PM	MW4 03-14-23 01:25 PM	MW5 03-14-23 12:45 PM
General Chemistry								
Anion Sum		me/L		-	9.69	8.05	12.6	10.7
Bicarb. Alkalinity (calc. as CaCO ₃)		mg/L	1.0	310	350	290	360	300
Calculated TDS		mg/L	1.0	720	530	490	700	610
Carb. Alkalinity (calc. as CaCO ₃)		mg/L	1.0	2.2	2.9	2	2.2	1.8
Cation Sum		me/L		-	10.2	10.3	13.3	11.7
Hardness (CaCO ₃)		mg/L	1.0	420	400	410	460	470
Ion Balance (% Difference)		%		-	2.75	12.4	2.96	4.54
Langelier Index (@ 20C)		N/A		0.978	1.09	0.969	1.01	0.963
Langelier Index (@ 4C)		N/A		0.731	0.841	0.721	0.76	0.716
Saturation pH (@ 20C)		N/A		6.9	6.86	6.89	6.8	6.85
Saturation pH (@ 4C)		N/A		7.15	7.1	7.14	7.05	7.1
Conductivity		umho/cm	1.0	1300	950	760	1300	1100
Dissolved Organic Carbon		mg/L	0.40	-	1.6	1.8	1.8	2.5
Orthophosphate (P)		mg/L	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH	6.5:8.5	pH		7.88	7.94	7.86	7.81	7.81
Dissolved Sulphate (SO ₄)		mg/L	1.0	58	23	49	50	93
Alkalinity (Total as CaCO ₃)		mg/L	1.0	310	350	290	370	300
Dissolved Chloride (Cl ⁻)		mg/L	1.0 - 3.0	190	57	26	140	87
Nitrite (N)		mg/L	0.010	<0.010	<0.010	0.043	<0.010	<0.010
Nitrate (N)		mg/L	0.10	1.47	7.56	5.66	4.7	3.12
Nitrate + Nitrite (N)		mg/L	0.10	-	-	5.71	4.7	3.12
Total Ammonia-N		mg/L	0.050	0.074	0.095	0.11	0.056	0.085
Turbidity		NTU	0.1	28	-	-	-	-
Total Organic Carbon (TOC)		mg/L	0.40	2.6	-	-	-	-
Total Phosphorus	0.01	mg/L	0.004	1.4	-	-	-	-

Legend	
Exceeds one Criteria	Result
Criteria 1	Provincial Water Quality Objectives

Table 5
Summary of Surface Water Quality Analyses - Metals Parameters

<i>Parameter</i>	<i>PWQOs¹</i>	<i>Units</i>	<i>RDL</i>	SW-001 03-14-23 01:00 PM
Metals				
Total Aluminum (Al)	75	ug/L	4.9	43
Total Antimony (Sb)	20	ug/L	0.50	<0.50
Total Arsenic (As)	100	ug/L	1.0	<1.0
Total Barium (Ba)		ug/L	2.0	54
Total Beryllium (Be)	11	ug/L	0.40	<0.40
Total Boron (B)	200	ug/L	10	37
Total Cadmium (Cd)	0.2	ug/L	0.090	<0.090
Total Calcium (Ca)		ug/L	200	150000
Total Chromium (Cr)		ug/L	5.0	<5.0
Total Cobalt (Co)	0.9	ug/L	0.50	<0.50
Total Copper (Cu)	5	ug/L	0.90	1.9
Total Iron (Fe)	300	ug/L	100	<100
Total Lead (Pb)	5	ug/L	0.50	<0.50
Total Magnesium (Mg)		ug/L	50	28000
Total Manganese (Mn)		ug/L	2.0	2.7
Total Molybdenum (Mo)	40	ug/L	0.50	<0.50
Total Nickel (Ni)	25	ug/L	1.0	<1.0
Total Potassium (K)		ug/L	200	1900
Total Selenium (Se)	100	ug/L	2.0	<2.0
Total Silicon (Si)		ug/L	50	3600
Total Silver (Ag)	0.1	ug/L	0.090	<0.090
Total Sodium (Na)		ug/L	100	170000
Total Strontium (Sr)		ug/L	1.0	560
Total Thallium (Tl)	0.3	ug/L	0.050	<0.050
Total Titanium (Ti)		ug/L	5.0	<5.0
Total Uranium (U)	5	ug/L	0.10	0.53
Total Vanadium (V)	6	ug/L	0.50	0.5
Total Zinc (Zn)	30	ug/L	5.0	5.1

Legend	
Exceeds one Criteria	Result
Criteria 1	Provincial Water Quality Objectives

Table 6
Summary of Surface Water Quality Analyses - General Chemistry Parameters

<i>Parameter</i>	<i>PWQOs¹</i>	<i>Units</i>	<i>RDL</i>	SW-001 03-14-23 01:00 PM
General Chemistry				
Anion Sum		me/L		-
Bicarb. Alkalinity (calc. as CaCO ₃)		mg/L	1.0	280
Calculated TDS		mg/L	1.0	910
Carb. Alkalinity (calc. as CaCO ₃)		mg/L	1.0	4
Cation Sum		me/L		-
Hardness (CaCO ₃)		mg/L	1.0	450
Ion Balance (% Difference)		%		-
Langelier Index (@ 20C)		N/A		1.23
Langelier Index (@ 4C)		N/A		0.986
Saturation pH (@ 20C)		N/A		6.95
Saturation pH (@ 4C)		N/A		7.2
Conductivity		umho/cm	1.0	1700
Dissolved Organic Carbon		mg/L	0.40	-
Orthophosphate (P)		mg/L	0.010	<0.010
pH	6.5:8.5	pH		8.18
Dissolved Sulphate (SO ₄)		mg/L	1.0	130
Alkalinity (Total as CaCO ₃)		mg/L	1.0	290
Dissolved Chloride (Cl ⁻)		mg/L	1.0 - 3.0	250
Nitrite (N)		mg/L	0.010	<0.010
Nitrate (N)		mg/L	0.10	4.95
Nitrate + Nitrite (N)		mg/L	0.10	-
Total Ammonia-N		mg/L	0.050	<0.050
Turbidity		NTU	0.1	0.4
Total Organic Carbon (TOC)		mg/L	0.40	2
Total Phosphorus	0.01	mg/L	0.004	0.005

Legend	
Exceeds one Criteria	Result
Criteria 1	Provincial Water Quality Objectives

Figures

Figure 1. Site Location

Figure 2. Site Layout

Figure 3. Physiographic Landforms

Figure 4. Surficial Geology

Figure 5. MECP Water Well Records

Figure 6. Site Investigation Layout

Figure 7a. Groundwater Contours (April 2023)

Figure 7b. Seasonal High Groundwater Levels (up to November 2025)

Figure 8. Estimated Zone of Influence for Construction Dewatering

Figure 9. Well Monitoring Buffer

Lot 19, Con 15
Geo. Twp of Nichol

Scale: 1: 200,000
June 2024

Figure 1: Site Location

GEI  Consultants

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol



Site Boundary (approx.)
Study Area (500m)
Roads

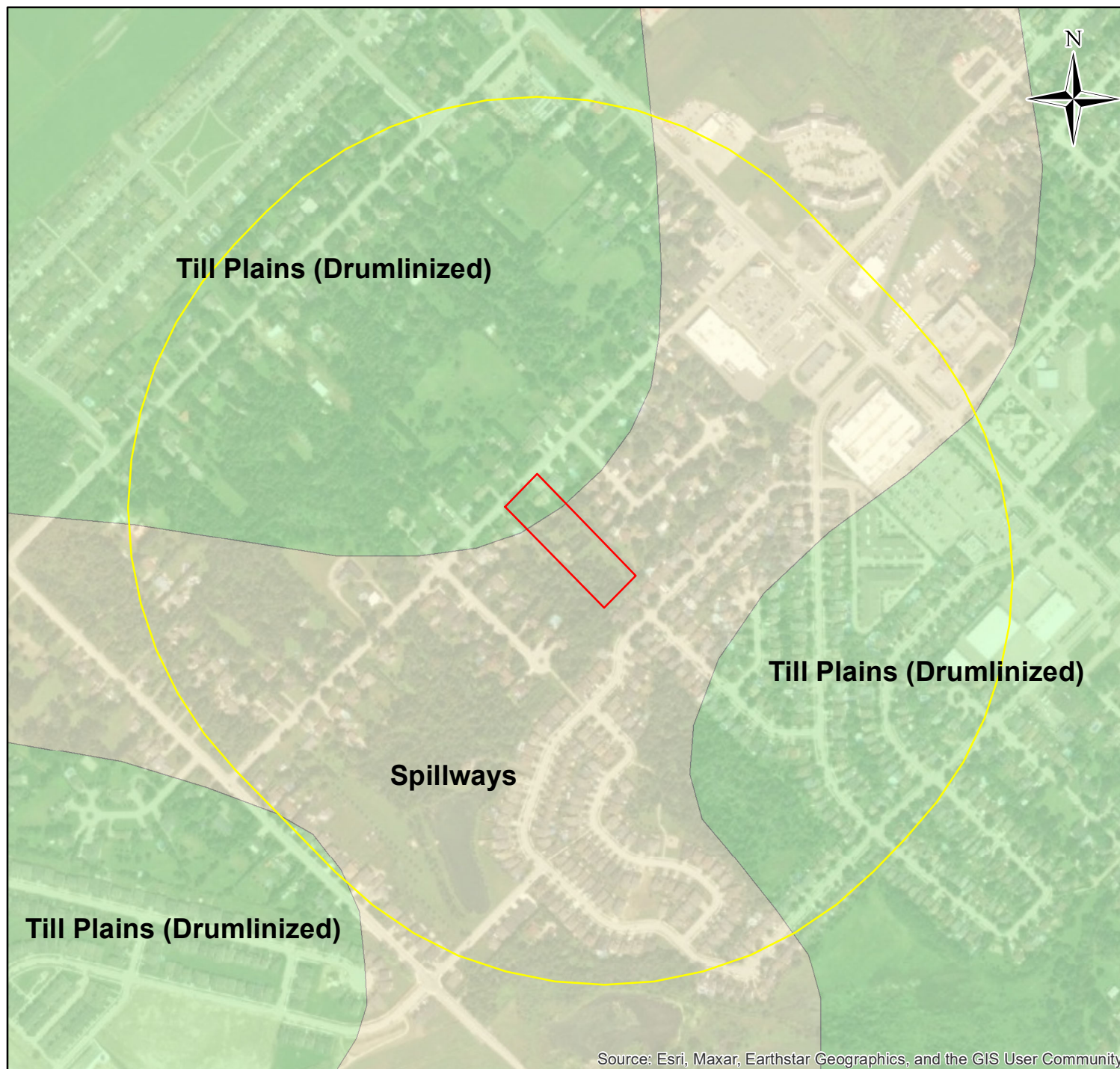
Scale: 1: 7,500
June 2024

Figure 2:
Site Layout

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

-  Site Boundary (approx.)
-  Study Area (500m)
- Physiography of Southern Ontario**
-  Spillways
-  Till Plains (Drumlinized)

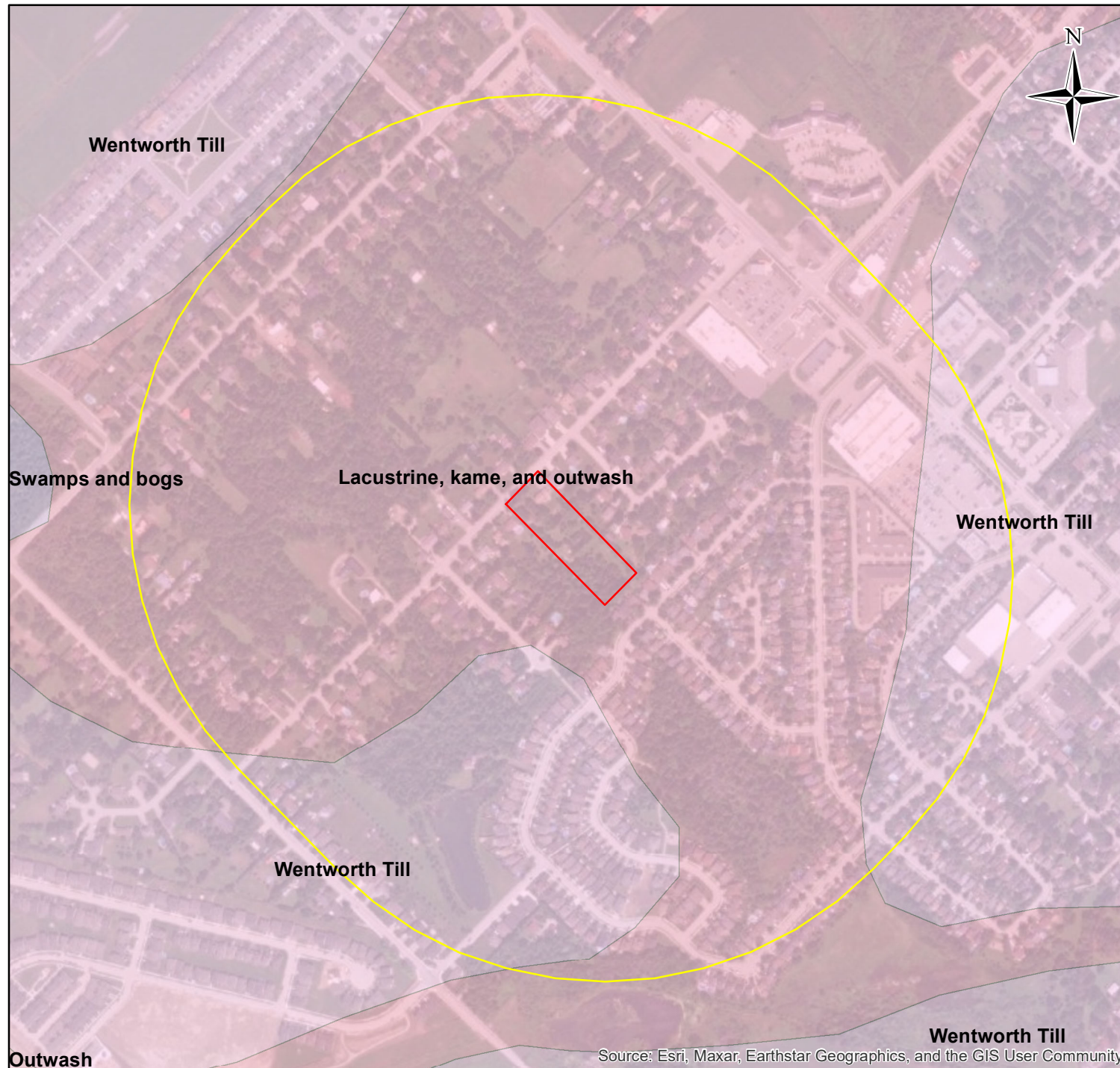
Scale: 1: 7,500
June 2024

Figure 3:
Physiographic Landforms

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol

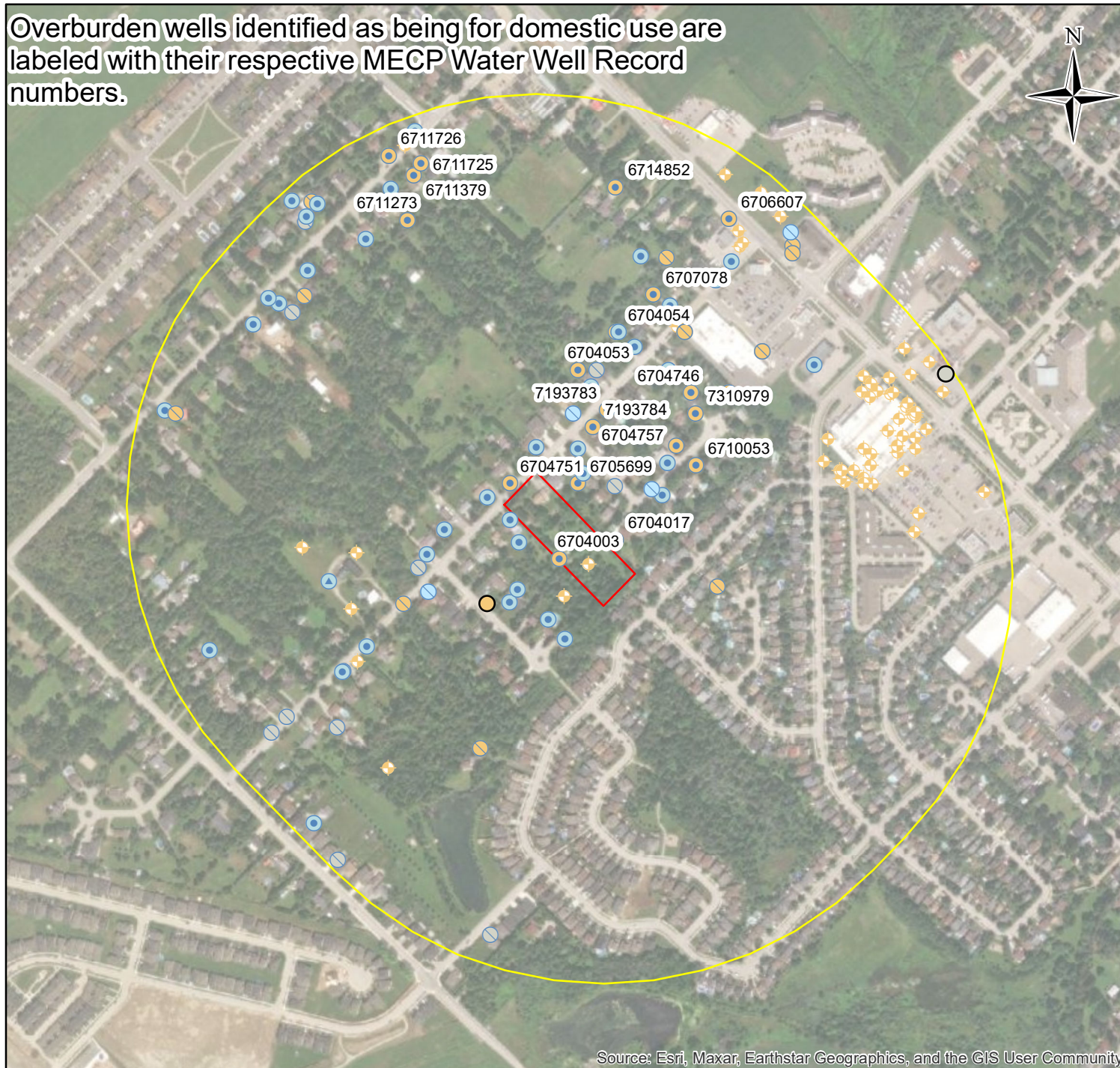


- Site Boundary (approx.)
Study Area (500m)
Surficial Geology of Ontario
Lacustrine, kame, and outwash
Outwash
Swamps and bogs
Wentworth Till

Scale: 1: 7,500
June 2024

Figure 4:
Surficial Geology

Overburden wells identified as being for domestic use are labeled with their respective MECP Water Well Record numbers.



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol

Well Type, Well Use

- Bedrock, Abandoned
- Bedrock, Domestic
- Bedrock, Livestock
- Overburden, Abandoned
- Overburden, Domestic
- Overburden, Monitoring
- Overburden, Unknown
- Unknown, Abandoned
- Unknown, Unknown
- Site Boundary (approx.)
- Study Area (500m)

Scale: 1: 7,500
June 2024

Figure 5:
MECP Water Well Records



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol

- Site Boundary (approx.)
- Monitoring Wells
- Surface Water Monitoring Location

Scale: 1: 1,500
June 2024

Figure 6:
Site Investigation Layout

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- Site Boundary (approx.)
- Monitoring Wells
- Groundwater Contours

Scale: 1: 1,500
June 2024

Figure 7a:
Groundwater Contours
(April 2023)

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

- Site Boundary (approx.)
- Monitoring Wells
- GW Contours (2025-05-06)
- Roads

Scale: 1: 1,000
July 2025

Figure 7b:
Seasonal High Groundwater
Levels (up to Nov 2025)

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol



- Site Boundary (approx.)
- Sanitary Sewer (Proposed)
- Estimated ZOI (Sanitary Sewer)
- SWM Pond Forebay (Proposed)
- Estimated ZOI (SWM Pond)
- Roads
- Well Type, Well Use**
 - Bedrock, Abandoned
 - Bedrock, Domestic
 - Overburden, Abandoned
 - Overburden, Domestic
 - Overburden, Monitoring
 - Overburden, Unknown
 - Unknown, Abandoned

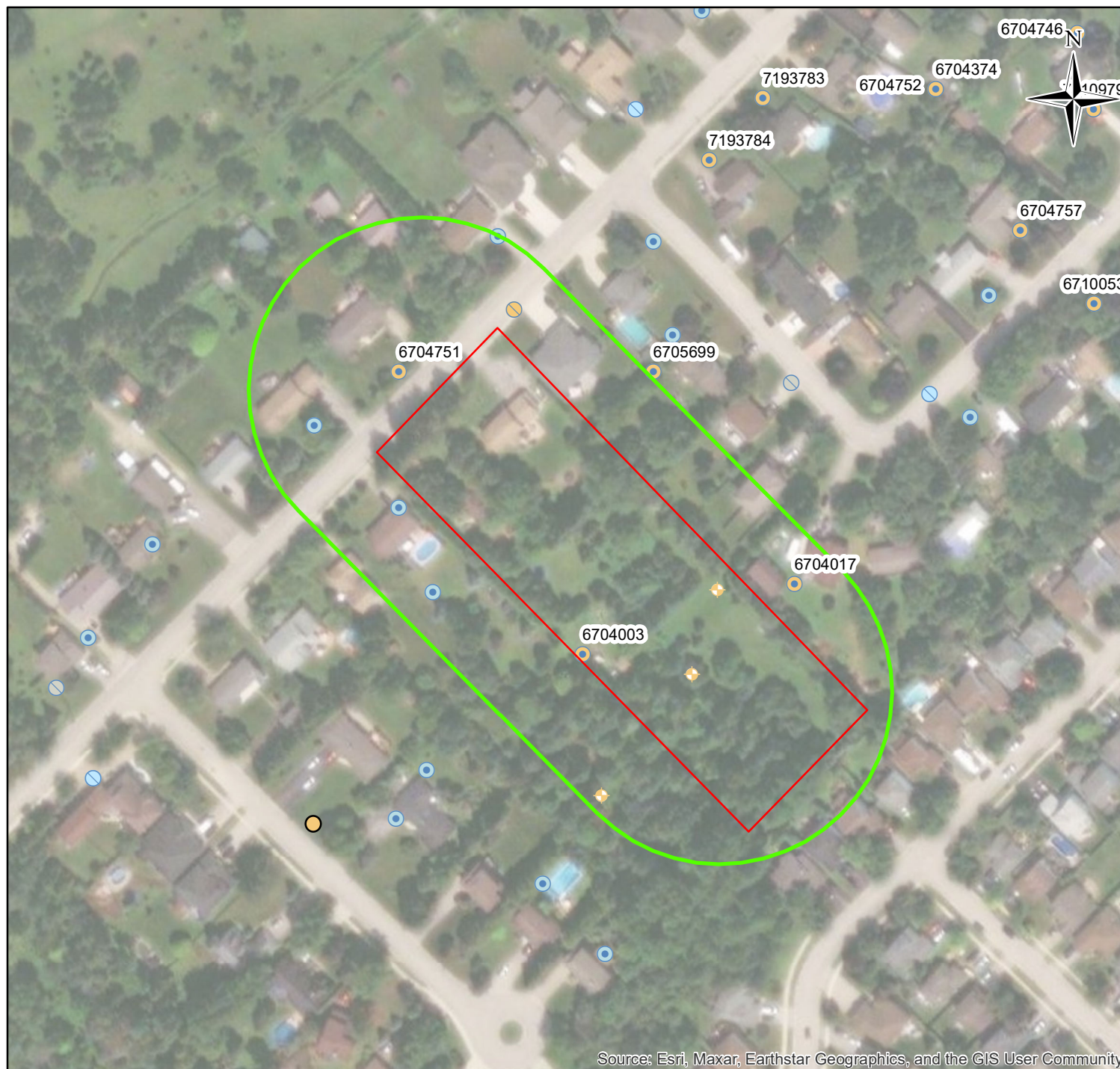
Scale: 1: 2,000
July 2025

Figure 8:
Estimated Zones of Influence
for Construction Dewatering

Project: 2402265
Hydrogeological Study
Report

Proposed Residential
Development at
73/79 Sideroad 19

Lot 19, Con 15
Geo. Twp of Nichol



- Site Boundary (approx.)
Well Monitoring Buffer
- Well Type, Well Use**
- Bedrock, Abandoned
 - Bedrock, Domestic
 - Overburden, Abandoned
 - Overburden, Domestic
 - Overburden, Monitoring
 - Overburden, Unknown
 - Unknown, Abandoned

Scale: 1: 1,500
June 2024

Figure 9:
Well Monitoring Buffer

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Appendix A Zoning Maps from Township of Centre Wellington

Elora-Salem and Fergus

—SITE - 79 Sideroad 19

Belwood

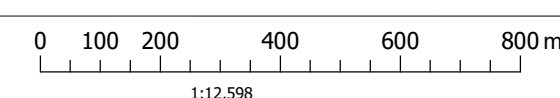
Ennotville

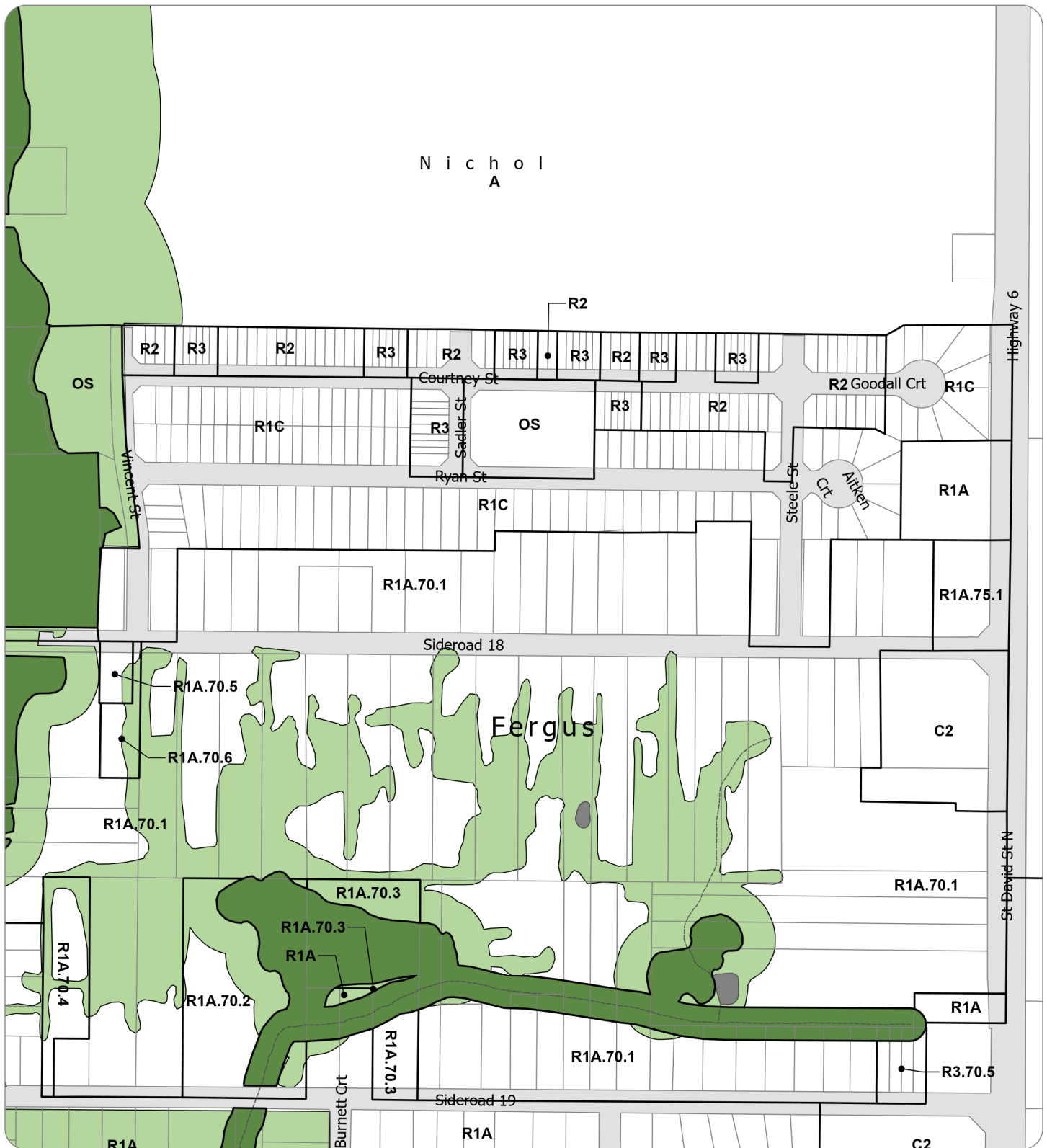
Inverhaugh

Others

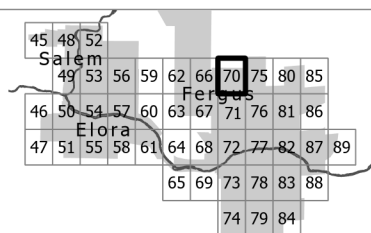
Urban Zoning Map Index

Urban and Hamlet Zoning Map Index





- Zone Boundary
- Environmental Protection
- Environmental Protection Overlay
- Heritage Area Overlay
- Parcel Fabric
- Floodplain
- Flood Fringe
- Waterbody
- Watercourse
- Road



Township of Centre Wellington
Zoning By-Law
Schedule "A"
Map 70
Fergus

Sources: May include data from the Grand River Conservation Authority, County of Wellington, Teranet (2004) and © 2023 of the Queens Printer for Ontario.
Data provided herein is derived from sources with varying levels of accuracy and currency. This is not a survey product. The Township of Centre Wellington disclaims all responsibility for the accuracy or completeness of information contained herein. The Township of Centre Wellington assumes no responsibility for errors arising from use of these mapping products. All rights reserved. May not be reproduced without permission. © 2023 The Township of Centre Wellington.
Path: O:\DATA_ENTERPRISE\ZONING\ARPA\Zoning_ByLaw_Maps\Zoning_ByLaw_Maps.aprx

1:5,000
0 50 100 m



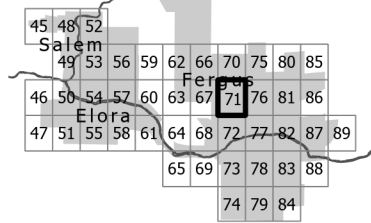
Author: GWolowich
Date Saved: 2023-09



SITE - 79 Sideroad 19



- Zone Boundary
- Environmental Protection
- Environmental Protection Overlay
- Heritage Area Overlay
- Parcel Fabric
- Floodplain
- Flood Fringe
- Waterbody
- Watercourse
- Road



Township of Centre Wellington
Zoning By-Law
Schedule "A"
Map 71
Fergus

Sources: May include data from the Grand River Conservation Authority, County of Wellington, Teranet (2004) and © 2023 of the Queens Printer For Ontario.
Data provided herein is derived from sources with varying levels of accuracy and currency. This is not a survey product. The Township of Centre Wellington disclaims all responsibility for the accuracy or completeness of information contained herein. The Township of Centre Wellington assumes no responsibility for errors arising from use of these mapping products. All rights reserved. May not be reproduced without permission. © 2023 The Township of Centre Wellington.
Path: O:\DATA_ENTERPRISE\ZONING\ARPA\Zoning_ByLaw_Maps\Zoning_ByLaw_Maps.aprx

1:5,000
0 50 100 m



Author: GWolowich
Date Saved: 2023-09



Appendix B Proposed Site Plan

Appendix C Select MECP Water Well Records

17 54840 Con XV
15 483935 CODED
5B 1365
423



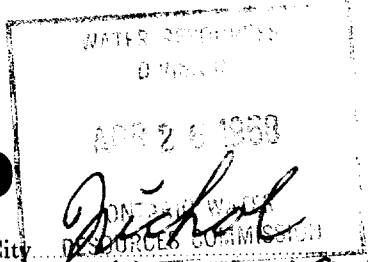
6703120-
3 9

48 P/W

7

The Ontario Water Resources Commission Act

WATER WELL RECORD



County or District Wellington
Con 15 XV Pr. Lot 19

Township, Village, Town or City Box 880 FERGUS ONT.
Date completed 23 4 1968
(day month year)

Casing and Screen Record

Inside diameter of casing 5 1/4
Total length of casing 71 feet
Type of screen -
Length of screen -
Depth to top of screen 5 1/4"
Diameter of finished hole 5 1/4"

Pumping Test

Static level 27 feet
Test-pumping rate 15 G.P.M.
Pumping level 40 feet
Duration of test pumping 3 1/2 Hours
Water clear or cloudy at end of test Clear
Recommended pumping rate 15 G.P.M.
with pump setting of 40 feet below ground surface

Well Log

Overburden and Bedrock Record

Stoney Clay
gray lime Stone

Water Record

From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
0	5-6	15-5-	fresh
5-6	15-5-		

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 JOHN CUDNEY

Address SALEM ONT

Licence Number 2934

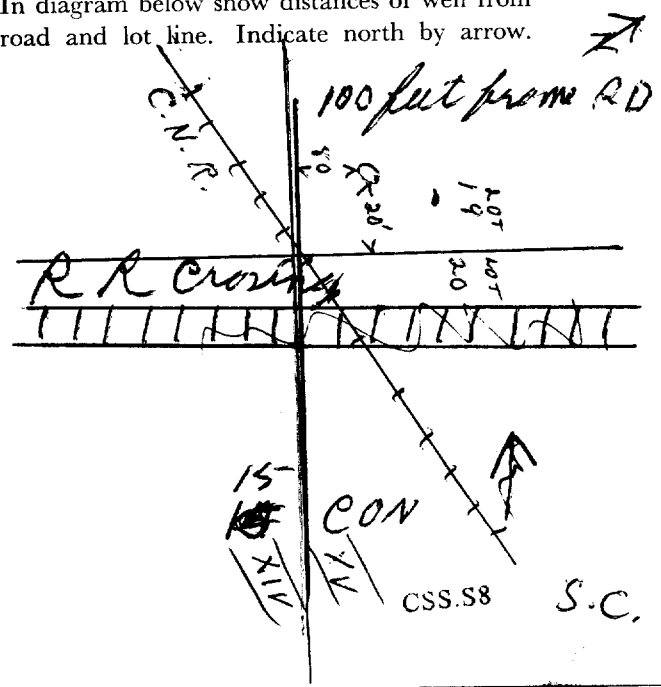
Name of Driller or Borer same

Date April 23 1968

John Cudney
(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.



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

6704003

MUNICIP

CON

COUNTY OR DISTRICT	WELLINGTON	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	NICHOL	CON., BLOCK, TRACT, SURVEY, ETC.	XV	LOT	2771
<p><i>Nichol</i></p>		<p><i>Wellington</i></p>		<p><i>XV</i></p>		<p><i>2771</i></p>	
						DATE COMPLETED	
						<p><i>88</i></p>	
						DAY <i>31</i> MO. <i>7</i> YR. <i>71</i>	
		RC	ELEVATION	RC	BASIN CODE		
<p><i>39700</i></p>		<p><i>4</i></p>	<p><i>1375</i></p>	<p><i>5</i></p>	<p><i>23</i></p>		

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31	0010605	0018 10				
32						
1 2	10 14 15	21	32	43	54	65 75 80

WATER RECORD

WATER FOUND FT - FEET	KIND OF WATER	
10-13	1 ☒ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL
15-18	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL
20-23	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL
25-28	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL
30-33	1 ☐ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES		MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
				FROM	TO
10-11	☐ STEEL ☐ GALVANIZED ☒ CONCRETE ☐ OPEN HOLE	12		0018 13-14	
0030	☐ STEEL ☒ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	J 1/2	0	13-14	
17-18	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	19		20-21	
24-25	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	26		27-28	

Z	SIZE(S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
----------	----------------------------------	-------	----------	-------	--------	-------

SCREEN	INCHES		FEET	
	MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN	41-44	80
			FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

PUMPING TEST	71

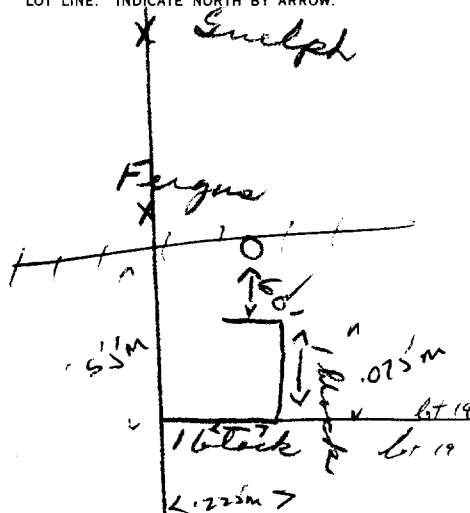
PUMPING TEST	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 ☐ PUMP	2 ☒ BAILER		0010		GPM.	02	15-16 HOURS 00
	STATIC LEVEL		25	WATER LEVELS DURING		1 ☒ PUMPING		
	WATER LEVEL END OF PUMPING				2 ☐ RECOVERY			
	19-21	22-24	15 MINUTES 26-28	30 MINUTES 29-31	45 MINUTES 32-34	60 MINUTES 35-37		
010	010	010	010	010	010	010		
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			016	FEET	0010		GPM.	
50-53		GPM./FT. SPECIFIC CAPACITY						
020.0								

**FINAL
STATUS
OF WELL**

<p>FINAL STATUS OF WELL</p>	<p>54</p> <p>1 ☒ WATER SUPPLY</p> <p>2 ☐ OBSERVATION WELL</p> <p>3 ☐ TEST HOLE</p> <p>4 ☐ RECHARGE WELL</p>	<p>5 ☐ ABANDONED, INSUFFICIENT SUPPLY</p> <p>6 ☐ ABANDONED, POOR QUALITY</p> <p>7 ☐ UNFINISHED</p>
<p>WATER USE</p> <p>01</p>	<p>55-56</p> <p>1 ☒ DOMESTIC</p> <p>2 ☐ STOCK</p> <p>3 ☐ IRRIGATION</p> <p>4 ☐ INDUSTRIAL</p> <p>☐ OTHER _____</p>	<p>5 ☐ COMMERCIAL</p> <p>6 ☐ MUNICIPAL</p> <p>7 ☐ PUBLIC SUPPLY</p> <p>8 ☐ COOLING OR AIR CONDITIONING</p> <p>9 ☐ NOT USED</p>
<p>METHOD OF DRILLING</p>	<p>57</p> <p>1 ☐ CABLE TOOL</p> <p>2 ☐ ROTARY (CONVENTIONAL)</p> <p>3 ☐ ROTARY (REVERSE)</p> <p>4 ☐ ROTARY (AIR)</p> <p>5 ☐ AIR PERCUSSION</p>	<p>6 ☒ BORING</p> <p>7 ☐ DIAMOND</p> <p>8 ☐ JETTING</p> <p>9 ☐ DRIVING</p>

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER
	Lone Star Well Digging		3413
	ADDRESS		
	176 Strachburg Rd, Kitchener		
	NAME OF DRILLER OR BORER		LICENCE NUMBER
	J. Moore		3413
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE	
	L. Moore	DAY 31 MO Aug YR 21	

OFFICE USE ONLY

DATA SOURCE		58	CONTRACTOR	59-62	DATE RECEIVED	63-68	69-72
1			3413		080971		
DATE OF INSPECTION			INSPECTOR				
REMARKS:						P	
						WI	

OWRC COPY



2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11
1 2

6704054

MUNICIP. 67119

CON *[Handwritten signature]*

4-10

COUNTY OR DISTRICT
WELLINGTON

TOWNSHIP, ~~BOROUGH~~, CITY, TOWN, VILLAGE
NICHOL

CON, BLOCK, TRACT, SURVEY, ETC
15

LOT *PART*
019

DATE COMPLETED 01/53
DAY 25 MO. JUN YR. 71

Box 303 ERIN

40000

RC
|U

ELEVATION
13

R4
| 2

BASIN CODE
23

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31

00011001

009605

00138101112

001 781 01

32

41

WATER RECORD

WATER FOUND AT FEET		KIND OF WATER	
0-3	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

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES			MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
					FROM	TO
10-11	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☒ CONCRETE 4 ☐ OPEN HOLE	12				0014 ¹³⁻¹⁶
30		2 1/2			0	15 15
17-18	1 ☐ STEEL 2 ☒ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	19			0014 ¹³⁻¹⁶ 15 15	09/20/23 ¹³⁻¹⁶ 15 15
32		16 ga				
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	26				27-30

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
	INCHES			FEET		
	MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN			41-44	80
	<i>GT 3/16" RACK</i>				FEET	

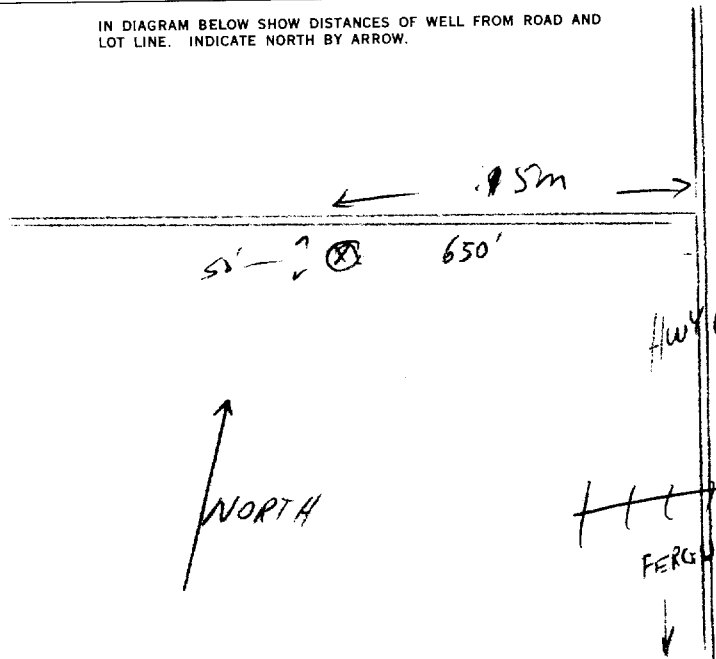
61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

PUMP TEST	PUMPING TEST METHOD		10	DUMPING RATE		11-14	DURATION OF PUMPING	
	☒ PUMP	☐ BAILER		0010		GPM.	02	15-16 HOURS 00 MINS.
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING		1 ☐ PUMPING	2 ☐ RECOVERY	
	19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES	75-37	
	009	0017	0010		0010		0010	
FEET		FEET	FEET	FEET	FEET	FEET	FEET	FEET
IF FLOWING, GIVE RATE		38-41	PUMP INTAKE SET AT			WATER AT END OF TEST		42
		GPM	15		FEET	1 ☐ CLEAR 2 ☒ CLOUDY		
RECOMMENDED PUMP TYPE			RECOMMENDED PUMP SETTING	43-45	RECOMMENDED PUMPING RATE	46-49		
☒ SHALLOW ☐ DEEP			015	FEET	0005	GPM.		
50-53			0012 GPM./FT. SPECIFIC CAPACITY					

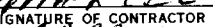
LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS

<p>FINAL STATUS OF WELL</p>	<p>54</p> <p>1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL</p>	<p>5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED</p>
<p>WATER USE</p> <p>01</p>	<p>55-56</p> <p>1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER _____</p>	<p>5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED</p>
<p>METHOD OF DRILLING</p>	<p>57</p> <p>1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION</p>	<p>6 ☒ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING</p>

CONTRACTOR	NAME OF WELL CONTRACTOR	MILTON WELL BORING	LICENCE NUMBER	3637
	ADDRESS	6751 WALKERS LINE RD #2 MILTON		
	NAME OF DRILLER OR BORER	MARCEL PELTIER	LICENCE NUMBER	3637
	SIGNATURE OF CONTRACTOR			
		SUBMISSION DATE		
		DAY	28	MO. JUN. 21

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68
	1		3637		211071	
	DATE OF INSPECTION		INSPECTOR		Z	
	REMARKS:					P WI
	CSS:SS					

OWRC COPY



WATER WELL RECORD

40P/9W.

6704748 -

MUNICIP.
67009

CON. *[Signature]*

11/5

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON., BLOCK, TRACT, SURVEY, ETC.

LOT 25-27

Wellington

Nichol

~~Page 71~~

DATE COMPLETED _____

48-5

OWNER (SURNAME FIRST)

ADDRESS

DATE COMPLETED 11/1/54 48-5

Belmont Building Corporation

239 Queen Street East, Brampton, Ontario

DAY 17 MO 1968

21

UT | 17

EASTING
548950

NORTHING
48.3992

RC. 4

ELEVATION
1375

RC.
15

BASIN CO
23

11

1

111

1

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

31	0002602	0006228	0012628	002220512			
32							

51 CASING & OPEN HOLE RECORD				
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 30	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	16	0	13-16 <i>Ob 22</i>
17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	19		20-23
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	26		27-30

61		PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)	
FROM	TO		
10-13	14-17		
18-21	22-25		
26-29	30-33	80	

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

225m

075m

125m

575m

DRILLERS REMARKS:

<p>FINAL STATUS OF WELL</p>	<p>54</p> <p>1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL</p>	<p>5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED</p>
<p>WATER USE</p>	<p>55-56</p> <p>1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER</p>	<p>5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED</p>
<p>METHOD OF DRILLING</p>	<p>57</p> <p>1 ☒ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION</p>	<p>6 ☒ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING</p>

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER
	Hadoo Well Drilling and Digging Ltd		2519
	ADDRESS		
	P.O. Box 730 Elmira Ontario		
	NAME OF DRILLER OR BORER		LICENCE NUMBER
	H.P. Watson		
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE	
	<i>H.P. Watson</i>	DAY 24 MO. Aug YR. 77	

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68
	1		2519		290873	
	DATE OF INSPECTION		INSPECTOR			
	10/1/79				3	
	REMARKS:					
	CSS.S8					



WATER WELL RECORD

40 p/gw

4

6704752-1

MUNICIPAL

COM

Plan 72

DATE COMPLETED _____

DATE COMPLETED 15 11 1981
DAY MO.

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON. BLOCK, TRACT, SURVEY, ETC.

LOT 35-27

OWNERS (SURNAME FIRST) **Wellington Bldg Corp**
Wellington Building Corporation

Nichol **Plan 71**
ADDRESS
239 Queen Street East Brampton, Ontario.

21	ZONE	EASTING	NORTHING	RC	ELEVATION	RC	BASIN CODE	II	III	IV
	17	548850	4839900	4	137.5	5	23			

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31	00260502	00122811	00202005					
32								

WATER RECORD

WATER FOUND AT - FEET		KIND OF WATER			
10-13	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		
	2 ☐ SALTY	4 ☐ MINERAL			

CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 30	☐ STEEL ☒ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	16g	0	20
17-18	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			20-23
24-25	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			27-30

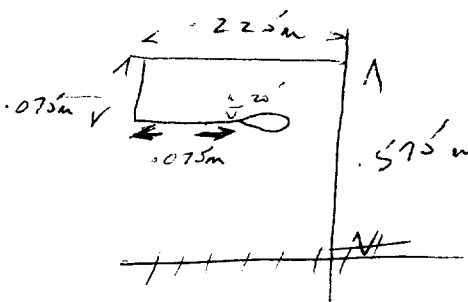
PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

PUMPING TEST	PUMPING TEST METHOD		PUMPING RATE		DURATION OF PUMPING	
	1 ☒ PUMP	2 ☐ BAILER	000 5		01 15-16 HOURS 00 MINS	
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25 WATER LEVELS DURING		1 ☐ PUMPING 2 ☒ RECOVERY	
	19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
	00 3 FEET	0 18 FEET	26-28 FEET	29-31 FEET	32-34 FEET	018 FEET
IF FLOWING, GIVE RATE		38-41	PUMP INTAKE SET AT		WATER AT END OF TEST	
			16 FEET		42	
		GPM			1 ☒ CLEAR 2 ☐ CLOUDY	
RECOMMENDED PUMP TYPE		RECOMMENDED PUMP SETTING	43-45		RECOMMENDED PUMPING RATE	
☒ SHALLOW ☐ DEEP		0 16 FEET			000 5 GPM	
50-53						

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 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
9 ☐ 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		LICENCE NUMBER
	Hadoo Well Drilling and Digging Ltd		2519
	ADDRESS		
	P.O. Box 730 Elmira Ontario		
	NAME OF DRILLER OR BORER		LICENCE NUMBER
	R. L. Franklin		
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE	
		DAY: 24 MO: Aug YR: 2000	

OFFICE USE ONLY	DATA SOURCE	58 CONTRACTOR	59-62	DATE RECEIVED	63-68
		2519		290873	
	DATE OF INSPECTION		INSPECTOR		
	10/1/74				
	REMARKS:				
	CSS.S8 P/LM WI LM				



WATER WELL RECORD

40 P/9W

6704780

MUNICIP.
67049

CON 

11/15

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON., BLOCK, TRACT, SURVEY, ETC

Wellington

Nichol

OWNER (SURNAME FIRST)

2B-47 150

ADDRESS

Belmont Building Corporation

239 Queen Street East, Brampton, Ontario

DATE COMPLETED *96* 48-53

DATE COMPLETED **10/10/11**

DAY 12 MO. SEP

21

U T | ZONE 17

EASTING
1548870

NORTHING
48,399.50

RC

ELEVATION

2

BASIN CODE
1021

11

153

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

31	00056165	001242811	0020120526				
32							

CASING & OPEN HOLE RECORD				
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 30"	1 ☐ STEEL 2 ☒ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	12 16g		13-16 0 20
17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	19		20-23
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	26		27-30

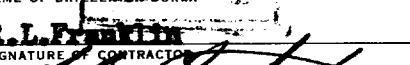
SCREEN	SIZE(S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
				INCHES	FEET	
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN		41-44	80
					FEET	

61		PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)	
FROM	TO		
10-13	14-17		
18-21	22-25		
26-29	30-33	80	

PUMPING TEST

71	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING		17-18
	1 ☒ PUMP	2 ☐ BAILER		8	0008	GPM	01	15-16 HOURS	00
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING		1 ☐ PUMPING 2 ☒ RECOVERY			
	19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES			
	004 FEET	014 FEET	26-28 FEET	29-31 FEET	32-34 FEET	35-37 FEET			
IF FLOWING, GIVE RATE			38-41	PUMP INTAKE SET AT		WATER AT END OF TEST			42
			GPM	15	FEET	1 ☒ CLEAR 2 ☐ CLOUDY			
RECOMMENDED PUMP TYPE			RECOMMENDED PUMP SETTING		43-45	RECOMMENDED PUMPING RATE		46-49	
☒ SHALLOW ☐ DEEP					015	FEET	0006	GPM	
50-53									

<p>FINAL STATUS OF WELL</p>	<p>54</p> <p>1 ☒ WATER SUPPLY</p> <p>2 ☐ OBSERVATION WELL</p> <p>3 ☐ TEST HOLE</p> <p>4 ☐ RECHARGE WELL</p>	<p>5 ☐ ABANDONED, INSUFFICIENT SUPPLY</p> <p>6 ☐ ABANDONED, POOR QUALITY</p> <p>7 ☐ UNFINISHED</p>
<p>WATER USE</p>	<p>55-56</p> <p>1 ☒ DOMESTIC</p> <p>2 ☐ STOCK</p> <p>3 ☐ IRRIGATION</p> <p>4 ☐ INDUSTRIAL</p> <p>☐ OTHER</p>	<p>5 ☐ COMMERCIAL</p> <p>6 ☐ MUNICIPAL</p> <p>7 ☐ PUBLIC SUPPLY</p> <p>8 ☐ COOLING OR AIR CONDITIONING</p> <p>9 ☐ NOT USED</p>
<p>METHOD OF DRILLING</p>	<p>57</p> <p>1 ☐ CABLE TOOL</p> <p>2 ☐ ROTARY (CONVENTIONAL)</p> <p>3 ☐ ROTARY (REVERSE)</p> <p>4 ☐ ROTARY (AIR)</p> <p>5 ☐ AIR PERCUSSION</p>	<p>6 ☒ BORING</p> <p>7 ☐ DIAMOND</p> <p>8 ☐ JETTING</p> <p>9 ☐ DRIVING</p>

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER	
	Hedco Well Drilling and Digging Ltd. 2519			
	ADDRESS			
	P.O. Box 230 Elmira Ontario			
	NAME OF DRILLER BORER		LICENCE NUMBER	
	R. L. Franklin			
	SIGNATURE OF CONTRACTOR		SUBMISSION DATE	
			DAY 26 MO. Sept. 7	

LOCATION OF WELL

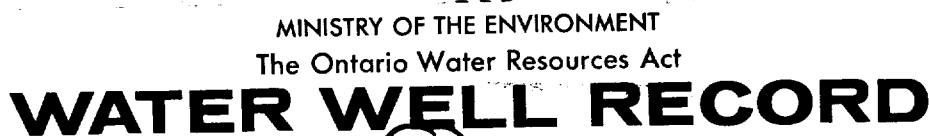
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

**New Subdivision north of Fergus off of
No. 6 Highway.**

The diagram is a hand-drawn sketch on a grid background. It depicts a rectangular area representing a lot. The top horizontal boundary is labeled '225' m'. The left vertical boundary is labeled '075' m'. The bottom horizontal boundary is labeled '075' m' and '100''. The right vertical boundary is labeled '5'95''. A north arrow is drawn pointing upwards from the top left corner. A road line is shown at the bottom right, with several short vertical tick marks indicating its edge. A small circle with a cross inside, representing a well, is located near the bottom right corner, with a dimension of '120'' indicated from the bottom boundary line.

DRILLERS REMARKS

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68
	1		2519		28 09 73	
	DATE OF INSPECTION		INSPECTOR			
	10/1/74					
	REMARKS:					
	<p>CSS.S8</p> <p>P/LM</p> <p>WTL BM</p>					



40 P/qw

11

6705305

MUNICIP.
67009

CON.
Cdn

115

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.							
WILLIAMSTON	NICHOL	CON. A 15	DATE COMPLETED 48-53						
[REDACTED]		ERGUS ONT.	DAY 25 MO. 09 YR. 74						
ING	RC.	ELEVATION	RC.	BASIN CODE	II	III	IV		
6705305	17	548833	4840101	5	1380	5	23	AUG 05, 1977	323

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31 00106052877 002862877 01832051177 023622877 023721179 023821573

32

41		WATER RECORD	
WATER FOUND AT - FEET		KIND OF WATER	
0-13	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	
	2 ☐ SALTY 4 ☐ MINERAL		

51 CASING & OPEN HOLE RECORD				
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	12 .188	+1	13-16 0237
06 17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE	19	237	20-21 0238
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	26		27-30

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
	INCHES			FEET		
	MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN		41-44	FEET	

61		PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)	
FROM	TO		
10-13	14-17		
18-21	22-25		
26-29	30-33	80	

<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">71</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-top: 10px;">PUMPING TEST</div>	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 ☐ PUMP 2 ☒ BAILER			0035		GPM	02	15-16 HOURS 15 MINS
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING		1 ☐ PUMPING 2 ☒ RECOVERY		
	19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES		
	078	140	100	085	078	078	32-34	078
FEET		FEET	FEET	FEET	FEET	FEET	FEET	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			150		FEET	0010		GPM
50-53		GPM / FT. SPECIFIC CAPACITY						

<p>FINAL STATUS OF WELL</p>	<p>54</p> <p>1 ☒ WATER SUPPLY</p> <p>2 ☐ OBSERVATION WELL</p> <p>3 ☐ TEST HOLE</p> <p>4 ☐ RECHARGE WELL</p>	<p>76</p> <p>5 ☐ ABANDONED, INSUFFICIENT SUPPLY</p> <p>6 ☐ ABANDONED, POOR QUALITY</p> <p>7 ☐ UNFINISHED</p>
<p>WATER USE</p> <p>01</p>	<p>55-56</p> <p>1 ☒ DOMESTIC</p> <p>2 ☐ STOCK</p> <p>3 ☐ IRRIGATION</p> <p>4 ☐ INDUSTRIAL</p> <p>☐ OTHER</p>	<p>5 ☐ COMMERCIAL</p> <p>6 ☐ MUNICIPAL</p> <p>7 ☐ PUBLIC SUPPLY</p> <p>8 ☐ COOLING OR AIR CONDITIONING</p> <p>9 ☐ NOT USED</p>
<p>METHOD OF DRILLING</p>	<p>57</p> <p>1 ☒ CABLE TOOL</p> <p>2 ☐ ROTARY (CONVENTIONAL)</p> <p>3 ☐ ROTARY (REVERSE)</p> <p>4 ☐ ROTARY (AIR)</p> <p>5 ☐ AIR PERCUSSION</p>	<p>6 ☐ BORING</p> <p>7 ☐ DIAMOND</p> <p>8 ☐ JETTING</p> <p>9 ☐ DRIVING</p>

LOCATION OF WELL 4840

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

NICHOLS TWP

WELL

TOWN OF

FERGUS

LOT 20

HWY #6

1.5 miles

CONIN

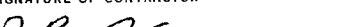
50

100

100

100

DRILLERS REMARKS:

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER
	JOHN OCONNOR		4005
	ADDRESS		
	RR#1 MILLGROVE ONT.		
	NAME OF DRILLER OR BORER		LICENCE NUMBER
	W. HOWE		
	SIGNATURE OF CONTRACTOR		SUBMISSION DATE
			DAY _____ MO. _____ YR. _____

OFFICE USE ONLY	DATA SOURCE	1	58	CONTRACTOR	58-62	4005	DATE RECEIVED	101074	63-68
	DATE OF INSPECTION				INSPECTOR				
	REMARKS:	CSS.S8							P 
									WI



The Ontario Water Resources Act

WATER WELL RECORD

② 17 548950 4840.150 5 1380 3 23 47

[illegible]

41 WATER RECORD			
WATER FOUND AT - FEET	KIND OF WATER		
10-13 5	1 ☒ FRESH 2 ☐ SALTY	3 ☐ SULPHUR 4 ☐ MINERAL	12
15-18 9	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

51 CASING & OPEN HOLE RECORD				
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 30	1 ☒ STEEL 2 ☒ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.064	0	13-16 15
17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			20-23
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			27-30

SCREEN	(SLOT NO.)	INCHES	DEPTH TO TOP OF SCREEN
			41-44 FEET

61 PLUGGING & SEALING RECORD			
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)	
FROM	TO		
10-13	14-17		
18-21	22-25		
26-29	30-33		

[illegible]

OFFICE USE ONLY	DATA SOURCE	58 CONTRACTOR	59-62	DATE RECEIVED	63-68	69
	1	2511		100178		
	DATE OF INSPECTION		INSPECTOR			
	July 31, 1980					
	REMARKS		CSS.S8 P-70			

MINISTRY OF THE ENVIRONMENT COPY



Ontario

Ministry
of the
Environment

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

6707078

67009

CAN

16

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC.	LOT
	16	019	019
DATE COMPLETED			MO. 08
YEAR			1980
ELEVATION			1380
BASIN CODE			23

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
	Top soil			0	1
	Brown sandy clay + stones			1	10
	Brown sand + gravel			10	15
	grey clay			15	28
	gravel + sand			28	30

31	POC 1 82	POC 1 405 1281	POC 1 5028 11	POC 2 244	POC 3 9 1128
32					

WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER
10-13	1 ☒ FRESH 3 ☐ SULPHUR
15-18	2 ☐ SALTY 4 ☐ MINERAL
20-23	1 ☐ FRESH 3 ☐ SULPHUR
25-28	2 ☐ SALTY 4 ☐ MINERAL
30-33	1 ☐ FRESH 3 ☐ SULPHUR
	2 ☐ SALTY 4 ☐ MINERAL

CASING & OPEN HOLE RECORD	
INSIDE DIAM. INCHES	MATERIAL
30"	1 ☒ STEEL
	2 ☐ GALVANIZED
	3 ☐ CONCRETE
	4 ☐ OPEN HOLE
17-18	1 ☐ STEEL
24-25	1 ☐ STEEL

SIZE (S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN	41-44
		FEET

PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM TO	
10-13	14-17
18-21	22-25
26-29	30-33

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ FRESH 3 ☐ SULPHUR	0005 GPM	1 ☒ PUMPING
2 ☐ SALTY 4 ☐ MINERAL		2 ☐ RECOVERY
19-21	22-24	15 MINUTES
26-28	29-31	30 MINUTES
32-34	35-37	45 MINUTES
38-41	42	60 MINUTES
IF FLOWING GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
012 FEET	24 FEET	1 ☐ CLEAR 2 ☒ CLOUDY
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
1 ☒ SHALLOW 2 ☐ DEEP	024 FEET	0005 GPM

LOCATION OF WELL	
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.	
CON 16 LOT 19	
1st Rd north of Leagus	
turn left, 3rd place	
on Rt.	
15 km	
Leagus	

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
	9 ☐ 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	

NAME OF WELL CONTRACTOR	LICENCE NUMBER
Water Wells	5477
ADDRESS	
RR 2 Breslau	
NAME OF DRILLER OR BORER	LICENCE NUMBER
R. Langdon	5477
SIGNATURE OF CONTRACTOR	SUBMISSION DATE
	DAY 13 MO. 2

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	5477	16 10 79
DATE OF INSPECTION	INSPECTOR	
10/1/80		
REMARKS		

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 (<https://data.ontario.ca/dataset/well-records>) .

Go Back to Map

Well ID

Well ID Number: 6708059

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	NICHOL TOWNSHIP
Lot	019
Concession	CON 15
County/District/Municipality	WELLINGTON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 548674.20 Northing: 4839975.00
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	FILL			0 ft	5 ft
BLCK	LOAM			5 ft	6 ft
RED	CLAY	SAND	BLDR	6 ft	76 ft
GREY	LMSN			76 ft	88 ft
GREY	LMSN			88 ft	181 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
Rotary (Convent.)	
	Domestic

Status of Well

Water Supply

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5 inch			88 ft
5 inch	OPEN HOLE		181 ft

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 4643

Results of Well Yield Testing

After test of well yield, water was	CLEAR
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	120 GPM
Duration of Pumping	6 h:0 m
Final water level	
If flowing give rate	
Recommended pump depth	130 ft
Recommended pump rate	4 GPM
Well Production	PUMP
Disinfected?	

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL	60 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 ft	60	

Water Details

Water Found at Depth	Kind
170 ft	Fresh

Hole Diameter

Depth From	Depth To	Diameter

Audit Number:

Date Well Completed: July 07, 1983

Date Well Record Received by MOE: August 11, 1983

Related

How to use a Ministry of the Environment map (<https://www.ontario.ca/page/how-use-ministry-environment-map#wells>)

Technical documentation: Metadata record (<https://data.ontario.ca/dataset/well-records/resource/3031344e-e3f2-48d5-888c-c1deadfd2f77>)

6709226

MUNICIPALITY
67009

CON. 10 14 15 22 23 24

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY ETC	LOT
	Nichol	15	20
DATE COMPLETED			48-53
DAY 2			MO Nov. YR 87

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Br.	Clay	F. Sand - M. Gravel		0	18
Gr.	Clay	Rock pebbles		18	80
Gr.	Rock	Limestone		80	260

31	32
----	----

41	WATER RECORD
WATER FOUND AT - FEET	KIND OF WATER
180-260	☒ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERALS ☐ GAS

51	CASING & OPEN HOLE RECORD		
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
5	STEEL	.188	0 82

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH

61	PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET	MATERIAL AND TYPE	(CEMENT GROUT, LEAD PACKER, ETC.)
FROM TO		

71	PUMPING TEST	
PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	10 GPM	1 30 HOURS

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	WATER SUPPLY	ABANDONED, INSUFFICIENT SUPPLY
WATER USE	DOMESTIC	COMMERCIAL
METHOD OF CONSTRUCTION	CABLE TOOL	BORING

CONTRACTOR	NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
	Rudy's Well Drilling	2332
	ADDRESS	
	RRI Hillsburg	
	NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
	Rudy Garbotz	0180
	SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE

OFFICE USE ONLY	DATA SOURCE	CONTRACTOR	DATE RECEIVED
		2332	MAY 19 1988
	DATE OF INSPECTION	INSPECTOR	
	REMARKS		



Ministry
of the
Environment

Ontario

The Ontario Water Resources Act

WATER WELL RECORD

6709436

MUNICIPALITY
67000

CON. 15 22 23 24

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT Wellington	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE Nichol	CON. BLOCK, TRACT, SURVEY, ETC. 19 lot #7 P1 71	LOT 25-27
OWNER (SURNAME FIRST) R G Construction	ADDRESS Turnett Court Kk #1 Jergus	DATE COMPLETED DAY 28 MO Sept YR 88	
NORTHING new home owners			

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Brown		clay and stones		0	81
Brown		rock		81	105
Gray		rock		105	130
Brown		rock		130	175
White		rock		175	245

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER					
10-13	1 ☐ FRESH	3 ☐ SULPHUR	4 ☐ MINERALS	5 ☐ GAS	6 ☐ OTHER	14
245	1 ☒ FRESH	3 ☐ SULPHUR	4 ☐ MINERALS	5 ☐ GAS	6 ☐ OTHER	19
20-23	1 ☐ FRESH	3 ☐ SULPHUR	4 ☐ MINERALS	5 ☐ GAS	6 ☐ OTHER	24
25-28	1 ☐ FRESH	3 ☐ SULPHUR	4 ☐ MINERALS	5 ☐ GAS	6 ☐ OTHER	29
30-33	1 ☐ FRESH	3 ☐ SULPHUR	4 ☐ MINERALS	5 ☐ GAS	6 ☐ OTHER	34

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
5	1 ☒ STEEL	188	FROM	TO
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	5 ☐ PLASTIC			
17-18	1 ☐ STEEL			
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	5 ☐ PLASTIC			
24-25	1 ☐ STEEL			
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	5 ☐ PLASTIC			

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN	FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE	(CEMENT GROUT LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	

PUMPING TEST METHOD	10	PUMPING RATE	11-14	DURATION OF PUMPING	15-18
1 ☒ PUMP 2 ☐ BAILER		6	GPM	7	HOURS
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	1 ☒ PUMPING	2 ☐ RECOVERY	
10-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
60 FEET	200 FEET	200 FEET	200 FEET	200 FEET	200 FEET
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	1 ☒ CLEAR	2 ☐ CLOUDY	
	GPM	200			
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE	43-45	46-49	
☐ SHALLOW ☒ DEEP	200	6			

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

19519

DRILLERS REMARKS

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	9 ☐ DEWATERING
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 CONSTRUCTION	1 ☐ CABLE TOOL	6 ☐ BORING
	2 ☒ ROTARY (CONVENTIONAL)	7 ☐ DIAMOND
	3 ☐ ROTARY (REVERSE)	8 ☐ JETTING
	4 ☐ ROTARY (AIR)	9 ☐ DRIVING
	5 ☐ AIR PERCUSSION	☐ DIGGING ☐ OTHER

NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
Albert Earley	1906
ADDRESS	
202 Meave St Guelph	
NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
Albert Earley	100-18
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE
	DAY 5 MO Oct YR 88

DATA SOURCE	CONTRACTOR	DATE RECEIVED
	1906	NOV 01 1988
DATE OF INSPECTION	INSPECTOR	
REMARKS		

CSS.ES

FORM NO. 0506 (11/86) FORM 9

MINISTRY OF THE ENVIRONMENT COPY

1. PRINT ONLY IN SPACES PROVIDED 2. CHECK CORRECT BOX WHERE APPLICABLE 11 6709626 67009 CON 14

COUNTY OR DISTRICT Wellington TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE Nichol CON. BLOCK, TRACT, SURVEY, ETC. XIV LOT 19 DATE COMPLETED 48-53 DAY 11 MO 03 YR 88

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Br.	Clay	Rocks		0	18
Gr.	Clay	Stones		18	72
Lt. Br.	Limestone			72	123
Dk. Br.	Rock			123	128
Lt. Br.	Limestone		(soft)	128	145

31 32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER		
140-145	1 FRESH	3 SULPHUR	14
	2 SALTY	4 MINERALS	
		6 GAS	
15-18	1 FRESH	3 SULPHUR	19
	2 SALTY	4 MINERALS	
		6 GAS	
20-23	1 FRESH	3 SULPHUR	24
	2 SALTY	4 MINERALS	
		6 GAS	
25-28	1 FRESH	3 SULPHUR	29
	2 SALTY	4 MINERALS	
		6 GAS	
30-33	1 FRESH	3 SULPHUR	34
	2 SALTY	4 MINERALS	
		6 GAS	

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11	1 STEEL			13-16
	2 GALVANIZED			
	3 CONCRETE			
	4 OPEN HOLE			
	5 PLASTIC			
6-4		188	0	80
17-18	1 STEEL			20-23
	2 GALVANIZED			
	3 CONCRETE			
	4 OPEN HOLE			
	5 PLASTIC			
6-8			80	145
24-25	1 STEEL			27-30
	2 GALVANIZED			
	3 CONCRETE			
	4 OPEN HOLE			
	5 PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	FEET
		41-44
		10
		FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)	
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 PUMP 2 BAILER	20 GPM	2 15-16 HOURS 00 MINS
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING
48 FEET	70 FEET	15 MINUTES 70 FEET
		30 MINUTES 70 FEET
		45 MINUTES 70 FEET
		60 MINUTES 70 FEET
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
		1 CLEAR 2 CLOUDY
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
SHALLOW DEEP	90 FEET	20 GPM

FINAL STATUS OF WELL

1 WATER SUPPLY	8 ABANDONED, INSUFFICIENT SUPPLY
2 OBSERVATION WELL	9 ABANDONED POOR QUALITY
3 TEST HOLE	7 UNFINISHED
4 RECHARGE WELL	9 DEWATERING

WATER USE

1 DOMESTIC	5 COMMERCIAL
2 STOCK	6 MUNICIPAL
3 IRRIGATION	7 PUBLIC SUPPLY
4 INDUSTRIAL	8 COOLING OR AIR CONDITIONING
	9 NOT USED

METHOD OF CONSTRUCTION

1 CABLE TOOL	6 BORING
2 ROTARY (CONVENTIONAL)	7 DIAMOND
3 ROTARY (REVERSE)	8 JETTING
4 ROTARY (AIR)	9 DRIVING
5 AIR PERCUSSION	
	DIGGING OTHER

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

CONV. 300' 1 KM LOT 19 TWP Rd 19 LOT 19 18070

DRILLERS REMARKS T.W.C. 75

CONTRACTOR

NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
Lang Well Drilling Ltd	3317
ADDRESS	
RR1 Wellshurgh Ont	
NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
Ray Lang	T-0158
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE
	DAY 10 MO 02 YR 89

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
	3317	FEB 10 1989
DATE OF INSPECTION	INSPECTOR	
REMARKS		

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 6709841 67009 CAN 15

COUNTY OR DISTRICT: Wellington TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Nichols CON. BLOCK, TRACT, SURVEY, ETC: Con 15 LOT: 41

OWNER (SURNAME FIRST): Blinkhorn Motors ADDRESS: RR#1 Fergus NIM: 2N3 DATE COMPLETED: DAY 4 MO 7 YR 89

U ZONE EASTING NORTHING RC ELEVATION RC BASIN CODE

21

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)					
GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
	gravel	clay		0	13
Gray	sand	gravel silt		13	47
Gray	clay	gravel		47	130
Gray	sand	gravel		130	171
Gray	clay	gravel		171	197
Brown	Quick Sand			197	230
White	Limestone		Porous	230	245
Brown	Limestone			245	251
White	Limestone			251	321
Brown	Limestone			321	340

31 32

41 WATER RECORD	51 CASING & OPEN HOLE RECORD	61 PLUGGING & SEALING RECORD
<p>WATER FOUND AT - FEET: 240, 270, 330</p> <p>KIND OF WATER: 1 FRESH, 2 SALTY, 3 SULPHUR, 4 MINERALS, 6 GAS</p>	<p>INSIDE DIAM INCHES: 6</p> <p>MATERIAL: 1 STEEL, 2 GALVANIZED, 3 CONCRETE, 4 OPEN HOLE, 5 PLASTIC</p> <p>WALL THICKNESS INCHES: 188</p> <p>DEPTH - FEET: 267, 340</p>	<p>SIZE(S) OF OPENING (SLOT NO.):</p> <p>DIAMETER: 31-33 INCHES</p> <p>LENGTH: 39-40 FEET</p> <p>MATERIAL AND TYPE:</p> <p>DEPTH TO TOP OF SCREEN: 41-44 FEET</p>

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP, 2 ☐ BAILER

PUMPING RATE: 15-18 GPM

DURATION OF PUMPING: 1 15-16 HOURS, 30 17-18 MINS

STATIC LEVEL: 97 FEET

WATER LEVEL END OF PUMPING: 22-24 FEET

WATER LEVELS DURING: 15 MINUTES: 26-28 FEET, 30 MINUTES: 29-31 FEET, 45 MINUTES: 31-34 FEET, 60 MINUTES: 35-37 FEET

IF FLOWING, GIVE RATE: GPM

PUMP INTAKE SET AT: 42-45 FEET

WATER AT END OF TEST: 1 ☒ CLEAR, 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW, ☒ DEEP

RECOMMENDED PUMP SETTING: 150 FEET

RECOMMENDED PUMPING RATE: 15 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

Fergus Hwy #6

Side Rd #9

75' 180'

22962

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, 9 ☐ DEWATERING

WATER USE

1 ☒ DOMESTIC, 2 ☐ STOCK, 3 ☐ IRRIGATION, 4 ☐ INDUSTRIAL, 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: <u>Highland Water Wells</u>	WELL CONTRACTOR'S LICENCE NUMBER: <u>2576</u>	OFFICE USE ONLY	DATE RECEIVED: <u>JUL 11 1989</u>
	ADDRESS: <u>Box 141 Durham</u>			DATE OF INSPECTION: <u>25 7 6</u>
	NAME OF WELL TECHNICIAN: <u>E. Wilson</u>	WELL TECHNICIAN'S LICENCE NUMBER: <u>70113</u>		INSPECTOR:
	SIGNATURE OF TECHNICIAN/CONTRACTOR: <u>E. Wilson</u>	SUBMISSION DATE: DAY <u>5</u> MO <u>7</u> YR <u>89</u>		REMARKS:

CSS.ES

FORM NO. 0506 (11/86) FORM 9



The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

6709871

MUNICIP
67009
10 14

CON.
CON
15

115
22 23 24

COUNTY OR DISTRICT <i>Delaware</i>	TOWNSHIP, BOROUGH CITY, TOWN, VILLAGE <i>Nickel</i>	CON. BLOCK, TRACT, SURVEY, ETC. <i>15</i>	LOT 29-27 <i>2</i>
<i>[REDACTED]</i>		<i>NIM 2H3</i>	DATE COMPLETED 48-53
<i>R.R. # 1</i>		<i>Fergus Cont.</i>	DAY <i>10</i> MO <i>Aug</i> YR <i>89</i>
ING _____ RC _____		ELEVATION _____ RC _____	BASIN CODE _____ II _____ III _____ IV _____

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31

32

41 WATER RECORD

WATER FOUND AT - FEET		KIND OF WATER			
10-13	1 ☒ FRESH	3 ☐ SULPHUR	14		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
245 ¹⁸⁻²⁰	1 ☐ FRESH	3 ☐ SULPHUR	19		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
20-23	1 ☐ FRESH	3 ☐ SULPHUR	24		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
25-28	1 ☐ FRESH	3 ☐ SULPHUR	29		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
30-33	1 ☐ FRESH	3 ☐ SULPHUR	34		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
5 ⁴⁰ / ₁₁	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	12	188 0 79	79 245
17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	19		20-21
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	26		27-30

SCREEN	SIZE (S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
				INCHES		FEET
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN		41-44	50
					FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

PUMPING TEST	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 ☒ PUMP 2 ☐ BAILER			10		GPM	7	15-16 HOURS 17-18 MINS
	STATIC LEVEL		WATER LEVEL END OF PUMPING		25 WATER LEVELS DURING		1 ☒ PUMPING 2 ☐ RECOVERY	
	10-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES		
	76 FEET	145 FEET	145 FEET	145 FEET	145 FEET	145 FEET		
	IF FLOWING GIVE RATE		30-41	PUMP INTAKE SET AT		WATER AT END OF TEST		42
			160 FEET		1 ☐ CLEAR 2 ☐ CLOUDY			
RECOMMENDED PUMP TYPE			RECOMMENDED PUMP SETTING		43-46	RECOMMENDED PUMPING RATE		48-49
☐ SHALLOW ☒ DEEP			160 FEET			10		GPM
00-53								

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.

County Rd. 15

Bennett Court.

250 ft.

19506

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 9 ☐ DEWATERING
	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 CONSTRUCTION	57	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

DRILLERS REMARKS

CONTRACTOR	NAME OF WELL CONTRACTOR <i>Albert Carley</i>		WELL CONTRACTOR'S LICENCE NUMBER <i>1906</i>	
	ADDRESS <i>202 N. 2nd St. Mankato</i>			
	NAME OF WELL TECHNICIAN <i>Albert Carley</i>		WELL TECHNICIAN'S LICENCE NUMBER <i>700-18</i>	
	SIGNATURE OF TECHNICIAN/CONTRACTOR <i>Albert Carley</i>		SUBMISSION DATE DAY <i>10</i> MO. <i>Aug</i> YR. <i>88</i>	

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	80
			1906		AUG 24 1989		
	DATE OF INSPECTION		INSPECTOR				
	REMARKS						

CSS.ES

CSS.ES

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9



COM

CON. CON | | | | 15

1. PRINT ONLY IN SPACES PROVIDED

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON BLOCK TRACT. SURVEY ETC

LOT	25-27
-----	-------

DATE COMPLETED _____

DAY 4 MO NOV YR 89

VICTORIA COLLEGE FERGUSON OUT.

NG	RC	ELEVATION	RC	BASIN CODE	II	III	IV
----	----	-----------	----	------------	----	-----	----

WELL DEEPENDING

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31

32

41 WATER RECORD

WATER FOUND AT - FEET		KIND OF WATER	
FAST TEST ONLY			
10-15	1 ☒ FRESH	3 ☐ SULPHUR	14
9'	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
15-18	1 ☐ FRESH	3 ☐ SULPHUR	19
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
20-23	1 ☐ FRESH	3 ☐ SULPHUR	24
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
25-28	1 ☐ FRESH	3 ☐ SULPHUR	29
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
30-33	1 ☐ FRESH	3 ☐ SULPHUR	34
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE ☐ PLASTIC	12		13-16
36"		3"	0'	10'
17-18	☐ STEEL ☒ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE ☐ PLASTIC	19		20-23
30"		1 1/2" GROUP	3'	13'
24-25	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE ☐ PLASTIC	26		27-30

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
			INCHES		FEET	
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN		41-44	30
					FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT FEET		MATERIAL AND TYPE	(CEMENT GROUT LEAD PACKER, ETC.)
FROM	TO		
0 ¹⁰⁻¹³	10 ¹⁴⁻¹⁷	CEMENT TILE TOP	
18-21	22-25	10' COLVERT FILL	
26-29	30-33	VOID WITH NATIVE MATERIAL	

PUMPING TEST	71
---------------------	-----------

PUMPING TEST

71	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING		
	1 ☒ PUMP 2 ☐ BAILER			3 GPM			1 15-16 HOURS — 17-18 MINS		
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING			1 ☐ PUMPING 2 ☒ RECOVERY		
	19-21	22-24		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES		
	9'0" FEET	9'8" FEET		9'1" FEET	9' FEET	32-34 FEET	35-37 FEET		
IF FLOWING, GIVE RATE		38-41	PUMP INTAKE SET AT			WATER AT END OF TEST			
		GPM	12 FEET			1 ☒ CLEAR 2 ☐ CLOUDY			
RECOMMENDED PUMP TYPE			RECOMMENDED PUMP SETTING			RECOMMENDED PUMPING RATE			
☒ SHALLOW ☐ DEEP			12 FEET			3 GPM			
90-93									

N	LOCATION OF WELL

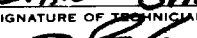
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.

A hand-drawn map of the Victoria area. A horizontal line represents a road. Above this line, the text "Hwy 6" is written. To the left of the line, "VICTORIA BIKES." is written. To the right of the line, "Gas Station X" is written with a small square labeled "X" below it. Further to the right, "KENTUCKY FRIED CHICKEN STORE" is written with a small square labeled "X" to its left. Below the horizontal line, "FERGOS." is written.

41658

DRILLERS REMARKS

FINAL STATUS OF WELL	54	1 ☒ WATER SUPPLY	5 ☐ ABANDONED, INSUFFICIENT SUPPLY
	2 ☐ OBSERVATION WELL	6 ☐ ABANDONED POOR QUALITY	
	3 ☐ TEST HOLE	7 ☐ UNFINISHED	
	4 ☐ RECHARGE WELL	☐ DEWATERING	
WATER USE	55-56	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 CONSTRUCTION	57	1 ☐ CABLE TOOL	6 ☒ BORING
	2 ☐ ROTARY (CONVENTIONAL)	7 ☐ DIAMOND	
	3 ☐ ROTARY (REVERSE)	8 ☐ JETTING	
	4 ☐ ROTARY (AIR)	9 ☐ DRIVING	
	5 ☐ AIR PERCUSSION	☒ DIGGING	☐ OTHER

CONTRACTOR	NAME OF WELL CONTRACTOR S.D. SMITH DRILLING CO. LTD.		WELL CONTRACTOR'S LICENCE NUMBER 4868	
	ADDRESS RR# 2 ACTON ONT.			
	NAME OF WELL TECHNICIAN STAN SMITH		WELL TECHNICIAN'S LICENCE NUMBER 70416	
	SIGNATURE OF TECHNICIAN/CONTRACTOR 		SUBMISSION DATE DAY 4 MO. NOV. YR. 89	

OFFICE USE ONLY	DATA SOURCE	58 CONTRACTOR	59-62	DATE RECEIVED	63-68	69
		4868		NOV 29 1989		
	DATE OF INSPECTION	INSPECTOR				
	REMARKS	CSS.ES				

MINISTRY OF THE ENVIRONMENT COPY



Ontario

Ministry
of the
Environment

The Ontario Water Resources Act

WATER WELL RECORD

6710176

MUNICIPALITY
67009

CONTRACTOR
CON

LOT
15

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON BLOCK TRACT. SURVEY ETC

LOT

Nichol

15

19

Woodwich St. Guelph, Ont.

NIH 3V4

DATE COMPLETED

DAY 06 MO 012 YR 89

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BROWN	SAND	STONES		0	15
BROWN	CLAY	GRAVEL		15	63
BROWN	CLAY	SAND, GRAVEL		63	73
lt. BROWN	ROCK			73	105
BROWN, GREY	ROCK			105	140
lt. BROWN	ROCK			140	321
TOTAL Depth 321 ft.					

31

32

41 WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER
230	1 ☒ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
319	2 ☐ SALTY 4 ☐ MINERALS 6 ☐ GAS
	15-18 1 ☒ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	20-23 1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	25-28 1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	30-33 1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD			
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
6	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	0 75
6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC		75 321

61 PLUGGING & SEALING RECORD		
DEPTH SET AT - FEET	MATERIAL AND TYPE	(CEMENT GROUT LEAD PACKER, ETC.)
FROM TO		
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 ☐ BAILEY	7 GPM	3 HOURS
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING
80 FEET	145 FEET	15 MINUTES 124 FEET 30 MINUTES 132 FEET 45 MINUTES 140 FEET 60 MINUTES 145 FEET
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
	180 FEET	1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	180 FEET	7 GPM

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 8 ☐ DEWATERING
WATER USE	
1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL 5 ☐ OTHER	6 ☐ COMMERCIAL 7 ☐ MUNICIPAL 8 ☐ PUBLIC SUPPLY 9 ☐ COOLING OR AIR CONDITIONING 10 ☐ 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 ☐ SETTING 9 ☐ DRIVING 10 ☐ DIGGING 11 ☐ OTHER

LOCATION OF WELL	
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.	
DRILLERS REMARKS	

CONTRACTOR	
NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
GRAHAM WELL DRILLING LTD.	2336
ADDRESS	
RR#5 Rockwood, Ont. NOB-2KO	
NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
J. HAWKINS	T-0427
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE
R. G. G. G.	DAY 030 MO 012 YR 89

OFFICE USE ONLY	
DATA SOURCE	CONTRACTOR
	2336
DATE OF INSPECTION	DATE RECEIVED
	JAN 17 1990
REMARKS	
CSS.ES	



Ontario

Ministry
of the
Environment

The Ontario Water Resources Act

WATER WELL RECORD

39-90

1. PRINT ONLY IN SPACES PROVIDED

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

0710312

MUNICIP 67009

CON 15

15

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON BLOCK, TRACT, SURVEY, ETC

LOT

25-27

RR #1, Fergus, Ont. N1M2L3

DATE COMPLETED

DAY 030 MO 05 YR 90

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BROWN	SAND		FINE	0	35
"	CLAY	SAND		35	75
"	CLAY	GRAVEL		75	89
BROWN	Rock			89	141
TOTAL Depth				141 FT.	

31

32

41

WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER		
10-13	1 ☒ FRESH	3 ☐ SULPHUR	14
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
15-18	1 ☒ FRESH	3 ☐ SULPHUR	19
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
20-23	1 ☐ FRESH	3 ☐ SULPHUR	24
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
25-28	1 ☐ FRESH	3 ☐ SULPHUR	29
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
30-33	1 ☐ FRESH	3 ☐ SULPHUR	34
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	

CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11	1 ☒ STEEL			13-16
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	5 ☐ PLASTIC			
17-18	1 ☐ STEEL			20-23
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	5 ☐ PLASTIC			
24-25	1 ☐ STEEL			27-30
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	5 ☐ PLASTIC			

SCREEN

SIZE OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	FEET
		FEET

61

PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	

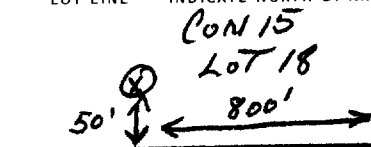
71

PUMPING TEST

PUMPING TEST METHOD		PUMPING RATE		DURATION OF PUMPING	
1 ☒ PUMP	2 ☐ BAILER	10	GPM	1	HOURS
					MIN.
STATIC LEVEL	WATER LEVEL, END OF PUMPING	WATER LEVELS DURING			
19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
74	100	74			
FEET	FEET	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	
1 ☐ SHALLOW 2 ☒ DEEP		125		10	
		FEET		GPM	

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



#6 High

Fergus

78202

DRILLERS REMARKS

CONTRACTOR

NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
GRAHAM WELL DRILLING LTD.	2336
ADDRESS	
RR # 5, Rockwood, Ont. N0B-2K0	
NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
J. HAWKINS	7-0427
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE
R. Graham	DAY 031 MO 05 YR 90

OFFICE USE ONLY

DATA SOURCE	2336	JUN 11 1990
DATE OF INSPECTION	INSPECTOR	
REMARKS		
CSS.ES		

CSS.ES







FORM NO. 0506 (11/86) FORM 9



Ministry of the Environment

The Ontario Water Resources Act

WATER WELL RECORD

6711253

MUNICIPALITY 67009

CON.

1. PRINT ONLY IN SPACES PROVIDED

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON BLOCK, TRACT, SURVEY, ETC

LOT

DATE COMPLETED

DAY 29 MO 6 YR 93

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BRN	SND	STNS - GRVL		0	6
BRN	CLAY	GRVL		6	15
BRN	SND	STNS		15	25
BRN	SND			25	47
BRN	SND	STNS GRVL		47	52
GREY	SND	GRVL CLAY		52	58
	HARD PAN			58	60
GREY	CLAY	GRVL		60	69
GREY	CLAY	GRVL STNS		69	77
BRN	LMSN		LAYERED	77	81
	GRVL			81	83
GREY	GRVL	CLAY & BOULDERS		83	93

31 BRN & GRV LMSN

32

93-135

41 WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER
10-13	1 ☒ FRESH 3 ☐ SULPHUR
15-18	2 ☐ SALTY 4 ☐ MINERALS
20-23	6 ☐ GAS
25-28	1 ☐ FRESH 3 ☐ SULPHUR
30-33	2 ☐ SALTY 4 ☐ MINERALS
	6 ☐ GAS

51 CASING & OPEN HOLE RECORD			
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
10-11	1 ☐ STEEL		FROM TO
17-18	2 ☐ GALVANIZED	1.88	0 95
24-25	3 ☐ CONCRETE		95 135
	4 ☐ OPEN HOLE		
	5 ☐ PLASTIC		

SCREEN	SIZE OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
	MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN	

61 PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM TO	
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	10 GPM	15-18 HOURS 0 MIN
	STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING
	35		15 MINUTES 26-28 30 MINUTES 29-31 45 MINUTES 32-34 60 MINUTES 35-37
	IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
		135 GPM	1 ☒ CLEAR 2 ☐ CLOUDY
	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
	☐ SHALLOW ☒ DEEP	90 FEET	8 GPM

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 8 ☐ DEWATERING
WATER USE	1 ☒ DOMESTIC 5 ☐ COMMERCIAL
	2 ☐ STOCK 6 ☐ MUNICIPAL
	3 ☐ IRRIGATION 7 ☐ PUBLIC SUPPLY
	4 ☐ INDUSTRIAL 8 ☐ COOLING OR AIR CONDITIONING
	9 ☐ NOT USED
METHOD OF CONSTRUCTION	1 ☐ CABLE TOOL 6 ☐ BORING
	2 ☒ ROTARY (CONVENTIONAL) 7 ☐ DIAMOND
	3 ☐ ROTARY (REVERSE) 8 ☐ JETTING
	4 ☐ ROTARY (AIR) 9 ☐ DRIVING
	5 ☐ AIR PERCUSSION ☐ DIGGING ☐ OTHER

LOCATION OF WELL	
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.	
SR 18 NICHOL	
093832	
DRILLERS REMARKS	

CONTRACTOR	NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
	ADVANCED WATER SYSTEMS INC	6624
	ADDRESS	
	33 HAYS AVE GURPH	
	NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
	JEFF ANDERSON	10543
	SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE
		DAY 1 NO 8 YR 93

OFFICE USE ONLY	DATA SOURCE	CONTRACTOR	DATE RECEIVED
		6624	AUG 05 1993
	DATE OF INSPECTION	INSPECTOR	
	REMARKS		
			CSS.ES



The Ontario Water Resources Act

6711273

MUNICIP.
67,009

CON

1. PRINT ONLY IN SPACES PROVIDED

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON	BLOCK, TRACT, SURVEY, ETC
-----	---------------------------

LOT	
-----	--

DATE COMPLETED

DAY 24 MO Sept YR. 73

Fergus

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

31      

32

41 WATER RECORD

51 CASING & OPEN HOLE RECORD

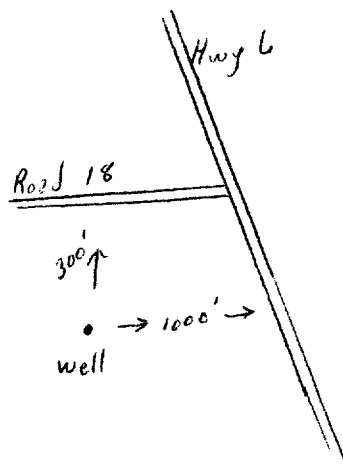
SCREEN	SIZE OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
				INCHES		FEET
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN		41-44	10
					FEET	

61 PLUGGING & SEALING RECORD

71	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 ☐ PUMP 2 ☐ BAILER			GPM		15-16 HOURS		17-18 MINS.
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING			1 ☐ PUMPING 2 ☒ RECOVERY	
	10-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES		
	8		28-28	29-31	32-34	35-37		
FEET		FEET	FEET	FEET	FEET	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		16	FEET		5		GPM	
50-53								

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.



111186

DRILLERS REMARKS

**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 | | ☐ DEWATERING |

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
CONSTRUCTION**

- | | | | |
|---|--|---|---|
| 1 | ☐ CABLE TOOL | 6 | ☒ BORING |
| 2 | ☐ ROTARY (CONVENTIONAL) | 7 | ☐ DIAMOND |
| 3 | ☐ ROTARY (REVERSE) | 8 | ☐ JETTING |
| 4 | ☐ ROTARY (AIR) | 9 | ☐ DRIVING |
| 5 | ☐ AIR PERCUSSION | | ☐ DIGGING ☐ OTHER |

CONTRACTOR	NAME OF WELL CONTRACTOR		WELL CONTRACTOR'S LICENCE NUMBER	
	Speedy Water Wells		4854	
	ADDRESS			
	RR #1 St. Agatha			
CONTRACTOR	NAME OF WELL TECHNICIAN		WELL TECHNICIAN'S LICENCE NUMBER	
	Vic Pidgeon		T 332	
	SIGNATURE OF TECHNICIAN/CONTRACTOR		SUBMISSION DATE	
	Vic Pidgeon		DAY _____ MO _____ YR _____	

OFFICE USE ONLY	DATA SOURCE	58 CONTRACTOR	59-62	DATE RECEIVED	63-68	80
		4854		OCT 06 1993		
	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

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

6711379

MUNICIPALITY
67009

CON.

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON. BLOCK, TRACT, SURVEY ETC

LOT 25-27

DATE COMPLETED 48-53

DAY 25 MO 1 YR 99

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Brown	Clay			0	1
=	Sand	sandy clay		1	2
=	Sand			2	9
Gray	Sand			9	14
Brown	Clay	sandy clay		14	19

31

32

41

WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER		
10-13	1 ☒ FRESH	3 ☐ SULPHUR	14
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
15-18	1 ☐ FRESH	3 ☐ SULPHUR	19
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
20-23	1 ☐ FRESH	3 ☐ SULPHUR	24
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
25-28	1 ☐ FRESH	3 ☐ SULPHUR	29
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	
30-33	1 ☐ FRESH	3 ☐ SULPHUR	34
	2 ☐ SALTY	4 ☐ MINERALS	
		6 ☐ GAS	

CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11	1 ☐ STEEL 2 ☒ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	18	0	19
17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			20-23
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			27-30

SCREEN

SIZE (S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
31-33	34-38	39-40
MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN
		41-44
		FEET

61

PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	

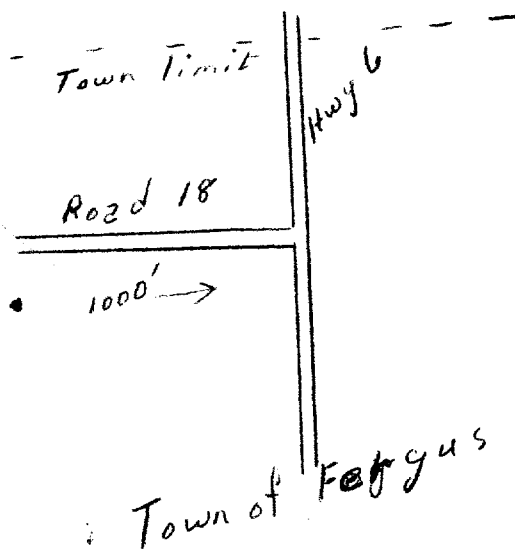
71

PUMPING TEST

PUMPING TEST METHOD		PUMPING RATE	DURATION OF PUMPING	
1 ☐ PUMP	2 ☐ BAILER	GPM	15-16 HOURS	17-18 MIN.
STATIC LEVEL		WATER LEVELS DURING		
19-21		15 MINUTES	30 MINUTES	45 MINUTES
22-24		26-28	29-31	32-34
9 FEET		1 FEET		
IF FLOWING GIVE RATE		WATER AT END OF TEST		
38-41		1 ☐ CLEAR 2 ☒ CLOUDY		
RECOMMENDED PUMP TYPE		RECOMMENDED PUMPING RATE		
1 ☒ SHALLOW 2 ☐ DEEP		16 FEET 2 GPM		

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



111190

DRILLERS REMARKS

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	8 ☐ DEWATERING	
WATER USE	1 ☒ DOMESTIC	5 ☐ COMMERCIAL
	2 ☐ STOCK	6 ☐ MUNICIPAL
3 ☐ IRRIGATION	7 ☐ PUBLIC SUPPLY	
4 ☐ INDUSTRIAL	8 ☐ COOLING OR AIR CONDITIONING	
	9 ☐ NOT USED	
METHOD OF CONSTRUCTION	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	WELL CONTRACTOR'S LICENCE NUMBER
	Speedy Water Wells	4854
	ADDRESS	
	RN#1 St Agatha	
CONTRACTOR	NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
	Vic Ridgeman	T0332
SIGNATURE OF TECHNICIAN/CONTRACTOR		SUBMISSION DATE
Vic Ridgeman		DAY _____ NO _____ YR _____

OFFICE USE ONLY	DATA SOURCE	CONTRACTOR	DATE RECEIVED
		4854	FEB 10 1994
	DATE OF INSPECTION	INSPECTOR	
REMARKS			
CSS.ES			

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

6711428 67009 CON 15

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 25-27 DATE COMPLETED 48-53 DAY 14 MO 6 YR 94

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
	Fill			0	4
Gray	Sand		Wet	4	19
Gray	Silt	clay		19	34
Gray	clay			34	50
Gray	gravel	Sand		50	68
Gray	gravel	Silt		68	74
White	Limestone			74	112
Gray	Limestone		Crack 114	112	148
Brown	Limestone			148	170
White	Limestone			170	301

31 32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
114	1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 5 GAS
198	1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 5 GAS
297	1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 5 GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
6	1 STEEL 2 GALVANIZED 3 CONCRETE 4 OPEN HOLE 5 PLASTIC	1/8	75
6	1 STEEL 2 GALVANIZED 3 CONCRETE 4 OPEN HOLE 5 PLASTIC		75 301

SCREEN

SIZE (S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
	34-38	39-40

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE
0 30	Benseal

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 AIR 2 BAILER	7-8 GPM	1 HOURS
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING
68 FEET		15 MINUTES 26-28 FEET 30 MINUTES 29-31 FEET 45 MINUTES 32-34 FEET 60 MINUTES 35-37 FEET
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
	160 FEET	1 CLEAR 2 CLOUDY
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
SHALLOW DEEP		6-7 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.

Lot 19 x Con 15

500m

Nichol twp

Km 94

Fergus 131029

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	8 DEWATERING

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 CONSTRUCTION

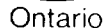
1 CABLE TOOL	5 BORING
2 ROTARY (CONVENTIONAL)	6 DIAMOND
3 ROTARY (REVERSE)	7 JETTING
4 ROTARY (AIR)	8 DRIVING
5 AIR PERCUSSION	9 DIGGING
	OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
Highland Water Wells	2576
Box 141 Durlam	
NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER
ERIC WILSON	70113
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE
	DAY 20 MO 6 YR 94

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
	2576	JUN 30 1994
DATE OF INSPECTION	INSPECTOR	
REMARKS		



Ministry
of the
Environment

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE:

11

6711725

MUNICIPAL

67009

CON

CON.
|C.O.N

115

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN VILLAGE

CON. BLOCK TRACT. SURVEY, ETC

LOT	25-27
-----	-------

WFL 146 Tol

ALLIANCE (DOJ No. 3-028-30)

PAGE 15

Pf 18

R No. 1 Focus Out

DATE COMPLETED	48-53
----------------	-------

DAY 17 MO 05 YR 95

WING	RC	ELEVATION	RC	BASIN CODE	II	III	IV
	N 14m	203					

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

31

32

41 WATER RECORD

WATER FOUND AT - FEET		KIND OF WATER			
10-13 96"	1 ☒ FRESH	3 ☐ SULPHUR	14		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
15-18	1 ☐ FRESH	3 ☐ SULPHUR	19		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
20-23	1 ☐ FRESH	3 ☐ SULPHUR	24		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
25-28	1 ☐ FRESH	3 ☐ SULPHUR	29		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			
30-33	1 ☐ FRESH	3 ☐ SULPHUR	34		
	2 ☐ SALTY	4 ☐ MINERALS 6 ☐ GAS			

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 36	☐ STEEL ☒ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE ☐ PLASTIC	12 3"	0	13-16 12 1/2
17-18 30"	☐ STEEL ☒ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE ☐ PLASTIC	19 16	10 1/2"	20-23 14' 8"
24-25	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE ☐ PLASTIC	26		27-30

SCREEN	SIZE OF OPENING (SLOT NO.)	31-33	DIAMETER	34-38	LENGTH	39-40
				INCHES	IN	FEET
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN		41-44	10
					FEET	

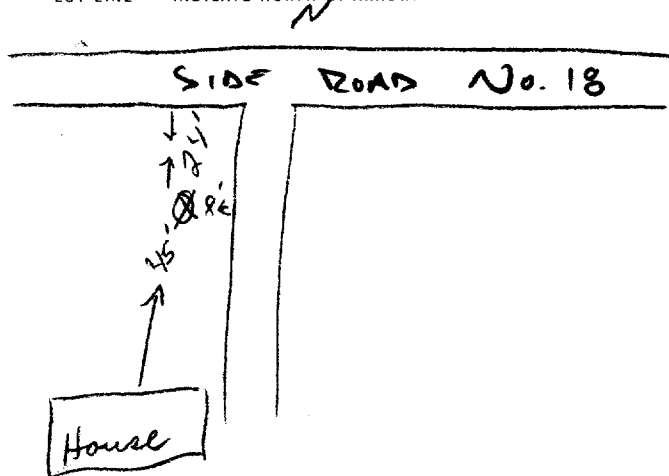
61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
FROM	TO	
10-13	14-17	
18-21	22-25	
26-29	30-33	80

71	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 ☒ PUMP 2 ☐ BAILER			10		GPM	1 15-16 HOURS	17-18 MINS
	STATIC LEVEL		25 WATER LEVELS DURING		1 ☒ PUMPING 2 ☐ RECOVERY			
	WATER LEVEL END OF PUMPING							
	19-21 9'6" FEET		22-24 12'6" FEET		15 MINUTES 11'6" FEET		30 MINUTES 12' FEET	
IF FLOWING, GIVE RATE		38-41 GPM		PUMP INTAKE SET AT 12' FEET		WATER AT END OF TEST 42		
RECOMMENDED PUMP TYPE		RECOMMENDED PUMP SETTING		45		RECOMMENDED PUMPING RATE		
☒ SHALLOW ☐ DEEP		12' FEET		4 1/2 GPM				

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



73495

DRILLERS REMARKS

54	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	☐ DEWATERING		
55-56	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
57	METHOD OF CONSTRUCTION		1 ☐ CABLE TOOL	6 ☐ BORING
	2 ☐ ROTARY (CONVENTIONAL)	7 ☐ DIAMOND	3 ☐ ROTARY (REVERSE)	8 ☐ JETTING
	4 ☐ ROTARY (AIR)	9 ☐ DRIVING	5 ☐ AIR PERCUSSION	☒ DIGGING ☐ OTHER

CONTRACTOR	NAME OF WELL CONTRACTOR <i>County Trades Ltd</i>		WELL CONTRACTOR'S LICENCE NUMBER <i>6030</i>	
	ADDRESS <i>RPI Orangerie 116 Court.</i>			
	NAME OF WELL TECHNICIAN <i>Robert Shirley</i>		WELL TECHNICIAN'S LICENCE NUMBER <i>T 0680</i>	
	SIGNATURE OF TECHNICIAN/CONTRACTOR <i>Robert Shirley</i>		SUBMISSION DATE DAY <i>25</i> NO <i>05</i> YR <i>98</i>	

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	80
	6030		JUN 06 1995				
	DATE OF INSPECTION		INSPECTOR				
	REMARKS: COULD NOT LOCATE ORIGINAL W.U. RECORD. JUNE 7/95. AS.						
	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

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

6711726

MUNICIPALITY
67009

CON. 15

LOT 25-27
15

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON. BLOCK TRACT SURVEY ETC

LOT 25-27

WATER WELL RECORD

Roll No. 3-091-00

CON. 15

Pl. 18

Roll No. 1 FERGUS ONT.

DATE COMPLETED
DAY 17 MO 05 YR 95

ING ELEVATION NO BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
			Deepening of existing well		10'
			Basal sand small pebbles	10'	11'8"
			course sand (getting finer at very bottom)		
			Well is in basement of House		

31 32

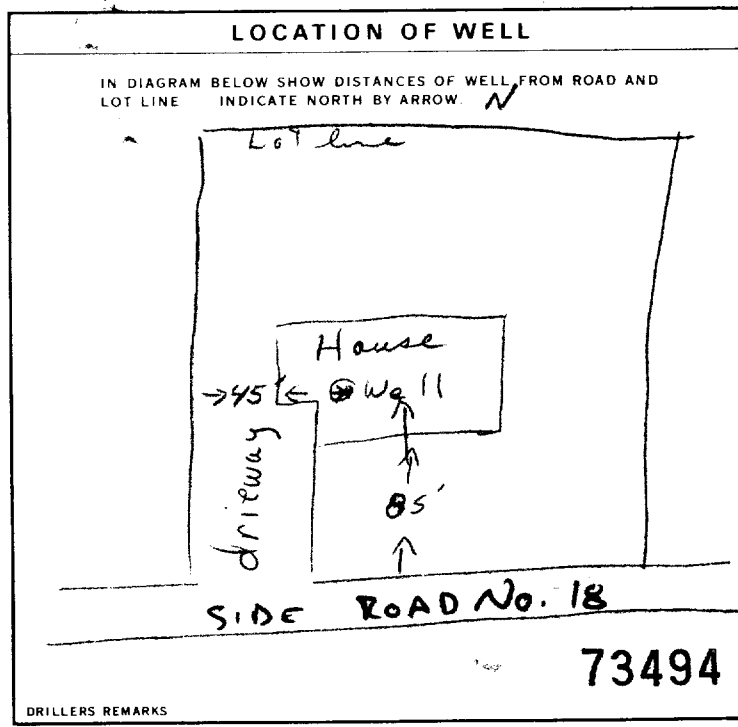
41 WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER
5'10"	1 ☒ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
15-18	1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
20-23	1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
25-28	1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
30-33	1 ☐ FRESH 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD				
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 30" 30"	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	2 1/2"	0	10' 10"
17-18 24"	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	16	7' 8"	29' 2" 118'
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			27-30

SCREEN	SIZE (S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
		INCHES	FEET
			DEPTH TO TOP OF SCREEN
			FEET

61		PLUGGING & SEALING RECORD		
DEPTH SET AT - FEET		MATERIAL AND TYPE		CEMENT GROUT LEAD PACKER ETC.
FROM	TO			
10-13	14-17			
18-21	22-25			
26-29	30-33	80		

71 PUMPING TEST	PUMPING TEST METHOD		PUMPING RATE		DURATION OF PUMPING	
	1 ☒ PUMP 2 ☐ BAILER		10	GPM	1	HOURS
	STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING			
	5'8"	8'6"	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
	FEET	FEET	8'6"	8'6"	8'6"	8'6"
	IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST			
		9'	1 ☒ CLEAR 2 ☐ CLOUDY			
	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE			
	✓ SHALLOW ☐ DEEP	9'				5 GPM



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 8 ☐ 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	WELL CONTRACTOR'S LICENCE NUMBER
	Country trades Ltd.	6030
ADDRESS	RRI Orangeville Ont.	
NAME OF WELL TECHNICIAN	WELL TECHNICIAN'S LICENCE NUMBER	
Robert T. Shirkey	7-0680	
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE	
Robert Shirkey	DAY 25 MO 05 YR 95	

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	8
			6030		JUN 06 1995		
	DATE OF INSPECTION			INSPECTOR			
	REMARKS						
	COULD NOT LOCATE ORIGINAL W.W. RECORD, JUNE 7/95, AS.						
	CSS.ES 						
	FORM NO. 0506 (11/86) FORM 1						



The Ontario Water Resources Act **WATER WELL RECORD**

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11

6712633

Municipality
67009
10 14

Con. CON 15 22 23 24

County or District <i>Wellington</i>	Township/Borough/City/Town/Village <i>Nichol</i>	Con block tract survey, etc. <i>15</i>	Lot <i>19</i>
Address <i>RR #1 Fergus N1M2W3</i>		Date completed <i>7 8 98</i> day month year	
<div> <div>21</div> <div> <div>T</div> <div>M</div> <div>10</div> </div> <div> <div>12</div> <div>17</div> </div> <div> <div>18</div> <div>24</div> </div> <div> <div>25</div> <div>26</div> </div> <div> <div>30</div> <div>31</div> </div> <div> <div>47</div> </div> </div>			

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)					
General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
	Topsoil			0	1
Brown	Sand	gravel		1	25
Gray	clay			25	70
Gray	clay	gravel		70	76
Brown	Limestone			76	83
Gray	Limestone	Brown layers		83	178

31

32

41 WATER RECORD						51 CASING & OPEN HOLE RECORD						SCREEN						
Water found at - feet		Kind of water				Inside diam inches		Material		Wall thickness inches		Depth - feet		Sizes of opening (Slot No.)		Diameter	Length	
												From	To			inches	feet	
10-13	☐ Fresh ☒ Salty	3 4	☐ Sulphur ☐ Mineral	14	10-11	1 2 3 4 5	☐ Steel ☒ Galvanized ☐ Concrete ☐ Open hole ☐ Plastic	12	188	+1	79	13-16						
15-18	☐ Fresh ☒ Salty	3 4	☐ Sulphur ☐ Minerals ☐ Gas	19	17-18	1 2 3 4 5	☐ Steel ☐ Galvanized ☐ Concrete ☒ Open hole ☐ Plastic	19				20-23						
20-23	☐ Fresh ☒ Salty	3 4	☐ Sulphur ☐ Minerals ☐ Gas	24	24-25	1 2 3 4 5	☐ Steel ☐ Galvanized ☐ Concrete ☒ Open hole ☐ Plastic	26				27-30						
25-28	☐ Fresh ☒ Salty	3 4	☐ Sulphur ☐ Minerals ☐ Gas	29														
30-33	☐ Fresh ☒ Salty	3 4	☐ Sulphur ☐ Minerals ☐ Gas	34														

61 PLUGGING & SEALING RECORD

☒ Annular space ☐ Abandonment

Depth set at - feet

From	To	Material and type (Cement grout, bentonite, etc.)
10-13	14-17	Bentonite
18-21	22-25	
26-29	30-33	

PUMPING TEST	Pumping test method ¹⁰ ☐ Pump ☒ Bail		Pumping rate ¹¹⁻¹⁴ 7-8 GPM		Duration of pumping ¹⁷⁻¹⁸ 1 Hours 0 Mins	
	Static level ¹⁹⁻²¹ 80 feet		Water level end of pumping ²²⁻²⁴ 80 feet		Water levels during ²⁵ ☐ Pumping ☒ Recovery	
	15 minutes ²⁶⁻²⁸ 80 feet		30 minutes ²⁹⁻³¹ 80 feet		45 minutes ³²⁻³⁴ 80 feet	
	60 minutes ³⁵⁻³⁷ 80 feet		if flowing give rate ³⁸⁻⁴¹ GPM		Pump intake set at ⁴² feet	
	Recommended pump type ⁴³⁻⁴⁵ ☐ Shallow ☒ Deep		Recommended pump setting ⁴⁶⁻⁴⁹ 150 feet		Water at end of test ⁴² ☒ Clear ☐ Cloudy	
	Recommended pump rate ⁴⁶⁻⁴⁹ 7 GPM					

LOCATION OF WELL

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

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 ☐ Abandoned (Other) 8 ☐ Dewatering	9 ☐ Unfinished 10 ☐ Replacement well
WATER USE		55-56
1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial	5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning	9 ☐ Not used 10 ☐ Other
METHOD OF CONSTRUCTION		57
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

Wiche / Sed Ro
 # 73
 +
 194272

Name of Well Contractor <i>Highland Water Wells</i>	Well Contractor's Licence No. <i>2576</i>	Date source	Contractor <i>2576</i>	59-62 Date received	63-68 <i>SEP 21 1998</i>	69
Address <i>Box 141, Durham NOG 1K0</i>		Date of inspection	Inspector			
Name of Well Technician <i>Nigel Poppleton</i>	Well Technician's Licence No. <i>72130</i>	Remarks CSS. S9				
Signature of Technician/Contractor <i>[Signature]</i>	Submission date day <i>22</i> mo <i>8</i> yr <i>98</i>					

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11
1 2

6712675

Municipality
67009

Con.
CON 15

95-98

County or District WELLINGTON	Township/Borough/City/Town/Village NICHOL TWP	Con block tract survey, etc. CON 15	Lot 18
Address RR#1 FERGUS, ONT NICHOL RD #18		Date completed 13 10 98	

21	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
BROWN	SAND	STONES		0	30
GREY	CLAY	STONES		30	92
BROWN	ROCK			92	135
GREY-BROWN	ROCK			135	180
TOTAL DEPTH 180'					
6" DRIVE SHOE					

31	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

WATER RECORD	
Water found at - feet	Kind of water
10-13 170-180	1 ☒ Fresh 3 ☐ Sulphur 14 2 ☐ Salty 4 ☐ Minerals 15 6 ☐ Gas 5 ☐ Gas 16
15-18	1 ☐ Fresh 3 ☐ Sulphur 19 2 ☐ Salty 4 ☐ Minerals 20 6 ☐ Gas 5 ☐ Gas 21
20-23	1 ☐ Fresh 3 ☐ Sulphur 24 2 ☐ Salty 4 ☐ Minerals 25 6 ☐ Gas 5 ☐ Gas 26
25-28	1 ☐ Fresh 3 ☐ Sulphur 29 2 ☐ Salty 4 ☐ Minerals 30 6 ☐ Gas 5 ☐ Gas 31
30-33	1 ☐ Fresh 3 ☐ Sulphur 34 2 ☐ Salty 4 ☐ Minerals 35 6 ☐ Gas 5 ☐ Gas 36

CASING & OPEN HOLE RECORD	
Inside diam inches	Material
10-11 6"	1 ☒ Steel 12 2 ☐ Galvanized 13 3 ☐ Concrete 14 4 ☐ Open hole 15 5 ☐ Plastic 16
17-18 6"	1 ☐ Steel 19 2 ☐ Galvanized 20 3 ☐ Concrete 21 4 ☒ Open hole 22 5 ☐ Plastic 23
24-25	1 ☐ Steel 26 2 ☐ Galvanized 27 3 ☐ Concrete 28 4 ☐ Open hole 29 5 ☐ Plastic 30

Sizes of opening (Slot No.)	Diameter	Length
	inches	feet
Material and type	Depth at top of screen	

PLUGGING & SEALING RECORD	
☒ Annular space	☐ Abandonment
Depth set at - feet	Material and type (Cement grout, bentonite, etc.)
From To	
10-13 0 25	BENTONITE

PUMPING TEST	Pumping test method	Pumping rate	Duration of pumping
1 ☒ Pump 2 ☐ Bailer	6 GPM	1 Hours 0 Mins	
Static level	Water level end of pumping	Water levels during	1 ☒ Pumping 2 ☐ Recovery
19-21 67 feet	22-24 105 feet	15 minutes 26-28 90 feet	30 minutes 29-31 98 feet
45 minutes 32-34 103 feet	60 minutes 35-37 105 feet		
If flowing give rate	Pump intake set at	Water at end of test	
130 GPM	130 feet	☒ Clear ☐ Cloudy	
Recommended pump type	Recommended pump setting	Recommended pump rate	
☐ Shallow ☒ Deep	130 feet	6 GPM	

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

FINAL STATUS OF WELL	
1 ☒ Water supply	5 ☐ Abandoned, insufficient supply
2 ☐ Observation well	6 ☐ Abandoned, poor quality
3 ☐ Test hole	7 ☐ Abandoned (Other)
4 ☐ Recharge well	8 ☐ Dewatering
9 ☐ Unfinished	10 ☐ Replacement well
WATER USE	
1 ☒ Domestic	5 ☐ Commercial
2 ☐ Stock	6 ☐ Municipal
3 ☐ Irrigation	7 ☐ Public supply
4 ☐ Industrial	8 ☐ Cooling & air conditioning
9 ☐ Not used	10 ☐ Other
METHOD OF CONSTRUCTION	
1 ☐ Cable tool	5 ☐ Air percussion
2 ☐ Rotary (conventional)	6 ☐ Boring
3 ☐ Rotary (reverse)	7 ☐ Diamond
4 ☒ Rotary (air)	8 ☐ Jetting
9 ☐ Driving	10 ☐ Digging
11 ☐ Other	

Name of Well Contractor GRAHAM WELL DRILLING LTD	Well Contractor's Licence No. 2336
Address RR#5 ROCKWOOD, ONT. NOB-2K0	
Name of Well Technician Jim Wilson	Well Technician's Licence No. T-1924
Signature of Technician/Contractor R. Graham	Submission date 030 010 98

MINISTRY USE ONLY	Data source	Contractor	Date received
		2336	OCT 28 1998
Date of inspection	Inspector		
Remarks			

CSS. ES9

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11

6712767

Municipality
67009

Con.

County or District

Township/Borough/City/Town/Village

Con block tract survey, etc.

Lot

Address

Date

completed 30/10/98
day month year

21 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
	Top Soil			0	1
Brown	Clay	Sand, Stones		1	45
Brown	Clay	Sand, Gravel		45	64
Brown	Limestone	Sand, Gravel		64	81
TOTAL = 81 FT.					
6" CASING DRIVE PIPE					

31 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50

WATER RECORD	
Water found at - feet	Kind of water
75	☒ Fresh ☐ Sulphur ☐ Minerals ☐ Gas
81	☒ Fresh ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Sulphur ☐ Minerals ☐ Gas
	☐ Fresh ☐ Sulphur ☐ Minerals ☐ Gas

CASING & OPEN HOLE RECORD	
Inside diam inches	Material
6"	Steel
6"	Galvanized
6"	Concrete
6"	Open hole
6"	Plastic
6"	Steel
6"	Galvanized
6"	Concrete
6"	Open hole
6"	Plastic
6"	Steel
6"	Galvanized
6"	Concrete
6"	Open hole
6"	Plastic

SCREEN	Sizes of opening (Slot No.)	Diameter	Length
		inches	feet

PLUGGING & SEALING RECORD	
☒ Annular space	☐ Abandonment
Depth set at - feet	Material and type (Cement grout, bentonite, etc.)
From To	
6 20	Grout
18-21	
26-29	

PUMPING TEST	
Pumping test method	Pumping rate
☒ Pump ☐ Bailer	4 GPM
Static level	Water level during
40 feet	15 minutes 50 feet
75 feet	30 minutes 75 feet
	45 minutes 75 feet
	60 minutes 75 feet
If flowing give rate	Pump intake set at
GPM	feet
Recommended pump type	Recommended pump setting
☐ Shallow ☒ Deep	79 feet
	Recommended pump rate
	4 GPM

FINAL STATUS OF WELL	
☐ Water supply	☐ Abandoned, insufficient supply
☐ Observation well	☐ Abandoned, poor quality
☐ Test hole	☐ Abandoned (Other)
☐ Recharge well	☐ Dewatering
☐ Unfinished	☐ Replacement well
WATER USE	
☒ Domestic	☐ Commercial
☐ Stock	☐ Municipal
☐ Irrigation	☐ Public supply
☐ Industrial	☐ Cooling & air conditioning
☐ Not used	☐ Other
METHOD OF CONSTRUCTION	
☐ Cable tool	☐ Air percussion
☐ Rotary (conventional)	☐ Boring
☐ Rotary (reverse)	☐ Diamond
☒ Rotary (air)	☐ Jetting
☐ Driving	☐ Digging
☐ Other	

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

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
	01/12/98

MINISTRY USE ONLY	Data source	Contractor	Date received
	2663	2663	DEC 21 1998
	Date of inspection	Inspector	
Remarks			
GSS. ES9			

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11

6712890

Municipality
67009

Con.
CON

15

County or District Wellington	Township/Borough/City/Town/Village Nichol	Con block tract survey, etc. CON/5	Lot 18
Address RR#1 Fergus N 1M 2W3 #0024		Date completed 20 01 99 day month year	
Northing 10 12 14 16 18 20 22 24 26 28 30 32		Elevation 25 26 27 28 29 30 31 32	

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
	Topsoil			0	1
Brown Clay				1	27
Gray Clay				27	138
Brown Silty clay		gravel		138	240
Brown Limestone		silt layers		240	252
Light Brown Limestone				252	318

31	32	33	34	35	36	37	38	39	40
----	----	----	----	----	----	----	----	----	----

41 WATER RECORD			
Water found at - feet	Kind of water		
10-13 302	1 ☒ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas	14
15-18	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas	19
20-23	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas	24
25-28	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas	29
30-33	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas	34

51 CASING & OPEN HOLE RECORD			
Inside diam inches	Material	Wall thickness inches	Depth - feet
10-11 6	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	+1 254
17-18 6	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic		254 318
24-25	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic		27-30

SCREEN	Sizes of opening (Slot No.)	Diameter inches	Length feet
	Material and type	Depth at top of screen feet	

61 PLUGGING & SEALING RECORD			
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)	
From	To		
10-13 0	14-17 45	Benseal	
18-21	22-25		
26-29	30-33		

71 PUMPING TEST			
Pumping test method 1 ☒ Pump 2 ☐ Bail	Pumping rate 3-4 GPM	Duration of pumping 15-18 Hours Mins	
Static level 19-21 118 feet	Water level during 15 minutes 22-24 feet	1 ☐ Pumping 2 ☒ Recovery	45 minutes 32-34 feet
If flowing give rate 38-41 GPM	Pump intake set at 43-45 feet	Water at end of test 42 190 feet	
Recommended pump type ☐ Shallow ☒ Deep	Recommended pump setting 46-49 250 feet	Recommended pump rate 48-49 3 GPM	

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 used 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	

LOCATION OF WELL	
In diagram below show distances of well from road and lot line. Indicate north by arrow.	
200218	

Name of Well Contractor Highland Water Works	Well Contractor's Licence No. 2576
Address Box 141 Durham N0G 1K0	
Name of Well Technician Nigel Popstefan	Well Technician's Licence No. 72130
Signature of Technician/Contractor [Signature]	Submission date 30 mo 01 yr 99

MINISTRY USE ONLY	
Data source 2576	Date received FEB 05 1999
Date of inspection	Inspector
Remarks	
CSS.ES9	

Print only in spaces provided. Mark correct box with a checkmark, where applicable.

11

6713080

Municipality 67009 Con. 15

57-99

County or District: WELLINGTON Township/Borough/City/Town/Village: NICHOL TWP. Con block tract survey, etc.: CON15 Lot: 18 Address: 0069 NICHOL RD #18 RR#1 FERGUS ONT. Date completed: 17 08 99

21 10 12 17 18 24 25 26 30 31 47

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
BROWN	SAND	STONES		0	30
GREY	CLAY	STONES		30	91
BROWN	ROCK			91	115
GREY	ROCK			115	130
GREY-BROWN	ROCK			130	180
TOTAL DEPTH				180	
6" DRIVE SHOE					

31 32 10 15 21 32 43 54 65 75 80

41 WATER RECORD 51 CASING & OPEN HOLE RECORD 61 PLUGGING & SEALING RECORD

71 PUMPING TEST 10 Pumping test method 11-14 Pumping rate 15 GPM 17-18 Duration of pumping 19-21 Static level 22-24 Water level end of pumping 25 Water levels during 26-28 15 minutes 29-31 30 minutes 32-34 45 minutes 35-37 60 minutes 38-41 If flowing give rate 42-45 Pump intake set at 46-49 Recommended pump type 50-53 Recommended pump setting 54-56 Recommended pump rate

LOCATION OF WELL In diagram below show distances of well from road and Lot line. Indicate north by arrow. Diagram shows well location relative to Nichol Rd. and Lot 18, with distances 75', 1800', and 196660'.

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 Abandoned (Other) 8 Dewatering 9 Unfinished 10 Replacement well WATER USE 55-56 1 Domestic 2 Stock 3 Irrigation 4 Industrial 5 Commercial 6 Municipal 7 Public supply 8 Cooling & air conditioning 9 Not used 10 Other METHOD OF CONSTRUCTION 57 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: GRAHAM WELL DRILLING LTD 2336 Address: RR#5 ROCKWOOD, ONT. NOB-2KO Name of Well Technician: JIM WILSON Well Technician's Licence No.: T-1924 Signature of Technician/Contractor: R. Graham Submission date: 031 08 99

MINISTRY USE ONLY 58 Data source 59-62 Contractor 63-68 Date received 69-70 Date of inspection 71 Inspector 72 Remarks



The Ontario Water Resources Act

WATER WELL RECORD

6714246

Municipality **67009** Con. **CON** **15**

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
Franklin-Town	NICHOL	15	447
Address		Date completed	
00514 NICHOL - 60 #11 Ficus		06 day 10 month 02 year	

21

U
T
M

10 12 14 16 17

1R 2R 3R 4R 5R 6R 7R 8R 9R 10R 11R 12R 13R 14R 15R 16R 17R 18R 19R 20R 21R 22R 23R 24R 25R 26R 27R 28R

North

RC

Elevation

RC

Basin Code

ii iii iv

25 26 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

[illegible][illegible]

41 WATER RECORD			
Water found at - feet	Kind of water		
10-13 185	1 ☒ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	14
15-18	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	19
20-23	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	24
25-28	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	29
30-33	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	34

51 CASING & OPEN HOLE RECORD			
Inside diam inches	Material	Wall thickness inches	Depth - feet
			From
10-11 6 1/4	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	12	13-16 108 + 1 87
17-18	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	19	20-23 87 185
24-25	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	26	27-30

SCREEN	Sizes of opening (Slot No.)	Diameter	Length	
			inches	feet
	Material and type		Depth at top of screen	
		feet		

61 PLUGGING & SEALING RECORD			
☒ Annular space ☐ Abandonment			
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)	
From	To		
10-13 0	14-17 20	BENSEAL	
18-21	22-25		
26-29	30-33	80	

PUMPING TEST	71 Pumping test method ¹⁰ 1 ☒ Pump 2 ☐ Bailer		Pumping rate ¹¹⁻¹⁴ 8 GPM		Duration of pumping ¹⁵⁻¹⁶ 1 Hours ¹⁷⁻¹⁸ 15 Mins	
	Static level ¹⁹⁻²¹ 97 feet		Water level end of pumping ²²⁻²⁴ 141 feet		Water levels during ²⁵ 1 ☒ Pumping 2 ☐ Recovery	
	15 minutes ²⁶⁻²⁸ 111 feet		30 minutes ²⁹⁻³¹ 133 feet		45 minutes ³²⁻³⁴ 139 feet	
	60 minutes ³⁵⁻³⁷ 141 feet		If flowing give rate ³⁸⁻⁴¹ GPM		Pump intake set at ⁴² feet	
	Recommended pump type ☐ Shallow ☒ Deep		Recommended pump setting ⁴³⁻⁴⁵ 160 feet		Water at end of test ☒ Clear ☐ Cloudy ⁴⁶⁻⁴⁹ GPM	
	50-53					

FINAL STATUS OF WELL			54
1 ☒ Water supply	5 ☐ Abandoned, insufficient supply	9 ☐ Unfinished	
2 ☐ Observation well	6 ☐ Abandoned, poor quality	10 ☐ Replacement well	
3 ☐ Test hole	7 ☐ Abandoned (Other)		
4 ☐ Recharge well	8 ☐ Dewatering		

WATER USE			55-56
1 ☒ Domestic	5 ☐ Commercial	9 ☐ Not use	
2 ☐ Stock	6 ☐ Municipal	10 ☐ Other	
3 ☐ Irrigation	7 ☐ Public supply		
4 ☐ Industrial	8 ☐ Cooling & air conditioning		

METHOD OF CONSTRUCTION			57
1 ☐ Cable tool	5 ☐ Air percussion	9 ☐ Driving	
2 ☐ Rotary (conventional)	6 ☐ Boring	10 ☐ Digging	
3 ☐ Rotary (reverse)	7 ☐ Diamond	11 ☐ Other	
4 ☐ Rotary (air)	8 ☐ Jetting		

LOCATION OF WELL

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

(N)
↑

45'

60'

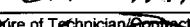
Cow #19

#6 Hairy.

VICTORIA CRES.

BEAT 19

FERGUS 247570

Name of Well Contractor LAWRENCE WELL DRILLING LTD	Well Contractor's Licence No. 0663
Address R.R. #5 EUEATH ONT N1H 6J2	
Name of Well Technician JOHN LAHTINEY	Well Technician's Licence No. T-2790
Signature of Technician/Contractor 	Submission date 01 11 02 day mo yr

MINISTRY USE ONLY	Data source	58 Contractor	59-62	Date received	63-68	80
	2663		OCT 23 2002			
Date of inspection		Inspector				
Remarks		CSS.ES2				

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

6714247

Municipality
67009

Con.

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
NEWINGTON	NICHOL	Phon 2	8
Address		Date completed	
Rt 1 FERRIS CMT. NIM 2403		09 day 10 02 month year	

21

UTM Northing RC Elevation RC Basin Code ii iii iv

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)					
General colour	Most common material	Other materials	General description	Depth - feet	
				From	To
Brown	Top Soil			0	2
Brown	SAND			2	27
Brown	CLAY			27	74
Brown	Limestone		Soft + Broken	74	78
Brown	Limestone			78	245
			TOTAL = 245	FT	
			6'14" DIA. CASING - DRIVE SHOE		

[illegible]

41 WATER RECORD			
Water found at - feet	Kind of water		
10-13 <i>200</i>	1 ☒ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	14
15-18 <i>245</i>	1 ☒ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	19
20-23 <i>4475-52-0</i>	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	24
25-28	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	29
30-33	1 ☐ Fresh 2 ☐ Salty	3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas	34

51 CASING & OPEN HOLE RECORD				
Inside diam inches	Material	Wall thickness inches	Depth - feet	
			From	To
10-11 <i>6 1/4</i>	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	<i>.188</i>	<i>+1</i>	<i>78</i>
17-18 <i>5 1/2"</i>	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic		<i>64</i>	<i>91</i>
24-25 <i>5 1/2</i>	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic		<i>91</i>	<i>245</i>

61 PLUGGING & SEALING RECORD				
SCREEN	Sizes of opening (Slot No.)		Diameter	Length
			Inches	feet
	Material and type		Depth at top of screen	
			41-44	feet
	<i>20 245</i>			

61 PLUGGING & SEALING RECORD		
☒ Annular space ☐ Abandonment		
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)
From	To	
10-13 <i>0</i>	14-17 <i>20</i>	<i>BENSEN</i>
18-21	22-25	
26-29	30-33	

PUMPING TEST	71 Pumping test method ¹⁰ 1 ☒ Pump 2 ☐ Bailer		Pumping rate ¹¹⁻¹⁴ 6 GPM		Duration of pumping ¹⁵⁻¹⁶ 1 Hours ¹⁷⁻¹⁸ Mins	
	Static level	Water level end of pumping	Water levels during ²⁵ 1 ☒ Pumping 2 ☐ Recovery			
	19-21	22-24	15 minutes ²⁶⁻²⁸	30 minutes ²⁹⁻³¹	45 minutes ³²⁻³⁴	60 minutes ³⁵⁻³⁷
	92 feet	108 feet	100 feet	106 feet	108 feet	108 feet
	If flowing give rate ³⁸⁻⁴¹		Pump intake set at		Water at end of test ⁴²	
GPM		feet		☒ Clear ☐ Cloudy		
Recommended pump type ☐ Shallow ☒ Deep		Recommended pump setting ⁴³⁻⁴⁵ 200 feet		Recommended pump rate ⁴⁶⁻⁴⁹ 6-8 GPM		

LOCATION OF WELL

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

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 ☐ Abandoned (Other) 8 ☐ Dewatering		9 ☐ Unfinished 10 ☐ Replacement well
WATER USE 55-56			
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 57			
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	

LOCATION OF WELL

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

BEATTY LINE

#6 Hwy

CON #19

VICTORIA CRES

12' 115' WELL

235188

Name of Well Contractor <i>DAVIDSON WELL DRILLING INC.</i>		Well Contractor's Licence No. <i>2663</i>
Address <i>RR#5 GUELPH ONT N1H 6J2</i>		
Name of Well Technician <i>JOHN HARTNEY</i>		Well Technician's Licence No. <i>T 2790</i>
Signature of Technician/Contractor <i>[Signature]</i>		Submission date <i>01 11 02</i> day mo yr

MINISTRY USE ONLY	Data source 2663	Contractor 58	Date received 59-62 OCT 23 2002	63-68 6
	Date of inspection		Inspector	
	Remarks			
	CSS ES2			

Instructions for Completing Form

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

Ministry Use Only

Address of Well Location (County/District/Municipality) WELLINGTON Township CENTER WELLINGTON Lot 6 Concession PLAN 71
RR#/Street Number/Name 0953 ST DAVID ST NORTH City/Town/Village FERGUS Site/Compartment/Block/Tract etc.
GPS Reading NAD 83 Zone 17 Easting 548814 Northing 4840415 Unit Make/Model Mode of Operation: Undifferentiated Averaged

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
BROWN	TOP-SOIL			0	0.3
BROWN	SAND			0.3	1.52
BROWN	SAND			1.52	2.43
GRAY	SAND			2.43	3.04
GRAY	CLAY	STONES		3.04	9.44

Hole Diameter	Construction Record	Test of Well Yield
Depth Metres Diameter From To Centimetres 0 4.57 121.92 4.57 9.44 312.8	Inside diam centimetres Material Wall thickness centimetres Depth From To Metres Casing 91.44 Steel Fibreglass 7.62 0 4.57 60.96 Plastic Concrete 1.8 4.41 9.44 Galvanized Screen Outside diam Steel Fibreglass Slot No. Plastic Concrete Galvanized No Casing or Screen Open hole	Pumping test method Draw Down Recovery Time min Water Level Metres Time min 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. 4 4 Recommended pump depth. 8.5 metres 5 5 Recommended pump rate. 15.19 (litres/min) 10 10 If flowing give rate - (litres/min) 15 15 20 20 25 25 If pumping discontinued, give reason 30 30 40 40 50 50 60 60 NO PUMPABLE WATER ON COMPLETION
Water Record	Water found at Metres Kind of Water 1.52 m Fresh Sulphur Gas Salty Minerals 2.43 m Fresh Sulphur Gas Salty Minerals Other: After test of well yield, water was Clear and sediment free Other, specify Chlorinated Yes No	

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) 0 2.65 HOLE PLUG 37 BAGS 2.65 9.44 FILTER SAND		

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 JOHNSON & BAKTZ Well Contractor's Licence No. 3030 Business Address (street name, number, city etc.) 19 MACBRIDE COURT Name of Well Technician (last name, first name) AVEY DARCY Well Technician's Licence No. T2488 Signature of Technician/Contractor Date Submitted

Location of Well
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow. VACANT LOT. OWN TREE LINE APPROX 45 m ST DAVID ST NORTH HWY 6 Audit No. Z 07694 Date Well Completed 2884 MM DD 10 Was the well owner's information package delivered? Yes No Date Delivered YYYY MM DD

Ministry Use Only
Data Source Contractor 3030 Date Received APR 16 2004 Date of Inspection Remarks Well Record Number 6714852

Instructions for Completing Form

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

Ministry Use Only

Address of Well Location (County/District/Municipality) WELLINGTON				Township NICHOL		Lot 19	Concession 15
RR#/Street Number/Name #0002 BURNETT CR				City/Town/Village FERGUS		Site/Compartment/Block/Tract etc.	
GPS Reading	NAD 83	Zone 17	Easting 548566	Northing 4839879	Unit Make/Model GARMIN ETREX	Mode of Operation: ☒ Undifferentiated ☐ Differentiated, specify	☐ Averaged

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
BROWN	SAND	CLAY + ROCKS		0	4.0
GREY	CLAY	STONES		4.0	23.8
TAN	LIMESTONE			23.8	29.9
BROWN	"			29.9	33.5
TAN + BROWN	"			33.5	51.9

TOTAL DEPTH - 170'

Hole Diameter		
Depth From	Metres To	Diameter Centimetres
0	6.4	22.5
6.4	29.0	20.0
29.0	51.9	15.6
Water Record		
Water found at _____ Metres		Kind of Water
40 m	Fresh ☐ Sulphur	
Gas ☐	Salty ☐ Minerals	
Other:	NOT TESTED	
51 m	Fresh ☐ Sulphur	
Gas ☐	Salty ☐ Minerals	
Other:	NOT TESTED	
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	Metres To		
Casing						
15.9	☒ Steel ☐ Fibreglass					
	☐ Plastic ☐ Concrete	. 5	.	6	25.0	
	☐ Galvanized					
	☐ Steel ☐ Fibreglass					
	☐ Plastic ☐ Concrete					
	☐ Galvanized					
	☐ Steel ☐ Fibreglass					
	☐ Plastic ☐ Concrete					
	☐ Galvanized					
Screen						
Outside diam	☐ Steel ☐ Fibreglass	Slot No.				
	☐ Plastic ☐ Concrete					
	☐ Galvanized					
No Casing or Screen						
	☒ Open hole		25.0	51.9		

Test of Well Yield					
Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres	
Pump Pump					
Pump intake set at - (metres) 45	Static Level	23.09			
Pumping rate - (litres/min) 18	1	25.42	1	36.40	
Duration of pumping 1 hrs + 0 min	2	26.18	2	35.81	
Final water level end of pumping 37.4 metres	3	26.86	3	35.75	
Recommended pump type. Shallow ☐ Deep ☒	4	27.51	4	35.73	
Recommended pump depth. 45 metres	5	28.13	5	35.69	
Recommended pump rate. 18 (litres/min)	10	30.62	10	33.67	
If flowing give rate - (litres/min)	15	32.42	15	35.64	
	20	33.80	20	35.60	
	25	34.92	25	34.82	
If pumping discontinued, give reason.	30	35.60	30	33.80	
	40	35.68	40	31.79	
	50	35.90	50	29.99	
	60	37.46	60	28.40	

Plugging and Sealing Record			☒ Annular space	☐ Abandonment
Depth set at - Metres		Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
From	To			
0	6.4	BENTONITE SLURRY	0.1	

Method of Construction			
☐ Cable Tool	☐ Rotary (air)	☐ Diamond	☐ Digging
☒ Rotary (conventional)	☐ Air percussion	☐ Jetting	☐ Other
☐ Rotary (reverse)	☐ Boring	☐ Driving	

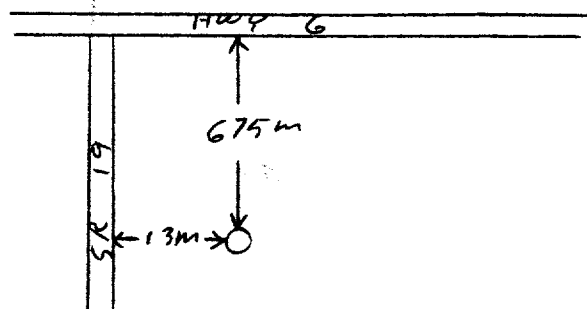
Water Use			
☒ Domestic	☐ Industrial	☐ Public Supply	☐ Other
☐ Stock	☐ Commercial	☐ Not used	
☐ Irrigation	☐ Municipal	☐ Cooling & air conditioning	

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	Well Contractor's Licence No.	
MEADOWBANK DRILLING SERVICES	6F65	
Business Address (street name, number, city etc.)		
RR1 ELORA ONT N0B1S0		
Name of Well Technician (last name, first name)	Well Technician's Licence No.	
Jim Broadfoot	T0370	
Signature of Technician/Contractor	Date Submitted	
	<div>YYYY</div> <div>MM</div> <div>DD</div>	

Location of Well

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



Audit No. Z 05717	Date Well Completed	YYYY	MM	DD
		04	02	24
Was the well owner's information package delivered? ☒ Yes ☐ No	Date Delivered	YYYY	MM	DD
		04	02	24

Ministry Use Only				
Data Source		Contractor 6865		
Date Received	YYYY	MM	DD	Date of Inspection
	JUN 10 2004			YYYY MM DD
Remarks		Well Record Number 6714908		

Instructions for Completing Form

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

Well Owner's Information and Location of Well Information

MUN

CON

LOT

Ministry Use Only

Address of Well Location (County/District/Municipality)

Township

Lot

Concession

RR#/Street Number/Name

City/Town/Village

Site/Compartment/Block/Tract etc.

GPS Reading

NAD

Zone

Easting

Northing

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	Metres To
ABANDONMENT.					

Hole Diameter		
Depth From	Metres To	Diameter Centimetres
0	3.6	21

Water Record	
Water found at _____ Metres	Kind of Water
1-8 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	Metres To
Casing				
	☐ Steel ☐ Fibreglass			
	☐ Plastic ☐ Concrete			
	☐ Galvanized			
	☐ Steel ☐ Fibreglass			
	☐ Plastic ☐ Concrete			
	☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass	Slot No.		
	☐ Plastic ☐ Concrete			
	☐ Galvanized			
No Casing or Screen				
☐ Open hole				

Test of Well Yield				
Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	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	
	20		20	
	25		25	
If pumping discontinued, give reason.	30		30	
	40		40	
	50		50	
	60		60	

Plugging and Sealing Record			
Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
0	3.6	BENTONITE SLURRY	

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	ABANDONMENT
☐ 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	Well Contractor's Licence No.
GEO-ENVIRONMENTAL DRILLING I.C. 6609	
Business Address (street name, number, city etc.)	
340 MARKET DR., MILTON, ON	
Name of Well Technician (last name, first name)	Well Technician's Licence No.
BARTLEY, ANDREW	7-3110
Signature of Technician/Contractor	Date Submitted
X [Signature]	2006 03 31

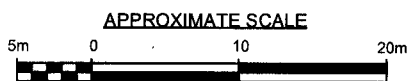
Location of Well	
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
SEE ATTACHED MAP.	

Audit No.	Date Well Completed
z 44249	2006 03 31

Was the well owner's information package delivered? ☐ Yes ☐ No	Date Delivered
	YYYY MM DD

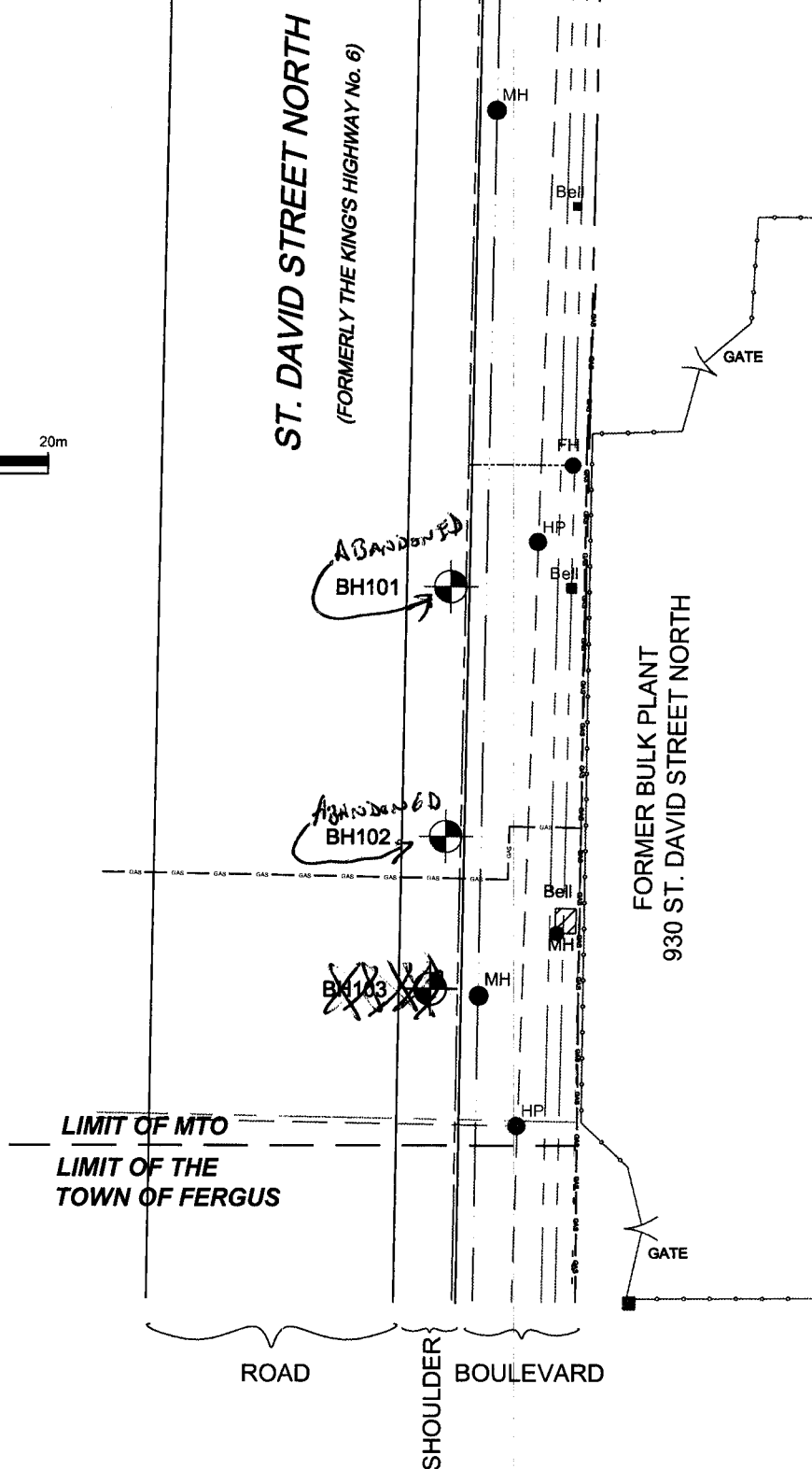
Ministry Use Only	
Data Source	Contractor
	6607
Date Received	Date of Inspection
APR 19 2006	YYYY MM DD
Remarks	Well Record Number

APR 19 2006



LEGEND

- Property Boundary
- Overhead Hydro Wires
- GAS — Natural Gas Line
- Watermain
- Sewer
- Cable Banks - Fiber Optic
- FH Fire Hydrant
(Temporary Bench Mark)
- Bell Bell Box
- MH Sewer Manhole
- HP Hydro Pole
- Off-Site Borehole Equipped
with Monitoring Well
(AMEC, April 2003)
- MTO Ministry of Transportation
of Ontario



amec Earth & Environmental

Date:
February 2005

Approximate Scale:
1 : 500

Project No.:
[REDACTED]

930 St. David Street North
Fergus, Ontario

Drawn by:
KH

Approved by:
PN

Figure No.: 3
Borehole
Location Plan

6607

244249

APR 19 2006



ABANDONMENT
NO WELL TAG

Instructions for Completing Form

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

Ministry Use Only

MUN CON LOT

Address of well Location (County/District/Municipality)

Wellington County
RR# Street Number/Name
930 ST. DAVID ST. N.

Township

Fergus

City/Town/Village

Fergus

Site/Compartment/Block/Tract etc.

GPS Reading

NAD

Zone

Easting

Northing

83

17

549049

4840328

Unit Make/Model

MAGILLAN

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		Metres
					From	To	To
ABANDONMENT							

Hole Diameter		
Depth	Metres	Diameter
From	To	Centimetres
0	3.6	21

Water Record

Water found at _____ Metres / Kind of Water

1.8 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	To				
Casing								
☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized								
☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized								
☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized								
Screen								
Outside diam.	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.						
No Casing or Screen								
☐ Open hole								

Test of Well Yield				
Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	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	
	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	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
From To		
0 3.6	BENTONITE CHIPS	

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 DRILLING INC. 6607
Business Address (street name, number, city etc.): 340 MARKET DR. MILTON, ON
Name of Well Technician (last name, first name): BARTLEY ANDREW
Signature of Technician/Contractor: [Signature]
Well Contractor's Licence No.: 7-3110
Well Technician's Licence No.: 2006 03 31

Location of Well

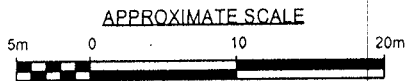
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.

SEE ATTACHED MAP

Audit No. 2 46628
Date Well Completed 2006 03 31
Was the well owner's information package delivered? ☐ Yes ☐ No
Date Delivered

Ministry Use Only

Data Source Contractor 6607
Date Received MAY 05 2006
Date of Inspection
Remarks
Well Record Number



LEGEND

- Property Boundary
- Fenceline
- Overhead Hydro Wires
- Natural Gas Line
- Watermain
- Sewer
- Cable Banks - Fiber Optic
- FH Fire Hydrant
(Temporary Bench Mark)
- Bell Box
- MH Sewer Manhole
- HP Hydro Pole
- Off-Site Borehole Equipped
with Monitoring Well
(AMEC, April 2003)
- MTO Ministry of Transportation
of Ontario

LIMIT OF MTO
LIMIT OF THE
TOWN OF FERGUS

ROAD SHOULDER BOULEVARD

ST. DAVID STREET NORTH
(FORMERLY THE KING'S HIGHWAY No. 6)

FORMER BULK PLANT
930 ST. DAVID STREET NORTH

amec Earth & Environmental

Date:
February 2005

Approximate Scale:
1 : 500

Project No.:

930 St. David Street North
Fergus, Ontario

Drawn by:
KH

Approved by:
PN

Figure No.: 3
Borehole
Location Plan

6607

Z46628

MAY 05 2006

Instructions for Completing Form

- | | |
|---|---------------------------------|
| <ul style="list-style-type: none"> • For use in the Province of Ontario only. This document is a permanent legal document. Please retain for future reference. • All Sections must be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form. • Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203. • All metre measurements shall be reported to 1/10th of a metre. • Please print clearly in blue or black ink only. | <p>Ministry Use Only</p> |
|---|---------------------------------|

Well Owner's Information and Location of Well Information

Ministry Use Only

[illegible]

WELLINGTON				MICHOE				20		15	
RR#/Street Number/Name 568 BLACK ST				City/Town/Village FERGUS				Site/Compartment/Block/Tract etc.			
GPS Reading 8.3		NAD 17	Zone 17	Easting 5486635	Northing 4839672	Unit Make/Model GARMIN ETREX		Mode of Operation:		☒ Undifferentiated ☐ Differentiated, specify _____	
										☐ Averaged	

Log of Overburden and Bedrock Materials (see instructions)

[illegible][illegible]

Plugging and Sealing Record			☐ Annular space	☒ Abandonment
Depth set at - Metres		Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
From	To			
0	1	NATIVE		
1	1.3	BENTONITE	.14	
1.3	2.7	NATIVE		
2.7	3.0	BENTONITE	.14	

Method of Construction			
☐ Cable Tool	☐ Rotary (air)	☐ Diamond	☐ Digging
☐ Rotary (conventional)	☐ Air percussion	☐ Jetting	☐ Other
☐ Rotary (reverse)	☐ Boring	☐ Driving	

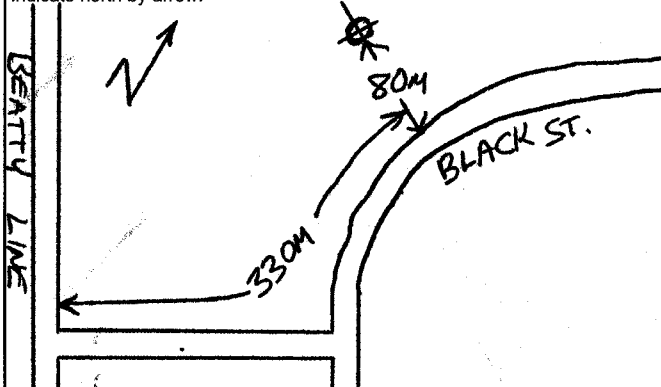
Water Use			
☐ Domestic	☐ Industrial	☐ Public Supply	☐ Other
☐ Stock	☐ Commercial	☐ Not used	
☐ Irrigation	☐ Municipal	☐ Cooling & air conditioning	

		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	Well Contractor's Licence No.	
MEADOWBANK DRILLING SERVICES	6865	
Business Address (street name, number, city etc.)		
RR1 EIORA ON, NOB ISO		
Name of Well Technician (last name, first name)	Well Technician's Licence No.	
HUGH BROADFOOT	T1897	
Signature of Technician/Contractor	Date Submitted	
X [Signature]	YYYY MM DD 2006 09 30	

Location of Well

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



Audit No.	Z 38461	Date Well Completed	YYYY	MM	DD
			2006	09	08
Was the well owner's information package delivered?	☐ Yes ☒ No	Date Delivered	YYYY	MM	DD
			2006	09	16

Ministry Use Only			
Data Source		Contractor 6865	
Date Received OCT 17 2006		Date of Inspection YYYY MM DD	
Remarks		Well Record Number	



Ministry of
the Environment

Well Tag Number (Please enter and print number below)

A 045101

Well Record
Regulation 903 Ontario Water Resources Act

page ____ of ____

Instructions for Completing Form

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

Ministry Use Only

Address of Well Location (County/District/Municipality)

WELLINGTON

Township

NICHOL

Lot

19

Concession

15

RR#/Street Number/Name

City/Town/Village

Site/Compartment/Block/Tract etc.

GPS Reading

NAD

Zone

Easting

Northing

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	To
BROWN	CLAY & GRAVEL			0	12ft
GRAY	CLAY			12ft	36ft
GRAY	CLAY & STONES			36ft	79ft
BROWN	LIMESTONE			79ft	101ft
GRAY	LIMESTONE			101ft	321ft
BROWN	LIMESTONE			321ft	332ft

Hole Diameter		
Depth	Metres	Diameter
From	To	Centimetres
0	82ft	8.75
82ft	332ft	6in

Water Record

Water found at _____ Metres / Kind of Water

327ft ☒ 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	Metres To
Casing				
6 1/2	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.188	0	82ft
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
	☒ Open hole		82ft	332ft

Test of Well Yield

Pumping test method	Draw Down	Recovery
	Time min	Water Level Metres
pump-air		Time min
		Water Level Metres
Pump intake set at - (metres)	Static Level	
160ft	84ft	
Pumping rate - (litres/min)	1	87ft
10gpm	1	92ft
Duration of pumping	2	89ft
2 hrs + 0 min	2	87ft
Final water level end of pumping	3	91ft
101ft	3	86ft
Recommended pump type	4	92ft
☐ Shallow ☐ Deep	4	
Recommended pump depth	5	93ft
160ft	5	84ft
Recommended pump rate	10	99ft
10gpm	15	101ft
If flowing give rate - (litres/min)	20	20
	25	25
If pumping discontinued, give reason.	30	30
	40	40
	50	50
	60	1+01ft

Plugging and Sealing Record ☒ Annular space ☐ Abandonment

Depth set at - Metres	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
From To		
0 82ft	BENTONITE SLURRY	

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: **KEITH LANG WELL DRILLING INC** Well Contractor's Licence No.: **7154**

Business Address (street name, number, city etc.): **251 ELDON ST GODERICH ONT**

Name of Well Technician (last name, first name): **KEITH LANG** Well Technician's Licence No.: **T446**

Signature of Well Contractor: *Keith Lang* Date Submitted: _____

Location of Well

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

Diagram showing well location relative to road, lot line, and building. Labels include: WELL, HOUSE, LANE, Lot 32, FERGUS.

Audit No.: **2 53157** Date Well Completed: **2006 9 27**

Was the well owner's information package delivered? ☒ Yes ☐ No

Ministry Use Only

Date Source: _____ Contract No.: **7154**

Date Received: **NOV 2 2 2006** Date of Inspection: _____

Remarks: _____ Well Record Number: _____

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 (<https://data.ontario.ca/dataset/well-records>) .

Go Back to Map

Well ID

Well ID Number: 7041270
Well Audit Number: Z58186
Well Tag Number: A046105

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

Well Location

Address of Well Location	585 GARATRAYA ST W
Township	FERGUS TOWN
Lot	
Concession	
County/District/Municipality	WELLINGTON
City/Town/Village	FERGUS
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 548644.00 Northing: 4839863.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BLCK	FILL			0 m	.3 m
BRWN	SAND	SILT		.3 m	3.1 m
BRWN	SILT	SAND		3.1 m	6.1 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.3 m	CONCRETE	
.3 m	1.5 m	BENTONITE	
1.5 m	6.1 m	SILICA SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Other Method	

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.08 cm	PLASTIC	0 m	1.5 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
5.08 cm	PLASTIC	1.5 m	6.1 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

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

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	

45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	6.1 m	8.255 cm

Audit Number: Z58186

Date Well Completed: January 18, 2007

Date Well Record Received by MOE: February 26, 2007

Related

How to use a Ministry of the Environment map (<https://www.ontario.ca/page/how-use-ministry-environment-map#wells>)

Technical documentation: Metadata record (<https://data.ontario.ca/dataset/well-records/resource/3031344e-e3f2-48d5-888c-c1deadfd2f77>)

A 063962

Well Owner's Information

County/District/Municipality: WELLINGTON City/Town/Village: FERGUS Province: Ontario Postal Code:
 UTM Coordinates: NAD 83 Zone: 18 Easting: 1754858 Northing: 74839962 GPS Unit Make: MAG Model: MER Mode of Operation: ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify

Overburden and Bedrock Materials (see instructions on the back of this form)

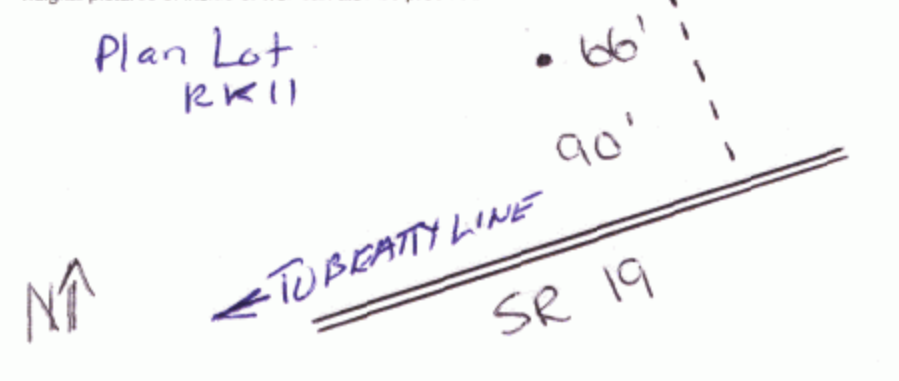
General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From	Depth (Metres) To
BROWN	CLAY	STONES		0	6
BROWN	GRAVEL	SAND		6	18
GREY	CLAY	STONES		18	61
GREY	HARD PAN			61	81
GREY	LIMESTONE			81	150
LT BRN	LIMESTONE			150	275

Annular Space/Abandonment Sealing Record
 Depth Set at (Metres) From: 0 To: 84 Type of Sealant Used (Material and Type): BENTONITE SLURRY Volume Placed (Cubic Metres): 0.64 cu/m

Method of Construction: ☒ Cable Tool ☐ Diamond ☐ Public ☐ Commercial ☐ Not used
☒ Rotary (Conventional) ☐ Jetting ☒ Domestic ☐ Municipal ☐ Dewatering
☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☐ Test Hole ☐ Monitoring
☒ Rotary (Air) ☐ Digging ☐ Irrigation ☐ Cooling & Air Conditioning
☐ Air percussion ☐ Boring ☐ Industrial
☐ Other, specify

Status of Well: ☒ Water Supply ☐ Dewatering Well ☐ Observation and/or Monitoring Hole
☐ Replacement Well ☐ Abandoned, Insufficient Supply ☐ Alteration (Construction)
☐ Test Hole ☐ Abandoned, Poor Water Quality ☐ Other, specify
☐ Recharge Well ☐ Abandoned, other, specify

Location of Well
 Please provide a map below showing:
 - all property boundaries, and measurements sufficient to locate the well in relation to fixed points,
 - an arrow indicating the North direction
 - detailed drawings can be provided as attachments no larger than legal size (8.5" by 14")
 - digital pictures of inside of well can also be provided



Date Well Completed (yyyy/mm/dd): 2007/10/25 Was the well owner's information package delivered? ☐ Yes ☐ No Date the Well Record and Package Delivered to Well Owner (yyyy/mm/dd): 2007/10/25

Well Contractor and Well Technician Information
 Business Name of Well Contractor: DURL HOPPER LIMITED Well Contractor's Licence No.: 21644
 Business Address (Street No./Name, number, RR): RR#1 Municipality: ST. MARYS
 Province: ON Postal Code: N4X1C9 Business E-mail Address: hopper@cyg.net
 Bus. Telephone No. (inc. area code): 519-271-7860 Name of Well Technician (Last Name, First Name): HOPPER, DOUGLAS
 Well Technician's Licence No.: 2323 Signature of Technician: [Signature] Date Submitted (yyyy/mm/dd): 2007/12/20

Results of Well Yield Testing
 Check box if after test of well yield, water was: ☒ Clear and sand free ☐ Cannot develop to sand-free state
 If pumping discontinued, give reason:
 Pumping test method: AIR/BAIL
 Pump intake set at (metres): 150'
 Pumping rate (Litres/min): 10 GPM
 Duration of pumping: 1 hrs + 45 min
 Final water level end of pumping (Metres): 150
 Recommended pump type: ☐ Shallow ☒ Deep
 Recommended pump depth: 150' Metres
 Recommended pump rate (Litres/min): 10 GPM
 If flowing give rate (Litres/min):
 Draw Down:

Time (Min)	Water Level (Metres)	Time (Min)	Water Level (Metres)
Static Level	89	Static Level	
1	150	1	111
2		2	107
3		3	104
4		4	101
5		5	99
10		10	91
15		15	90
20		20	90
25		25	89
30		30	
40		40	
50		50	
60	150	60	89

Water Details
 Water found at Depth:
 Metres ☐ Gas ☒ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
 Water found at Depth:
 Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
 Water found at Depth:
 Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

Casing Used: ☐ Galvanized ☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete
 Screen Used: ☐ Galvanized ☐ Steel ☒ Fibreglass ☐ Plastic ☐ Concrete
 Casing and Well Details:
 Diameter of the Hole (Centimetres): 83/4
 Depth of the Hole (Metres): 275
 Wall Thickness (Metres): .188
 Inside Diameter of the Casing (Metres): 6 1/4"
 Depth of the Casing (Metres): 84'
 No Casing and Screen Used: ☒ Open Hole
 Disinfected? ☒ Yes ☐ No

Ministry Use Only
 Audit No.: Z 62916
 Date Received (yyyy/mm/dd): APR 03 2009
 Well Contractor No.:
 Date of Inspection (yyyy/mm/dd):
 Remarks:



A082 703

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

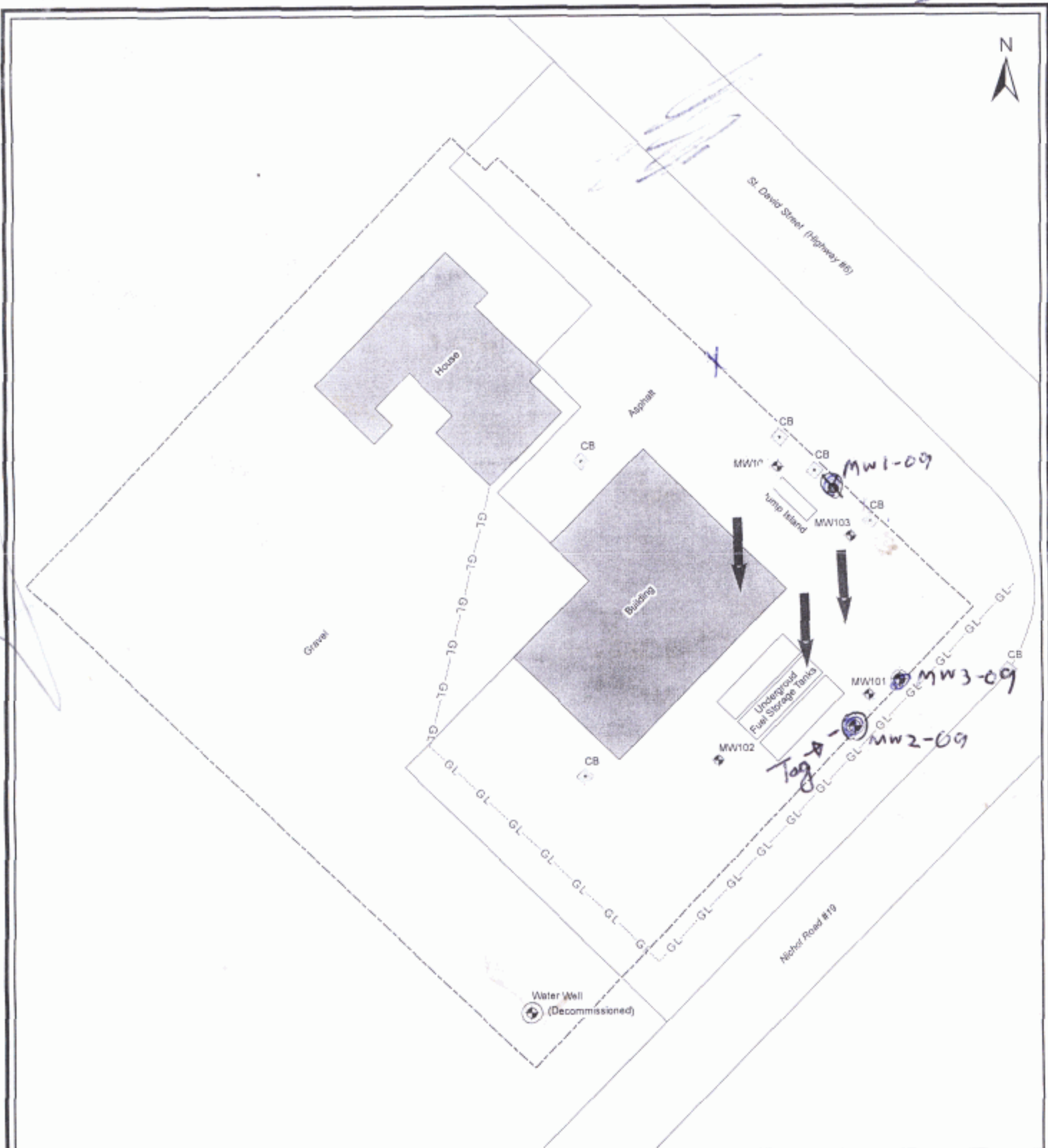
Page 2 of 2

Consent

Well Contractor and Well Technician Information

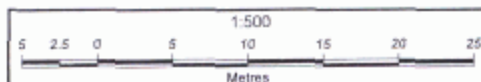
Business Name of Well Contractor Geo-Environmental		Business Address (Street Number/Name, RR) 340 Market Dr		Municipality Millar	Province On
Postal Code L9T5A4		Business Telephone No. (inc. area code) 9058763388		Well Contractor's Licence No. 6607	Business E-mail Address
Name of Well Technician (First Name, Last Name) Terrence Ward		Well Technician's Licence No. 3108		Date Submitted (yyyy/mm/dd)	Signature of Technician [Signature]

Date 1st Well in Cluster Constructed (yyyy/mm/dd) 2009/02/07	Date Last Well in Cluster Constructed (yyyy/mm/dd) 2009/02/07
Ministry Use Only	
Date Received (yyyy/mm/dd) APR 23 2009	Date Inspected (yyyy/mm/dd)
Audit No. c05250	Remarks md132a



Legend

- - - - - Site Property Boundary
- GL - - - - - Underground Gas Line
- ⊕ - Monitoring Well (Terrapex - 1999)
- ⊕ - Proposed Monitoring Well (FRANZ - Jan. 2009)
- ➔ - Inferred Ground Water Flow Direction



Title: PROPOSED MONITORING WELL LOCATIONS	
Project: SUPPLEMENTAL SUBSURFACE CONTAMINANT DELINEATION ASSESSMENT 935 St. DAVID St. NORTH, FERGUS, ON	
Client: BLINKHORN MOTORS LTD.	
 FRANZ ENVIRONMENTAL INC. * CONSULTING * ENGINEERING * TECHNOLOGIES *	Date: Jan. 2009
	Updated: Jan. 27, 2009
	FIGURE 1

APR 23 2009

C-6607 m84329
C05250

1586-0801/KG/MZ/SitePlan_MW_Proposed.pdf

Master Well Owner's and Land Owner's Information

First Name: Township of Centre Wellington Last Name: C/O Triton Engineering Limited E-mail Address:
Mailing Address (Street Number/Name, RR): 105 Queen St. W. Unit 14 Municipality: Fergus Province: ON Postal Code: N1M1S6 Telephone No. (inc. area code): 519 846 9691

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR): Sand 19 Infront of #146 Township: Concession:
County/District/Municipality: City/Town/Village: Fergus Province: Ontario Postal Code:

UTM Coordinates: NAD 83 Zone: 17 Easting: 548362 Northing: 4839497 GPS Unit Make: Magellan Model: Sportrak Mode of Operation: ☐ Undifferentiated ☒ Averaged
☐ Differentiated, specify:

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From	Depth (Metres) To
Brown	Silt	Sand	Fill	0	1.5
Brown	Sand	Silt	Compact	1.5	4.5
Grey	Silt	till	dense	4.5	6.0
Grey	Sand	Gravel	Very dense	6.0	7.6

BH 10A

Hole Details

Depth (Metres) From	Depth (Metres) To	Diameter (Centimetres)
0	7.6	21

Water Use

☐ Public ☐ Industrial ☐ Not used ☐ Other, specify
☐ Domestic ☐ Commercial ☐ Dewatering
☐ Livestock ☐ Municipal ☒ Monitoring
☐ Irrigation ☐ Test Hole ☐ Cooling & Air Conditioning

Method of Construction

☐ Cable Tool ☐ Air Percussion ☐ Digging
☐ Rotary (Conventional) ☐ Diamond ☒ Boring
☐ Rotary (Reverse) ☐ Jetting ☐ Other, specify
☐ Rotary (Air) ☐ Driving

Status of Well

☒ Test Hole ☐ Abandoned, Insufficient Supply
☐ Replacement Well ☐ Abandoned, Poor Water Quality
☐ Dewatering Well ☐ Other, specify
☐ Alteration (Construction) ☐ Abandoned, other, specify

No Casing and Screen Used

Open Hole ☐ Yes ☒ No

Static Water Level Test

Metres

Screen

☐ Galvanized ☐ Steel ☐ Fibreglass ☐ Concrete ☒ Plastic

Outside Diameter (Centimetres): 6.4 Slot No.: 10

Water Details

Water found at Depth: Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth: Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth: Metres ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

Disinfected ☐ Yes ☒ No If no, provide reason: Date Master Well Completed (yyyy/mm/dd): 2004/06/05

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Total Wells in Cluster: 3 Please indicate Number of Cluster Well Information Log Sheets Submitted: 1
Total Wells on this Property: 3

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.
☒ Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Well Contractor and Well Technician Information

Business Name of Well Contractor: Geo Environmental Drilling Inc Well Contractor's Licence No.: 6687
Business Address (Street No./Name, number, RR): 340 Market Dr, Milton Municipality: Halton
Province: ON Postal Code: L9T5A4 Business E-mail Address:
Bus. Telephone No. (inc. area code): 905 876 3388 Name of Well Technician (Last Name, First Name): Gales, Dave
Well Technician's Licence No.: 1306 Signature of Technician: Date Submitted (yyyy/mm/dd): 2004/06/05

Audit No.: M 051.61 Well Contractor No.:
Date Received (yyyy/mm/dd): JUL 09 2009 Date of Inspection (yyyy/mm/dd):
Remarks: VP

Ministry of
the Environment

A 085336

(Print Well Tag No.)

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

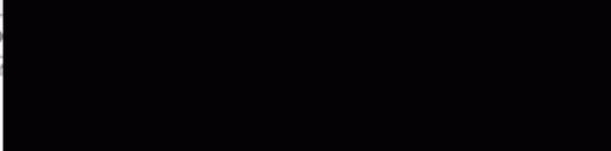
Page 2 of 2

Property Owner's Information

First Name	Last Name	Mailing Address (Street No./Name, RR)	Municipality
Membership of Centre Wellington	C/O Triton Engineering Ltd.	105 Queen St. W. Unit 14	Fergus
Province	Postal Code	E-mail Address	Telephone No. (inc. area code)
ON	N1M1S6		5198469691

Cluster Well Information

Address of Well Location (Street Number/Name, RR) Srd 19		Lot _____	Concession _____	Township _____	County/District/Municipality _____	
City/Town/Village Fergus	Province Ontario	Postal Code _____	GPS Unit Make Magellan	Model Sportraki	Unit Mode of Operation ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify: _____	

Co	
Pro	
Sign	
Co	
up	
Signature of Technician/Contractor	
Date (yyyy/mm/dd)	
 	

[illegible]

Well Contractor and Well Technician Information

Business Name of Well Contractor Geo Environmental Drilling Inc		Business Address (Street Number/Name, RR) 340 Market Dr, Milton		Municipality Halton	Province ON
Postal Code L9T 5A4	Business Telephone No. (inc. area code) 905 876 3388	Well Contractor's Licence No. 66 87	Business E-mail Address [Redacted]		
Name of Well Technician (First Name, Last Name) Dave Gales		Well Technician's Licence No. 13 86	Date Submitted (yyyy/mm/dd) 2009/06/05	Signature of Technician [Signature]	

Date 1st Well in Cluster Constructed (yyyy/mm/dd) 2009/06/04	Date Last Well in Cluster Constructed (yyyy/mm/dd) 2009/06/05
--	---

Ministry Use Only

Date Received (yyyy/mm/dd) JUL 19 2009	Date Inspected (yyyy/mm/dd)
Audit No. C05844	Remarks MD5161

C-6687
M05161
C05844



0 25 50 75 100 m
SCALE 1:2500

JUL 09 2009

© Queen's Printer for Ontario, 2004

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

A 082752

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 2 of 2

Property Owner's Information

First Name	Last Name	Mailing Address (Street No./Name, RR)	Municipality
TWO OF CENTRE WELLINGTON C/O TRITON ENG. SERVICES LTD.		105 QUEEN ST. W UNIT 14	FERGUS
Province	Postal Code	E-mail Address	Telephone No. (inc. area code)
ONT.	N 1 M 1 S 6		5 1 9 8 4 3 3 9 2 0

Cluster Well Information

Address of Well Location (Street Number/Name, RR)		Lot	Concession	Township		County/District/Municipality	
SIDEROAD 18 (BETWEEN HWY 6 & BEATTY LINE)							
City/Town/Village	Province	Postal Code	GPS Unit Make	Model	Unit Mode of Operation	☐ Undifferentiated	☒ Averaged
FERGUS	Ontario		MAGELLAN	EXPLORIST 170	☐ Differentiated, specify:		

upon request

Signature of Technician/Contractor

Date (yyyy/mm/dd)

122 2009/05/05

[illegible]

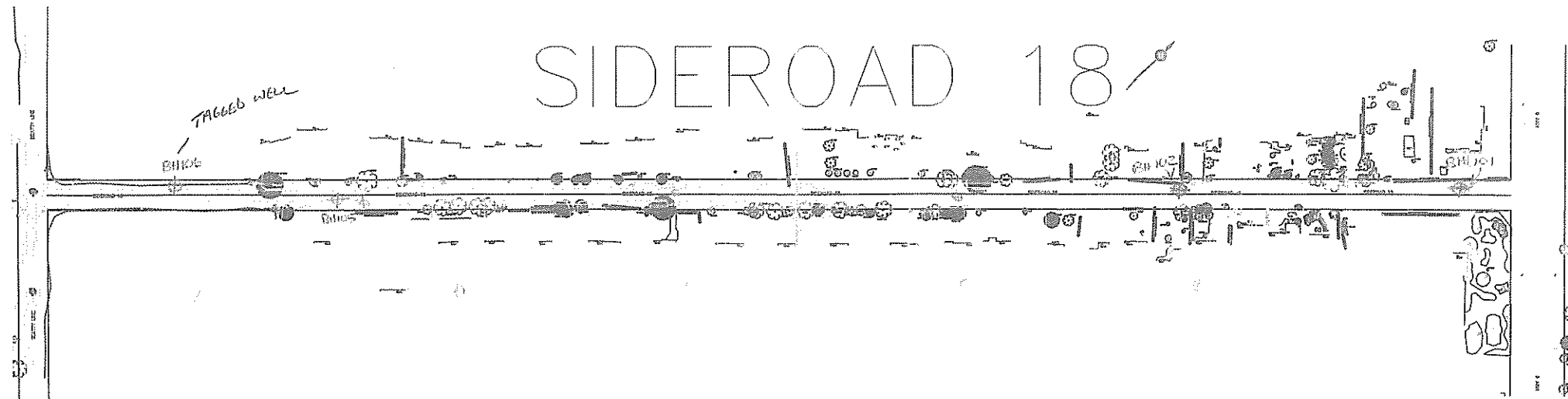
Well Contractor and Well Technician Information

Business Name of Well Contractor GEO-ENVIRONMENTAL DRILLING INC				Business Address (Street Number/Name, RR) 340 MARKET DR				Municipality HALTON		Province ONT	
Postal Code L9T5A4		Business Telephone No. (inc. area code) 905 876 3388		Well Contractor's Licence No. 6607		Business E-mail Address geo-environmental/drilling.com					
Name of Well Technician (First Name, Last Name) Dave Gunn				Well Technician's Licence No. 2062		Date Submitted (yyyy/mm/dd) 2009/05/27		Signature of Technician 			

Date 1st Well in Cluster Constructed (yyyy/mm/dd)	Date Last Well in Cluster Constructed (yyyy/mm/dd)
2009/05/26	

Ministry Use Only

Date Received (yyyy/mm/dd)	Date Inspected (yyyy/mm/dd)
005 01 2009	
Auth No.	Remarks
C 05834	M/S 151



0 25 50 75 100 m
SCALE 1:2500

OCT 01 2008

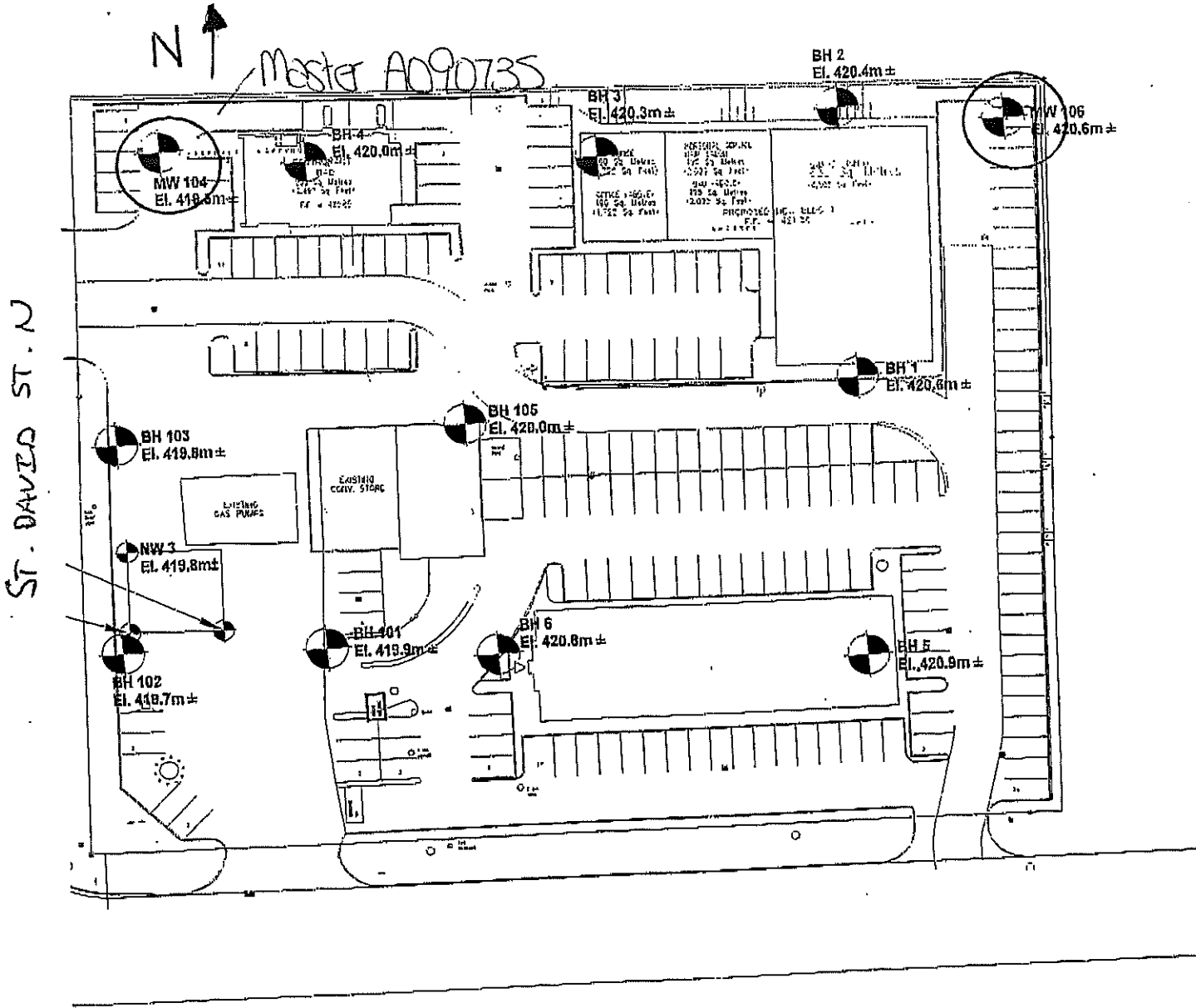
C-6607
M05181
C05834

Address of Well Location (Street Number/Name, RR) <u>820 St DAVID ST. NORTH</u>				Lot	Concession	Township <u>Nichol</u>	County/District/Municipality <u>WELLINGTON COUNTY</u>		
City/Town/Village <u>FERGUS</u>		Province <u>Ontario</u>	Postal Code <u>M1M2L2</u>		GPS Unit Make	Model	Unit Mode of Operation ☐ Undifferentiated ☐ Averaged ☐ Differentiated, specify: _____		

Well # on Sketch	Zone	UTM Coordinates		Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres)		Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
		Easting	Northing						From	To					
MW1		175491197	4840202	4.57	21	AUGER	PLASTIC	4.57	1.52	4.57	BENTONITE			Master.	2009/12/22
MW2		17549271	4840203	4.57	21	AUGER	PLASTIC	4.57	1.52	4.57	BENTONITE				2009/12/22

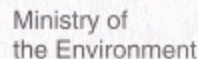
Well Contractor and Well Technician Information					
Business Name of Well Contractor <u>Hardwark Drilling Inc.</u>		Business Address (Street Number/Name, RR) <u>25 Lewis Road - Unit C</u>		Municipality <u>Guelph</u>	Province <u>ON</u>
Postal Code <u>N1H1E9</u>	Business Telephone No. (inc. area code) <u>5198269340</u>	Well Contractor's Licence No. <u>712318</u>	Business E-mail Address		
Name of Well Technician (First Name, Last Name) <u>England Matthew</u>		Well Technician's Licence No. <u>310159</u>	Date Submitted (yyyy/mm/dd) <u>2010/01/20</u>	Signature of Technician <u>Matt England</u>	

Date 1st Well in Cluster Constructed (yyyy/mm/dd) <u>2009/12/22</u>	Date Last Well in Cluster Constructed (yyyy/mm/dd) <u>2009/12/22</u>
Ministry Use Only	
Date Received (yyyy/mm/dd) <u>MAR 01 2010</u>	Date Inspected (yyyy/mm/dd)
Audit No. <u>C05367</u>	Remarks <u>mdt685</u>



21 2010

C-7238
m04689
C05367



ABN00N A085336

Regulation 903 Ontario Water Resources Act

Page 2 of 2

First Name <i>CENTRE WELLINGTON</i>	Last Name	Mailing Address (Street No./Name, RR)	Municipality
Province <i>ON</i>	Postal Code <i>N1M1S6</i>	E-mail Address	Telephone No. (inc. area code) <i>5190433920</i>
		<i>105 QUEEN ST W UNIT 14</i>	<i>FARGUS</i>

Address of Well Location (Street Number/Name, RR) SIDE ROAD 19			Lot	Concession	Township	County/District/Municipality CENTRE WELLINGTON	
City/Town/Village Kergus	Province Ontario	Postal Code _____	GPS Unit Make GARMIN	Model ETREX	Unit Mode of Operation ☐ Undifferentiated ☐ Averaged ☐ Differentiated, specify: _____		

Signature of Technician/Contractor	Date (yyyy/mm/dd)
	2008/01/08

[illegible]

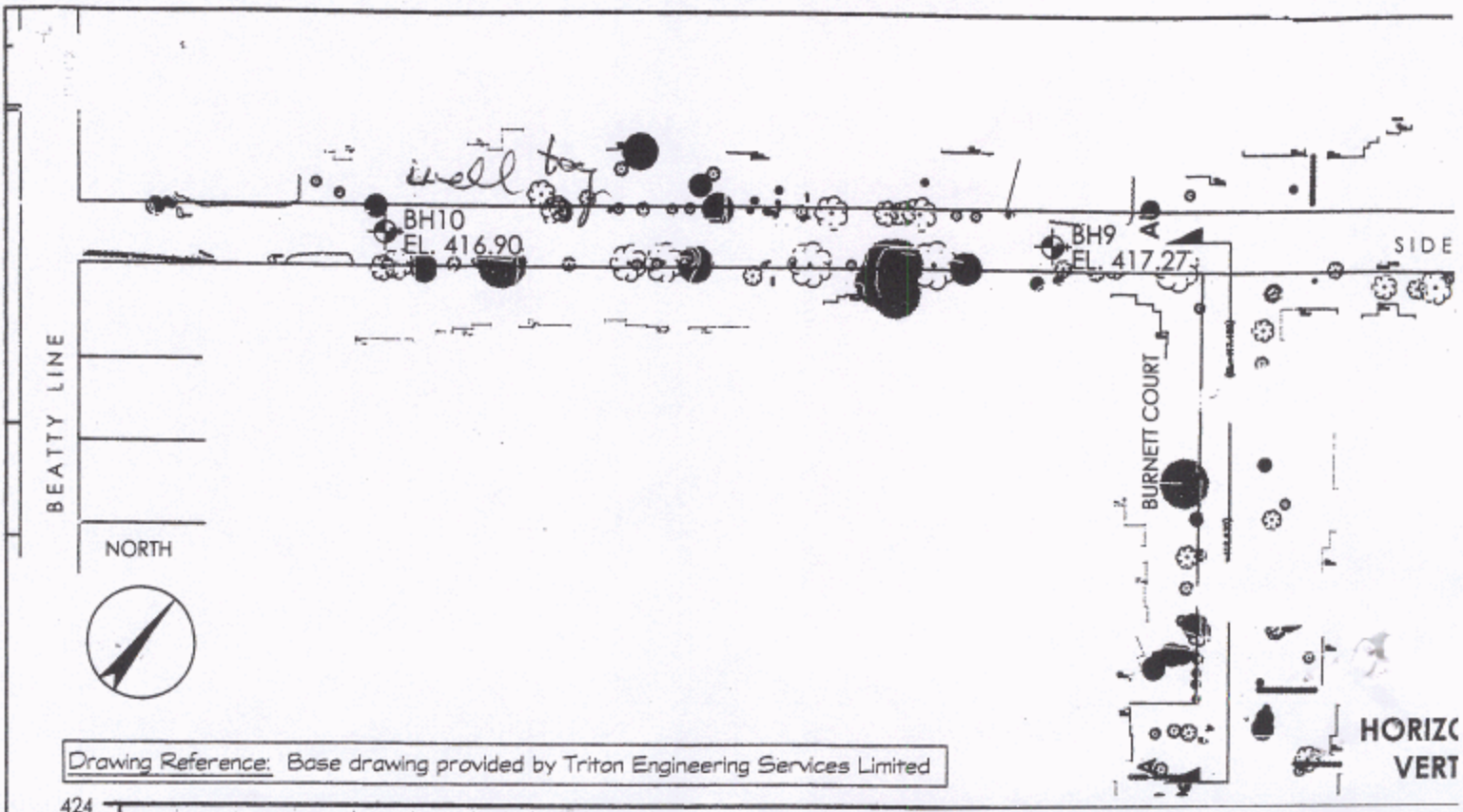
Business Name of Well Contractor GEO-ENVIRONMENTAL DRILLING			Business Address (Street Number/Name, RR) 340 MARKET DRIVE MTN			Municipality HOLTON		Province ON	
Postal Code L9T 5A4		Business Telephone No. (inc. area code) 905 876 3388		Well Contractor's Licence No. 6607		Business E-mail Address			
Name of Well Technician (First Name, Last Name) Dan Gammie				Well Technician's Licence No. 3109		Date Submitted (yyyy/mm/dd) 2010/04/27		Signature of Technician 	

Date 1st Well in Cluster Constructed (yyyy/mm/dd)	Date Last Well in Cluster Constructed (yyyy/mm/dd)
--	---

Date Received (yyyy/mm/dd) MAY 1 2007	Date Inspected (yyyy/mm/dd)
Audit No. c 07817	Remarks mab 588

MAY 19 2010

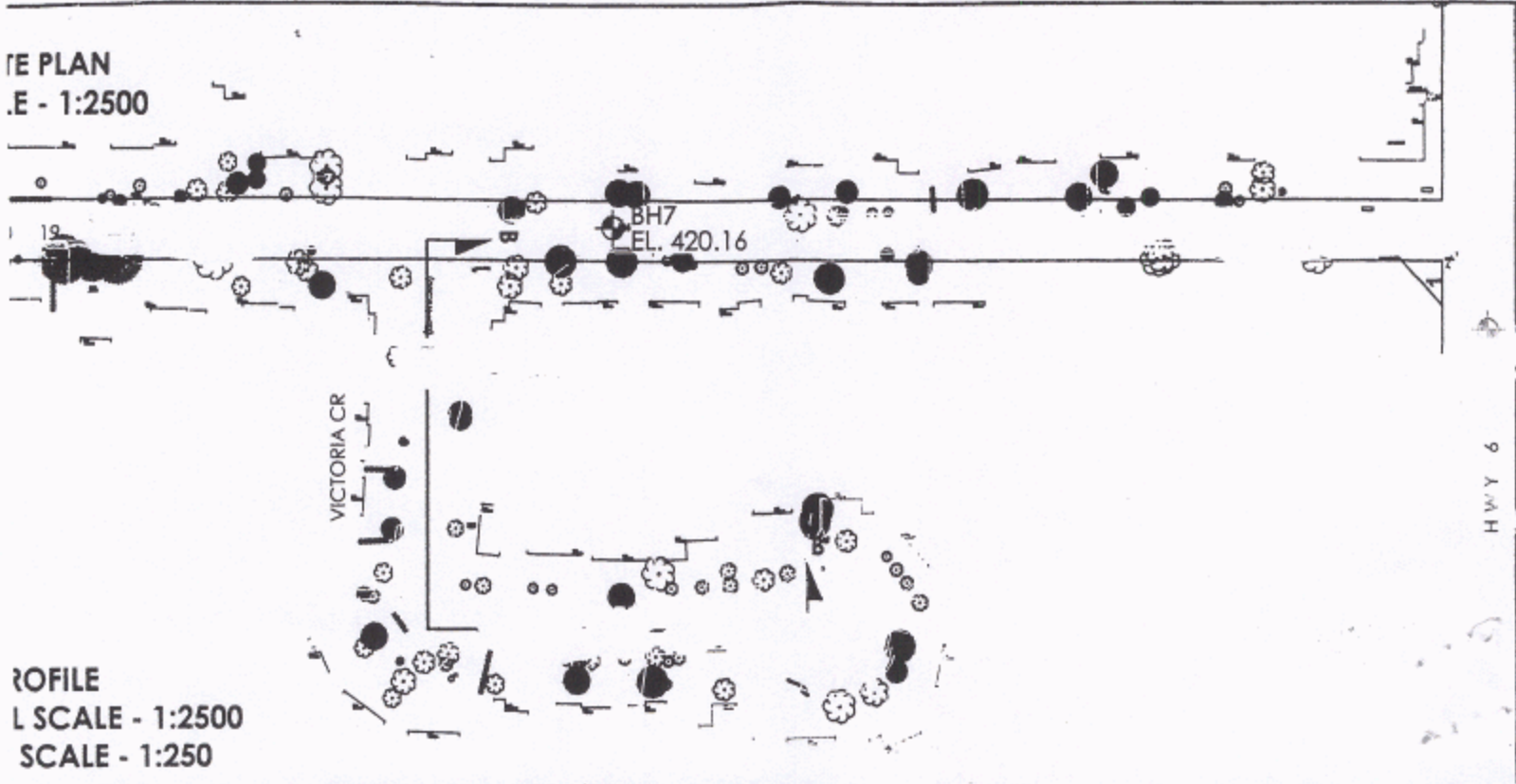
2-6607
M0658
E18707



MAY 19 2010

67817
88890W
6099-2

TE PLAN
E - 1:2500



PROFILE
L SCALE - 1:2500
SCALE - 1:250

A094887

A 094887

Master Well Owner's and Land Owner's Information

First Name CENTRE WELLINGTON	Last Name	E-mail Address
Mailing Address (Street Number/Name, RR) 105 QUEEN ST W UNIT 14	Municipality FERGUS	Province ON
	Postal Code N1M1S6	Telephone No. (inc. area code) 519 843 3920

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, RR) SPUR ROAD 19	Township CENTRE WELLINGTON	Lot	Concession
County/District/Municipality WELLINGTON	City/Town/Village FERGUS	Province Ontario	Postal Code
UTM Coordinates NAD 83 175488974840230	GPS Unit Make GOMAN	Model STREX	Mode of Operation: ☐ Undifferentiated ☐ Averaged ☐ Differentiated, specify

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From	To
Dark Brown	SILT			0	0.6
Brown	SILT	CLAY, SAND, GRAVEL		0.6	1.9
Brown	SAND	GRAVEL		1.9	2.8
Brown	SAND			2.8	3.6
Grey	SILT	SAND, GRAVEL		3.6	3.7

Hole Details

Depth (Metres) From	To	Diameter (Centimetres)
0	3.7	21

Water Use

☐ Public	☐ Industrial	☐ Not used	☐ Other, specify
☐ Domestic	☐ Commercial	☐ Dewatering	
☐ Livestock	☐ Municipal	☒ Monitoring	
☐ Irrigation	☐ Test Hole	☐ Cooling & Air Conditioning	

Method of Construction

☐ Cable Tool	☐ Air Percussion	☐ Digging
☐ Rotary (Conventional)	☐ Diamond	☒ Boring
☐ Rotary (Reverse)	☐ Jetting	☐ Other, specify
☐ Rotary (Air)	☐ Driving	

Status of Well

☒ Test Hole	☐ Abandoned, Insufficient Supply
☐ Replacement Well	☐ Abandoned, Poor Water Quality
☐ Dewatering Well	☐ Other, specify
☐ Alteration (Construction)	☐ Abandoned, other, specify

No Casing and Screen Used

Open Hole ☐ Yes ☒ No	Static Water Level Test  Metres
--	---

Screen

☐ Galvanized	☐ Steel	☐ Fibreglass	☐ Concrete	☒ Plastic
Outside Diameter (Centimetres) 6.4	Slot No. 10			

Water Details

Water found at Depth 2.8 Metres	Kind of Water ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth Metres	Kind of Water ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth Metres	Kind of Water ☐ Gas ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

Disinfected ☐ Yes ☐ No If no, provide reason:	Date Master Well Completed (yyyy/mm/dd) 2010/04/27
---	--

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)

Total Wells in Cluster 3	Please indicate Number of Cluster Well Information Log Sheets Submitted 1
Total Wells on this Property 3	

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed. ☒ Check box to confirm detailed map is provided as per Section 11.1 (3)

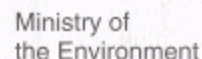
Consent to release additional information concerning the cluster to

Well Contractor and Well Technician Information

Business Name of Well Contractor Geo-Environmental	Well Contractor's Licence No. 6607
Business Address (Street No./Name, number, RR) 340 Market St.	Municipality Milton
Province ON	Postal Code L9T5A4
Business E-mail Address	
Bus. Telephone No. (inc. area code) 905 876 3388	Name of Well Technician (Last Name, First Name) Gammie Doug
Well Technician's Licence No. 3109	Signature of Technician 
	Date Submitted (yyyy/mm/dd) 2010/04/07

Ministry Use Only

Audit No. M 06587	Well Contractor No.
Date Received (yyyy/mm/dd) MAY 19 2010	Date of Inspection (yyyy/mm/dd)
Remarks	



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

A094887

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 2 of 2

Property Owner's Information

First Name CENTRE WELLINGTON	Last Name	Mailing Address (Street No./Name, RR) 105 QUEEN ST. W. UNIT 14	Municipality FERGUS
Province ON	Postal Code N1M1S6	E-mail Address	Telephone No. (inc. area code) 5198433920

Cluster Well Information

Address of Well Location (Street Number/Name, RR) SIDE RD 19		Lot	Concession	Township CENTRAL WILKINGTON		County/District/Municipality	
City/Town/Village FERRIS	Province Ontario	Postal Code _____	GPS Unit Make Garmin	Model ETREX	Unit Mode of Operation ☐ Undifferentiated ☐ Differentiated, specify:	☐ Averaged	

Signature of Technician/Contractor	Date (yyyy/mm/dd)
	2010/04/01

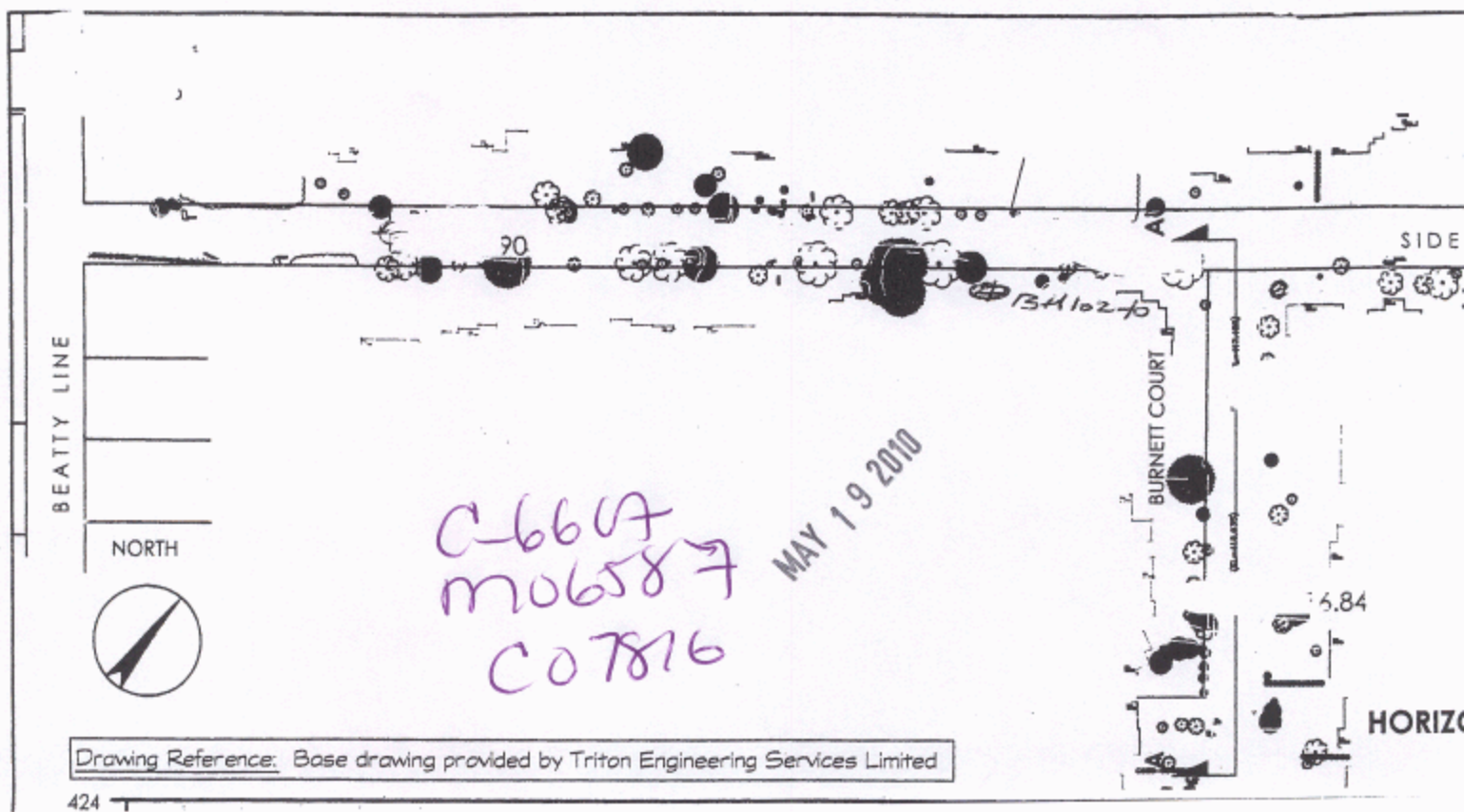
[illegible]

Well Contractor and Well Technician Information

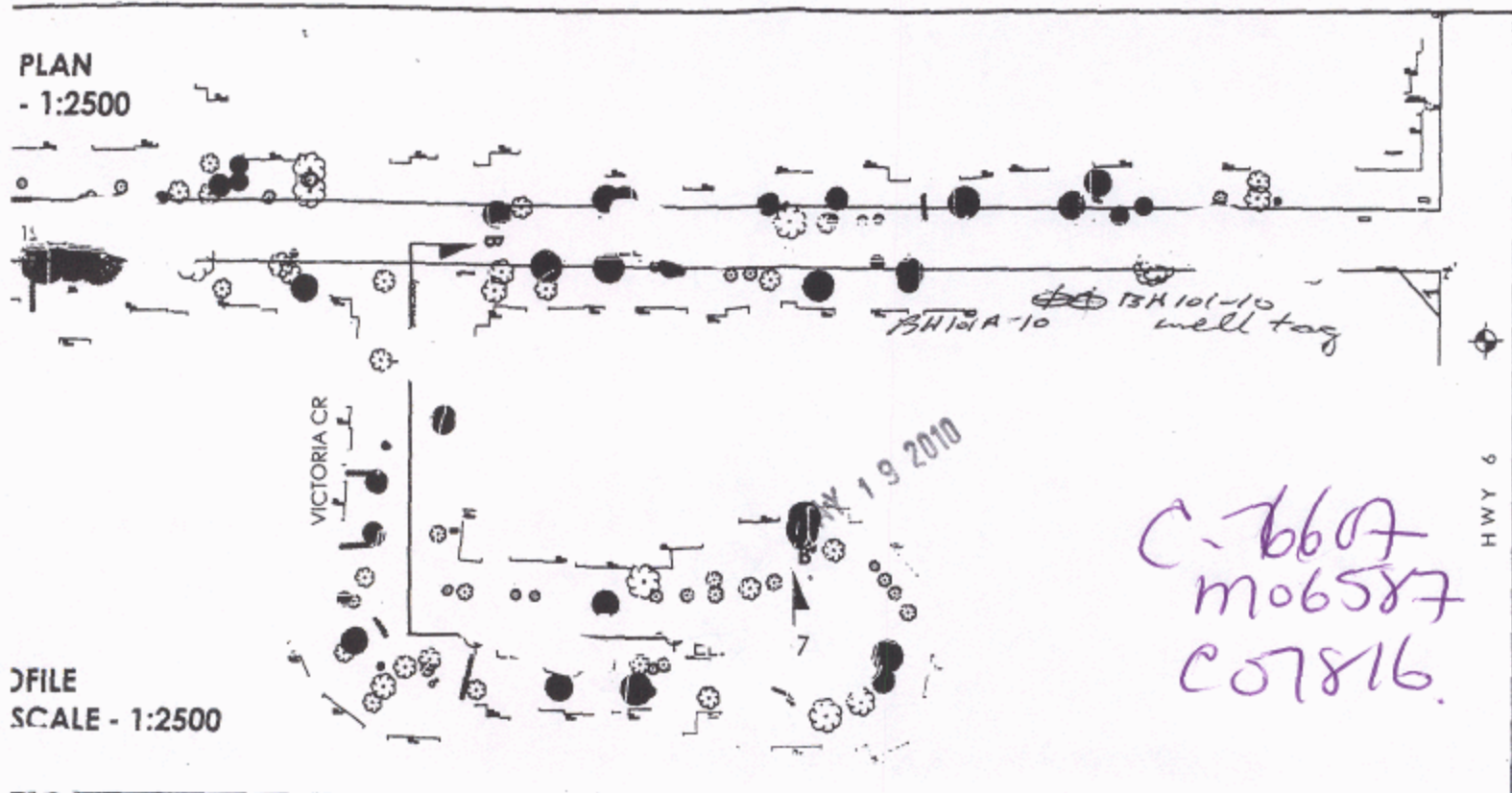
Business Name of Well Contractor GEO-ENVIRONMENTAL drilling		Business Address (Street Number/Name, RR) 340 MARKET ST. W. WINDSOR		Municipality WINDSOR	Province ON
Postal Code L9T5A4		Business Telephone No. (inc. area code) 505-276-3388		Well Contractor's Licence No. 6607	Business E-mail Address
Name of Well Technician (First Name, Last Name) Paul Gammie		Well Technician's Licence No. 3209		Date Submitted (yyyy/mm/dd) 2010/04/27	Signature of Technician 

Date 1st Well in Cluster Constructed (yyyy/mm/dd) 2010/04/27	Date Last Well in Cluster Constructed (yyyy/mm/dd) 2010/04/27
Ministry Use Only	
Date Received (yyyy/mm/dd) MAY 19 2010	Date Inspected (yyyy/mm/dd)
Audit No. c07816	Remarks M06587

110081

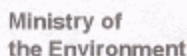


PLAN
- 1:2500



OFFICE
SCALE - 1:2500

C-7667
m06587
C07816



WELL BARRONMONT

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

1281 Side Rd 18
County/District/Municipality

City/Town/Village Centre Wellington

748

15

Wellington

Fergus
Municipal Plan and Sub

Ontario

NUM 258

Zone

5493864840249

4840249

Municipal Plan and Sublot Number

Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
			<p>Diagram of a Dig-Time Well. The well is circular with a diameter of 36 inches. It is 6 feet deep from the ground level (GRADE) to the bottom. The well is labeled 'Dig-Time Well'.</p>		

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To		
0	6	3/4" CHEL GRAVEL	2 YARDS
-6		DETONITE GROUT	750 BS

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, <i>specify</i> _____		☐ Other, <i>specify</i> _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☒ Abandoned, Insufficient Supply
			From	To	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☒ Maximum Supply
Water Quality
☐ Abandoned, other,
specify _____
☐ Other, specify _____

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From	Diameter (cm/in) To
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
21115 Guelph		2663	
Business Address (Street Number/Name)		Municipality	
21115 Guelph		Wellington	
Province	Postal Code	Business E-mail Address	
ONT.	N1H6W2	shane.well@telusnet.ca	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
519 763 8239		Shane Steyer	
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
0590	[Signature]		20/06/06

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i>	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping ____ hrs + ____ min	4		4	
	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? ☒ Yes ☐ No				

Map of Well Location		
Please provide a map below following instructions on the back.		
Comments:		
Well owner's information package delivered ☒ Yes ☐ No	Date Package Delivered <div style="border: 1px solid black; padding: 2px; display: inline-block;"> 2010/05/10 </div> Date Work Completed <div style="border: 1px solid black; padding: 2px; display: inline-block;"> 2010/07/26 </div>	<div style="text-align: center; font-weight: bold; padding-bottom: 5px;">Ministry Use Only</div> Audit No. <div style="font-size: 2em; color: red; text-align: center; padding: 10px 0;"> z113991 </div> <div style="text-align: center; padding-top: 10px;"> AUG 16 2010 </div>

Well Location

Address of Well Location (Street Number/Name) 146 Side Rd 19.		Township Nichol Centre Well	Lot 19	Concession 15
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code M1M2L3
UTM Coordinates Zone NAD 83	Easting 175483584839693	Northing Part Lot 17 Plan 71	Municipal Plan and Sublot Number	Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
	Well Abandonment			
		36"		
		5'6"	Top Tare Removed	

Annular Space		
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 5'6"	2 PORTLAND CEMENT + 3/4" COARSE GRAVEL	400185

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify INSIDE DIAMETER ☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From To	Diameter (cm/in)

Well Contractor and Well Technician Information			
Business Name of Well Contractor HANNOX WELL DRILLING LTD		Well Contractor's Licence No. 216163	
Business Address (Street Number/Name) RR#5 GUELPH		Municipality WELLINGTON	
Province ONT.	Postal Code N1H6J2	Business E-mail Address hannowelldrilling@bellnet.ca	
Bus. Telephone No. (inc. area code) 519 476 3823		Name of Well Technician (Last Name, First Name) HANNOX	
Well Technician's Licence No. 05910		Signature of Technician and/or Contractor [Signature]	
Date Submitted 2010/12/01			

Results of Well Yield Testing					
After test of well yield, water was:		Draw Down		Recovery	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
		1		1	
		2		2	
		3		3	
		4		4	
		5		5	
		10		10	
		15		15	
		20		20	
		25		25	
		30		30	
		40		40	
		50		50	
		60		60	
Pump intake set at (m/ft)					
Pumping rate (l/min / GPM)					
Duration of pumping hrs + min					
Final water level end of pumping (m/ft)					
If flowing give rate (l/min / GPM)					
Recommended pump depth (m/ft)					
Recommended pump rate (l/min / GPM)					
Well production (l/min / GPM)					
Disinfected? ☒ Yes ☐ No					

Map of Well Location	
Please provide a map below following instructions on the back.	

Comments:	
Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered Y Y Y Y M M D D Date Work Completed 2010/11/23
Ministry Use Only Audit No. 2124768 JAN 17 2011 Received	

Address of Well Location (Street Number/Name) 0141 SIDEROAD 19		Township NICHOL	Lot 19	Concession 15
County/District/Municipality WELLINGTON		City/Town/Village FERGUS	Province Ontario	Postal Code N1M2W3
UTM Coordinates NAD 83	Zone 17	Easting 548445	Northings 4839699	Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
	ABANDON	36" x 17 1/2' DUG WELL			
			NATIVE	0	3'
			BENTONITE	3'	4'
			GRAVEL	4'	16 1/2'
			BENTONITE	16 1/2'	17 1/2'

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From	To

Business Name of Well Contractor WELL INITIATIVES LTD		Well Contractor's Licence No. 7221
Business Address (Street Number/Name) 7461 WELLINGTON RD 18		Municipality ELORA
Province ON	Postal Code N0B1S0	Business E-mail Address
Bus. Telephone No. (inc. area code) 5198468289		Name of Well Technician (Last Name, First Name) HUGH BROADFOOT
Well Technician's Licence No. 1897	Signature of Technician and/or Contractor <i>[Signature]</i>	Date Submitted 20101130

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify			
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☒ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

Comments:

Well owner's information package delivered ☒ Yes ☐ No	Date Package Delivered 20101130	Date Work Completed 20101130
---	---	--

Ministry Use Only	
Audit No. z125268	Received FEB 04 2011

Address of Well Location (Street Number/Name) 0131 SIDEROAD 19		Township NICHOL	Lot 19	Concession 15
County/District/Municipality WELLINGTON		City/Town/Village FERGUS	Province Ontario	Postal Code N1M2W3
UTM Coordinates NAD 83	Zone 17	Easting 548453	Northings 4839774	Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
	ABANDON 30" x 11 1/2' DUG WELL			
			NATIVE	0 3'
			BENTONITE	3' 4'
			GRAVEL	4' 10 1/2'
			BENTONITE	10 1/2' 11 1/2'

Annular Space		
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify _____	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Commercial ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify MUNICIPAL ☐ Other, specify _____	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information			
Business Name of Well Contractor WELL INITIATIVES LTD.		Well Contractor's Licence No. 7221	
Business Address (Street Number/Name) 7461 WELLINGTON RD 18		Municipality ELORA	
Province ON	Postal Code N0B1S0	Business E-mail Address	
Bus. Telephone No. (inc. area code) 519 846 8289		Name of Well Technician (Last Name, First Name) HUGH BROADFOOT	
Well Technician's Licence No. 1897		Date Submitted 2010/11/30	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify _____		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☒ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	
Well owner's information package delivered ☒ Yes ☐ No	Date Package Delivered 2010/11/30
Date Work Completed 2010/11/30	Ministry Use Only
	Audit No. z125267
	FEB 04 2011

Address of Well Location (Street Number/Name) **0131 SIDEROAD 19** Township **NICHOL** Lot **19** Concession **15**
County/District/Municipality **WELLINGTON** City/Town/Village **FERGUS** Province **Ontario** Postal Code **N1M2W3**
UTM Coordinates Zone Easting Northing NAD 83 **175484524839773** Municipal Plan and Sublot Number _____ Other _____

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
BROWN	CLAY	TOP SOIL		0 2'
	SANDY CLAY			2' 5'
	GRAVEL			5' 6'
	TILL			6' 56'
GREY	HARDBAN CLAY			56' 58'
	CLAY	GRAVEL TILL		58' 74'
BROWN	LIMESTONE			74' 156'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0 40'	BENTONITE SLURRY	9

Method of Construction	Well Use
☐ Cable Tool ☒ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify _____	☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
6 1/4	STEEL	.188	+1 1/2'	78 1/2'
6 1/8	OPEN HOLE		78 1/2'	156'

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☒ Untested	Depth (m/ft)	Diameter (cm/in)
156'	☐ Gas ☐ Other, specify _____	From	To
		0 20'	10"
		20' 78 1/2'	9"
		78 1/2' 156'	6 1/8"

Well Contractor and Well Technician Information
Business Name of Well Contractor **WELL INITIATIVES LTD** Well Contractor's Licence No. **7 2 2 1**
Business Address (Street Number/Name) **7461 WELLINGTON ROAD 18** Municipality **ELORA**
Province **ON** Postal Code **N0B 1S0** Business E-mail Address _____
Bus. Telephone No. (inc. area code) **519 846 8289** Name of Well Technician (Last Name, First Name) **LUCA BROADFOOT**
Well Technician's Licence No. **18 97** Signature of Technician and/or Contractor **[Signature]** Date Submitted **20101231**

Results of Well Yield Testing				
After test of well yield, water was: ☒ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level	67'		86' 1"
	1	73' 5"	1	79' 4"
Pump intake set at (m/ft) 150	2	76' 2"	2	77' 2"
Pumping rate (l/min / GPM) 10	3	77' 10"	3	75' 9"
Duration of pumping 1 hrs + 0 min	4	79' 2"	4	75' 1"
Final water level end of pumping (m/ft) 86' 1"	5	79' 9"	5	74' 5"
If flowing give rate (l/min / GPM)	10	82' 1"	10	72' 4"
	15	83' 6"	15	71' 1"
Recommended pump depth (m/ft) 150'	20	84' 4"	20	70' 5"
	25	84' 8"	25	70'
Recommended pump rate (l/min / GPM) 7	30	85' 4"	30	69' 4"
Well production (l/min / GPM)	40	85' 9"	40	68' 8"
	50	86'	50	68' 3"
Disinfected? ☒ Yes ☐ No	60	86' 1"	60	68'

Map of Well Location
Please provide a map below following instructions on the back.

Comments: _____

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☒ Yes	20101216	Audit No. z125324
☐ No	20101209	Received FEB 04 2011

A 118815

8690 Page 1 of 4

Address of Well Location (Street Number/Name) Paradise Dr St David St. N.		Township	Lot	Concession	
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code	
UTM Coordinates	Zone Easting	Northing	Municipal Plan and Sublot Number		Other WKQ-003941 A 0 - A 03

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Depth Set at (m/ft)		Annular Space	Volume Placed (m ³ /ft ³)
From	To	Type of Sealant Used (Material and Type)	
0	1'	Concrete Flashment	
1'	7'	Benzal	
7'	18'	SAND	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion	Direct Push	☐ Industrial		
☒ Other, specify		☐ Other, specify		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
2'	PVC	0.25"	0	8'	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Inactive

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
2.25"	PVC	10	8'	18'

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

Water Details		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0	18'	4.25"
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Well Contractor and Well Technician Information	
Business Name of Well Contractor Strata Soil Sampling Inc.	Well Contractor's Licence No. 7 2 4 1
Business Address (Street Number/Name) 147-2 West Beaver Creek Road	Municipality Richmond Hill

Province Ontario	Postal Code L4B 1C6	Business E-mail Address wrecords@stratasoil.co
Bus. Telephone No. (inc. area code) 905-764-9304	Name of Well Technician (Last Name, First Name) Murray Stacey	
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
	50		50	
Well production (l/min / GPM)	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.

See Map
MW1

Comments:	General contractor: EXP Services Incorporated
-----------	--

Well owner's information package delivered	Date Package Delivered	Ministry Use Only Audit No. z 134916 AUG 05 2011 Received
	Y Y Y Y Y M M D D Date Work Completed 10/1/06 34	
☐ Yes ☒ No		

Well Location

Address of Well Location (Street Number/Name) Parkside Dr 85 St David St N.		Township	Lot	Concession
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 549211	Northings 4840084	Municipal Plan and Sublot Number
Other WKQ-003941 A 0 - A 03				

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Brown Grey	SAND SAND	SILT	Mud/Wat	0	5'
				5'	14'

Annular Space		
Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)
0	4'	Benseal
4'	14'	SAND

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify Direct Push	☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☒ Test Hole ☒ Monitoring ☐ Livestock ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To	
2"	PVC	0.25"	0	4'	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To	
2.25"	PVC	10	4'	14'	☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From	Diameter (cm/in) To
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	0	14' 4.25"
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Business Name of Well Contractor Strata Soil Sampling Inc.		Well Contractor's Licence No. 7 2 4 1
Business Address (Street Number/Name) 147-2 West Beaver Creek Road		Municipality Richmond Hill
Province Ontario	Postal Code L4B 1C6	Business E-mail Address wrecords@stratasoil.com
Bus. Telephone No. (inc. area code) 905-764-9304		Name of Well Technician (Last Name, First Name) Murray Stacy
Well Technician's Licence No. 3 6 1 8 2	Signature of Technician and/or Contractor	Date Submitted 2011 07 08

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free ☐ Other, specify	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
Pump intake set at (m/ft)	1		1	
Pumping rate (l/min / GPM)	2		2	
Duration of pumping hrs + min	3		3	
Final water level end of pumping (m/ft)	4		4	
If flowing give rate (l/min / GPM)	5		5	
Recommended pump depth (m/ft)	10		10	
Recommended pump rate (l/min / GPM)	15		15	
Well production (l/min / GPM)	20		20	
Disinfected?	25		25	
☐ Yes ☐ No	30		30	
	40		40	
	50		50	
	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map
MW2

Comments: General contractor:
EXP Services Incorporated

Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered 2011 07 08	Date Work Completed 2011 07 08	Ministry Use Only Audit No. z 134917 AUG 05 2011 Received
--	--------------------------------------	-----------------------------------	---

A118817

Measurements recorded in: ☐ Metric ☒ Imperial

Page 3 of 4

Well Location

Address of Well Location (Street Number/Name) Parkside Dr 1788 St David N		Township	Lot	Concession
County/District/Municipality		City/Town/Village Perth	Province Ontario	Postal Code N6A 0A3
UTM Coordinates NAD 83	Zone 17	Easting 549195	Northings 4840086	Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown Grey	SAND SAND	SILT	Moist / Wet	0	5'
				5'	14'

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	3'	Benzonal	
3'	14'	SAND	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify Direct Push	☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☐ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
2"	PVC	25"	0	4'	☐ Water Supply ☒ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To	
2-25"	PVC	10	4'	14'	☐ Water Supply ☒ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From	To
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	0	14'
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		4-25"

Well Contractor and Well Technician Information	
Business Name of Well Contractor Strata Soil Sampling Inc.	Well Contractor's Licence No. 7241
Business Address (Street Number/Name) 147-2 West Beaver Creek Road	Municipality Richmond Hill
Province Ontario	Postal Code L4B 1C6
Business E-mail Address wrecords@stratasoil.com	
Bus. Telephone No. (Inc. area code) 905-764-9304	Name of Well Technician (Last Name, First Name) Murray Stacy
Well Technician's Licence No. 3618	Signature of Technician and/or Contractor [Signature]
Date Submitted 2011/07/08	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☐ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

See MAP
MW3

General contractor:
EXP Services Incorporated

Well owner's information package delivered ☒ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011/06/24	Ministry Use Only
Date Work Completed 2011/06/24	Audit No. 134919	Received AUG 05 2011

A118818

Measurements recorded in: ☐ Metric ☐ Imperial

8690 Page 4 of 4

Address of Well Location (Street Number/Name) Paradise Dr St David St. N Township Fergus Lot Concession

County/District/Municipality Fergus City/Town/Village Fergus Province Ontario Postal Code

UTM Coordinates Zone 17 Easting 549190 Northing 4840109 Municipal Plan and Sublot Number Other WKQ-003941 A 0 - A 03

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
Brown	SAND		Moist	0 5'
Grey	SAND	STILL	SATURATED	5' 14'

Annular Space		
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 3'	Benseal	
3' 14'	SAND	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify <u>Direct Push</u>	☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☒ Test Hole ☐ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify <u></u>

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	
2"	PVC	25"	0 4'	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify <u></u> ☐ Other, specify <u></u>

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	
2-25"	PVC	10	4' 14'	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify <u></u> ☐ Other, specify <u></u>

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify <u></u>	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify <u></u>	Kind of Water: ☐ Fresh ☐ Untested	0 14'	4.25"
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify <u></u>	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information

Business Name of Well Contractor Strata Soil Sampling Inc. Well Contractor's Licence No. 7 2 4 1

Business Address (Street Number/Name) 147-2 West Beaver Creek Road Municipality Richmond Hill

Province Ontario Postal Code L4B 1C6 Business E-mail Address wrecords@stratasoil.com

Bus. Telephone No. (inc. area code) 905-764-9304 Name of Well Technician (Last Name, First Name) Murray Stacy

Well Technician's Licence No. 3 6 1 8 Signature of Technician and/or Contractor [Signature] Date Submitted 21 07 08

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify <u></u>		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☐ Yes ☐ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

See Map MW 4

Comments: General contractor: EXP Services Incorporated

Well owner's information package delivered ☐ Yes ☒ No

Date Package Delivered 2011 06 24

Date Work Completed 2011 06 24

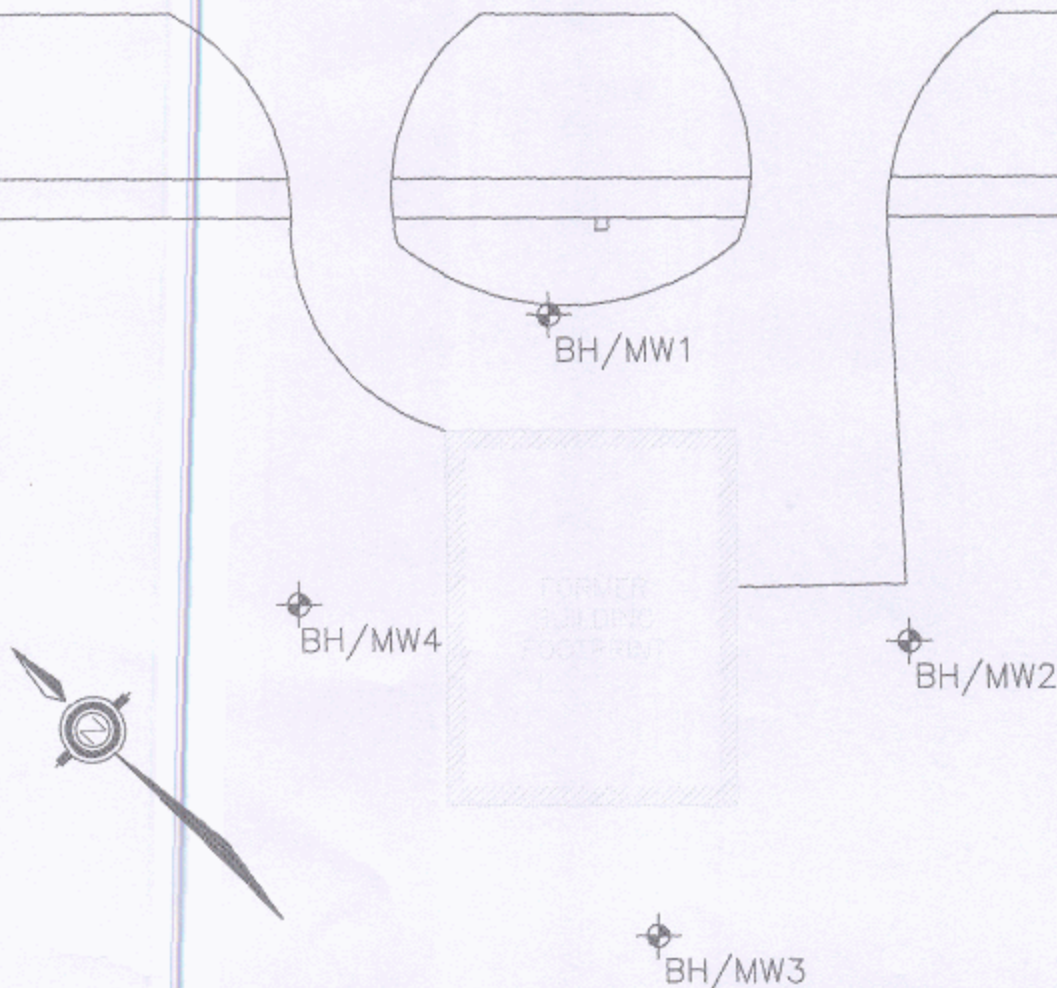
Ministry Use Only

Audit No. 134918

Received AUG 05 2011

8690

ST. DAVID STREET NORTH



SCALE:
0m 10m 20m 30m 40m 50m

 BH/MW1 BOREHOLE/MONITORING WELL INSTALLED BY EXP - JUNE 2011



exp Services Inc.

t: 1.519.650.4918 f: 1.519.650.4603
405 Maple Grove Road, Unit 6,
Cambridge, ON N3E 1B6
Canada

scale AS NOTED	LIMITED PHASE II - ESA SMARTCENTRES SITE, ST. DAVID STREET NORTH, FERGUS, ONTARIO	project no. KCH-00200564-D0
date JUNE 2011		FIG. 2
drawn by LAS	TITLE: BOREHOLE/MONITORING WELL LOCATION PLAN	

C-7241
2134916 2134919
2134917 2134918

AUG 05 2011

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address ☐ Well Constructed by Well Owner

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) Township Lot Concession

County/District/Municipality City/Town/Village Province Ontario Postal Code

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brown	SAND	FILL/GRAVEL		0 5'
Brown	SAND			5' 10'
Brown	SAND		Web	10' 13'
Grey	SILT/CLAY	STONE	Dense	13' 25'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 1'	Concrete/Flushmortar	
1' 19'	Grout	
19' 25'	SAND	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☒ Monitoring
☒ Air percussion		☐ Industrial	☐ Cooling & Air Conditioning
☒ Other, specify Direct Push		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
2"	PVC	25"	0 20'	☒ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☒ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☐ Abandoned, other, specify	
				☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
2.25"	PVC	10	20' 25'

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
0 25'			5.75"

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Business Address (Street Number/Name)	Municipality		
Province	Postal Code	Business E-mail Address	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	

Results of Well Yield Testing					
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
		4		4	
Duration of pumping _____ hrs + _____ min		5		5	
Final water level end of pumping (m/ft)		10		10	
If flowing give rate (l/min / GPM)		15		15	
		20		20	
Recommended pump depth (m/ft)		25		25	
Recommended pump rate (l/min / GPM)		30		30	
		40		40	
Well production (l/min / GPM)		50		50	
Disinfected? ☐ Yes ☐ No		60		60	

Map of Well Location

Please provide a map below following instructions on the back.

See MAP
NW 5

Comments:

Well owner's information package delivered		Date Package Delivered		Ministry Use Only	
☐ Yes		Y/Y/Y/M/M/D/D		Audit No.	
☐ No		Date Work Completed		z129631	
		2011 07 08		AUG 05 2011	

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name Last Name / Organization E-mail Address ☐ Well Constructed by Well Owner

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) Township Lot Concession

County/District/Municipality City/Town/Village Province Ontario Postal Code

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brown	SAND	Fill/Gravel		0 5'
Brown	CLAY			0 10'
Brown	SAND		Web	10' 13'
Gray	SILT/CLAY			13' 17.5'

Annular Space			Volume Placed (m ³ /ft ³)
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)		
0 1'	Concrete/Flashed		
1' 6.5'	Reseal		
6.5' 17.5'	SAND		

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify	Drill flush	☐ Other, specify		

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PVC	0.25"	0 7.5'	

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
2.25"	PVC	10	7.5 17.5'	

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
0 17.5'		0 17.5'	5.75"

Well Contractor and Well Technician Information

Business Name of Well Contractor: Strata Soil Sampling Inc. Well Contractor's Licence No.: 722411

Business Address (Street Number/Name): 142-2 West Beaver Creek Rd. Municipality: Richmond Hill

Province: Ont. Postal Code: L4B 1C6 Business E-mail Address: info@strata-soil.com

Bus. Telephone No. (inc. area code): 905 764 9304 Name of Well Technician (Last Name, First Name): Muir, Mike

Well Technician's Licence No.: 3448 Signature of Technician and/or Contractor: [Signature] Date Submitted: 2011 07 22

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping		3	3
hrs + min		4	4
Final water level end of pumping (m/ft)		5	5
If flowing give rate (l/min / GPM)		10	10
Recommended pump depth (m/ft)		15	15
Recommended pump rate (l/min / GPM)		20	20
Well production (l/min / GPM)		25	25
Disinfected?		30	30
☐ Yes ☐ No		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

See Map MW 6.

Comments:

Well owner's information package delivered: ☐ Yes ☐ No

Date Package Delivered: Y Y Y Y M M D D

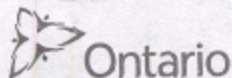
Date Work Completed: 2011 07 08

Ministry Use Only

Audit No. z129630

AUG 05 2011

Received



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A118794

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☐ Imperial

8763 Page 3 of 4

Well Owner's Information

First Name Last Name / Organization E-mail Address ☐ Well Constructed by Well Owner

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) Township Lot Concession

City/Town/Village Province Ontario Postal Code

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brown	Sand	Fill/Gravel		0 5'
Brown	Sand			5' 10'
Brown	Sand		Wet	10' 13'
Grey	Silt/Clay		Dense	13' 17.5'

Annular Space

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0 1'	Concrete/Mortar	
1' 6.5'	Ben Seal	
6.5' 17.5'	Sand	

Method of Construction

Well Use

☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify	Direct Push	☐ Other, specify		

Construction Record - Casing

Status of Well

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	Pvc	1.25"	0 7.5'	

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
2.25"	Pvc	10	7.5' 17.5'	

Water Details

Hole Diameter

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	0 17.5'	5.75"

Well Contractor and Well Technician Information

Business Name of Well Contractor Well Contractor's Licence No.
Shata Soil Sampling Inc 72411
Business Address (Street Number/Name) Municipality
#2-147 West Beaver Creek Rd. Richmond Hill
Province Postal Code Business E-mail Address
ON L4B 1C6 bwrecords@shatasoil.com
Bus. Telephone No. (inc. area code) Name of Well Technician (Last Name, First Name)
905 764 9304 Muid Mike
Well Technician's Licence No. Signature of Technician and/or Contractor Date Submitted
3448 Shata Mike 2011 07 22

Results of Well Yield Testing

After test of well yield, water was:	Draw Down	Recovery
☐ Clear and sand free	Time (min)	Water Level (m/ft)
☐ Other, specify	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level	
	1	1
Pump intake set at (m/ft)	2	2
Pumping rate (l/min / GPM)	3	3
Duration of pumping	4	4
hrs + min	5	5
Final water level end of pumping (m/ft)	10	10
If flowing give rate (l/min / GPM)	15	15
	20	20
Recommended pump depth (m/ft)	25	25
Recommended pump rate (l/min / GPM)	30	30
Well production (l/min / GPM)	40	40
Disinfected?	50	50
☐ Yes ☐ No	60	60

Map of Well Location

Please provide a map below following instructions on the back.

See Map
MW 7

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Y Y Y Y M M D D 2011 07 08	Audit No. z129629 AUG 05 2011

Measurements recorded in: ☐ Metric ☒ Imperial

8763

Page 4 of 4

Well Owner's Information

First Name Last Name / Organization E-mail Address ☐ Well Constructed by Well Owner

Mailing Address (Street Number/Name) Municipality Province Postal Code Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) Township Lot Concession

County/District/Municipality City/Town/Village Province Ontario Postal Code

UTM Coordinates Zone Easting Northing Municipal Plan and Sublot Number Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brown	SAND	FILL/GRAVEL		0 5'
Brown	SAND			5' 10'
Brown	SAND		Wet	10' 14'
Grey	Silt/Clay		Dense	14' 17.5'

Annular Space			Volume Placed (m³/ft³)
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	
From	To		
0	1'	Concrete/Monument	
1'	6.5'	Bentonite	
6.5'	17.5'	SAND	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☒ Monitoring
☐ Air percussion		☐ Cooling & Air Conditioning	
☒ Other, specify Direct Push		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
2"	PVC	.25"	0 7.5'	☐ Water Supply	
				☐ Replacement Well	
				☒ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☒ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☐ Abandoned, other, specify	
				☐ Other, specify	

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
2.25"	PVC	10	7.5' 17.5'	

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		0 17.5'	5.75"

Well Contractor and Well Technician Information

Business Name of Well Contractor: State Soil Sampling Inc. Well Contractor's Licence No.: 72411

Business Address (Street Number/Name): 42-147 West Beaver Creek Rd. Municipality: Richmond Hill

Province: ON Postal Code: L4B1C6 Business E-mail Address: w.records@state-soil.ca

Bus. Telephone No. (inc. area code): 905-764-9344 Name of Well Technician (Last Name, First Name): Mike

Well Technician's Licence No.: 3448 Signature of Technician and/or Contractor: [Signature] Date Submitted: 2011/07/02

Results of Well Yield Testing					
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
		4		4	
Duration of pumping _____ hrs + _____ min		5		5	
Final water level end of pumping (m/ft)		10		10	
		15		15	
If flowing give rate (l/min / GPM)		20		20	
Recommended pump depth (m/ft)		25		25	
		30		30	
Recommended pump rate (l/min / GPM)		40		40	
Well production (l/min / GPM)		50		50	
		60		60	
Disinfected? ☐ Yes ☐ No					

Map of Well Location

Please provide a map below following instructions on the back.

See Map MW8

Comments:

Well owner's information package delivered: ☐ Yes ☐ No

Date Package Delivered: YYY Y MM DD 2011 07 08

Date Work Completed: 2011 07 08

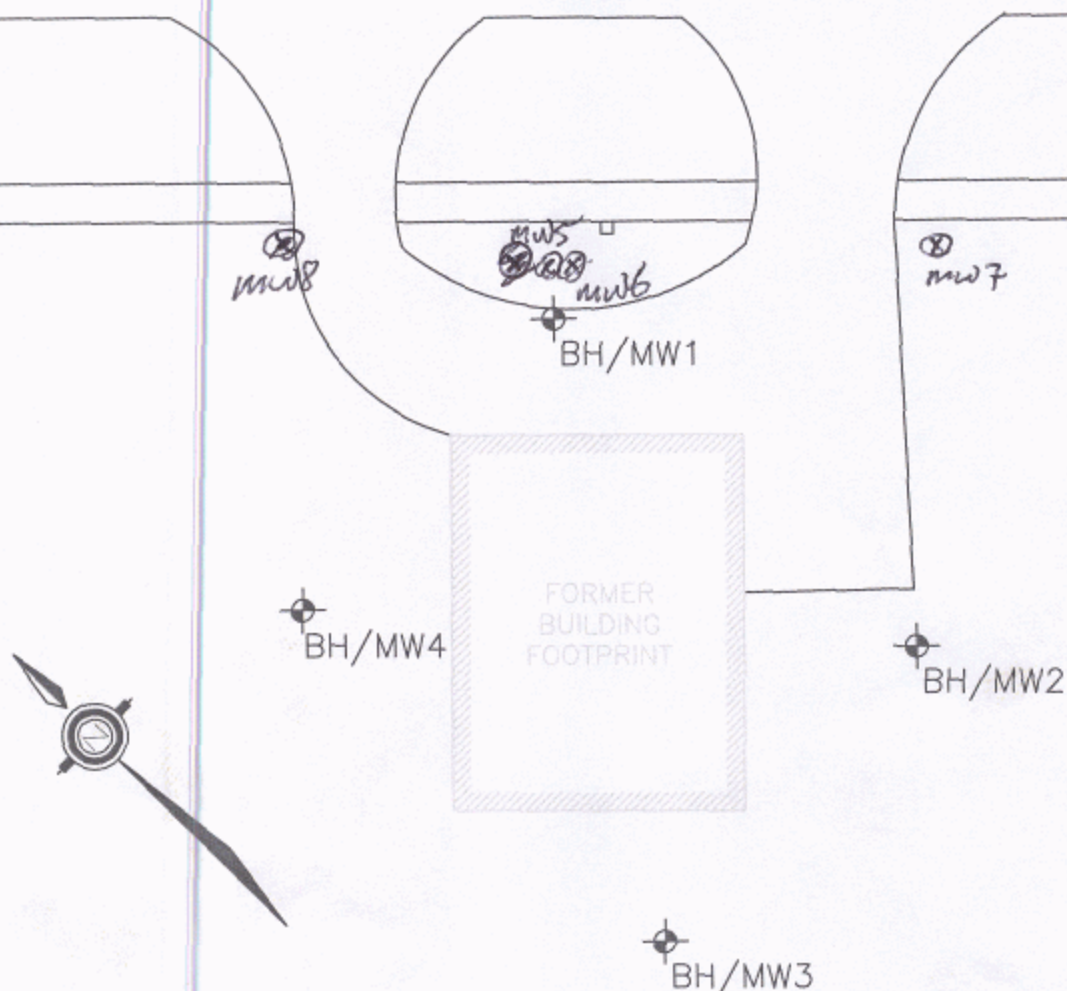
Ministry Use Only

Audit No.: 129628

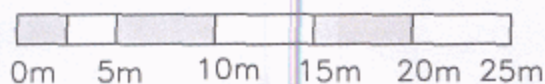
Received: AUG 05 2011

8763

ST. DAVID STREET NORTH



SCALE:

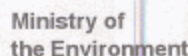
BOREHOLE/MONITORING WELL INSTALLED
BY EXP - JUNE 2011**exp Services Inc.**t: 1.519.650.4918 f: 1.519.650.4603
405 Maple Grove Road, Unit 6,
Cambridge, ON N3E 1B6
Canada

scale AS NOTED	LIMITED PHASE II - ESA SMARTCENTRES SITE, ST. DAVID STREET NORTH, FERGUS, ONTARIO	project no. KCH-00200564-D0
date JUNE 2011		
drawn by LAS		TITLE: BOREHOLE/MONITORING WELL LOCATION PLAN

C4241

2129631 2129629
2129630 2129628

AUG 05 2011



A113440

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

9034 Page 1 of 10

Well Owner's Information

First Name Smartcentre	Last Name / Organization	E-mail Address		☐ Well Constructed by Well Owner	
Mailing Address (Street Number/Name) 700 Applewood Crescent Suite 100		Municipality Vaughan	Province Ontario	Postal Code L4K 5X3	Telephone No. (inc. area code) 416 760 6200

Well Location

Address of Well Location (Street Number/Name) 801 St David St W		Township	Lot	Concession
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 549216	Northing 4839984	Municipal Plan and Sublot Number Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/m³)
From	To		
0	1'	Concrete	
1'	9'	Beniseal	
9'	15'	SAND	

Results of Well Yield Testing

Results of Well Water Pumping				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? ☐ Yes ☐ No				

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
1.75"	PVC	0.75"	0	10'	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Inefficient, Completed

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
2"	pvc	10	16'	15'

☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

Water Details

Water found at Depth		Kind of Water: ☐ Fresh ☐ Untested		Depth (m/ft)		Diameter (cm/in)
(m/ft)	☐ Gas	☐ Other, specify		From	To	
Water found at Depth	Kind of Water: ☐ Fresh ☐ Untested			0	15'	4.5"
(m/ft) ☐ Gas	☐ Other, specify					
Water found at Depth	Kind of Water: ☐ Fresh ☐ Untested					
(m/ft) ☐ Gas	☐ Other, specify					
Water found at Depth	Kind of Water: ☐ Fresh ☐ Untested					
(m/ft) ☐ Gas	☐ Other, specify					

Hole Diameter

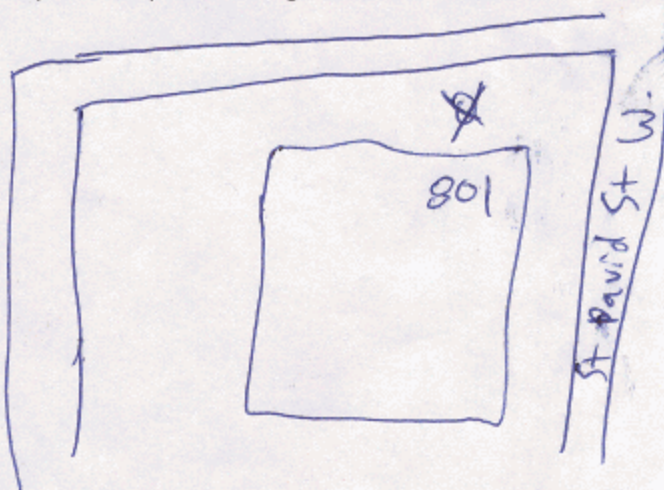
Depth (m/ft)		Diameter (cm/in)
From	To	
0	15'	4.5"

Well Contractor and Well Technician Information

Business Name of Well Contractor		Well Contractor's Licence No.	
Strata Soil Sampling Inc		FZ41	
Business Address (Street Number/Name)		Municipality	
147 West Beaver Creek		Richmond Hill	
Province	Postal Code	Business E-mail Address	
Ontario	L4B1C6	wrcw@stratasoil.com	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
9057649304		Mait, Mike	
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3448	[Signature]	2011/11/25	

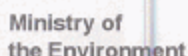
Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
	☐ Yes ☐ No	Audit No. z 131003 Date Work Completed 20110912 Received NOV 01 2011



A113439

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

9634 Page 2 of 10

Well Owner's Information

First Name Smart Centre	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner	
Mailing Address (Street Number/Name) 700 Applewood Crescent Suite 100 Vaughan	Municipality	Province Ontario	Postal Code L4K 5X3	Telephone No. (inc. area code) 416 760 6200

Well Location

Address of Well Location (Street Number/Name) 801 St David St W.		Township	Lot	Concession	
County/District/Municipality		City/Town/Village Fergus		Province Ontario	Postal Code

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	549216	4039984		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To		
0	1'	Concrete	
1'	9'	Benseal	
9'	15'	SAND	

Method of Construction

☐ Cable Tool
☐ Rotary (Conventional)
☐ Rotary (Reverse)
☐ Boring
☐ Air percussion
☒ Other, specify *Direct Push*

Well Use

☐ Public	☐ Commercial	☐ Not used
☐ Domestic	☐ Municipal	☐ Dewatering
☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Industrial		
☐ Other, specify		

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		Status of Well
			From	To	
1.75"	PVC	100.25"	0	10	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Data

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
2"	PVC	10	10'	15'

☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

Water Details

Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____

Hole Diameter

Depth (m/ft)		Diameter (cm/in)
From	To	
0	15'	4.5"

Well Contractor and Well Technician Information

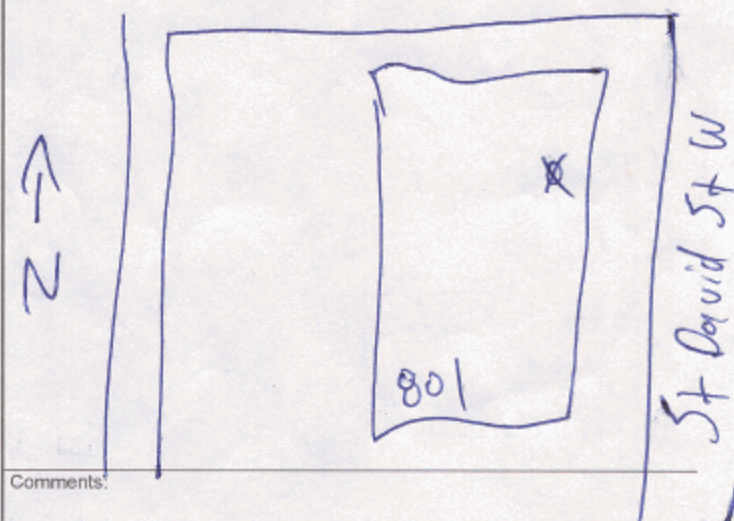
Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 7241	
Business Address (Street Number/Name) 147 West Beaver Creek		Municipality Richmond Hill	
Province Ontario	Postal Code L4B1C6	Business E-mail Address wiewords@stratasoil.com	
Bus. Telephone No. (inc. area code) 905-764-9304		Name of Well Technician (Last Name, First Name) Mark Mike	
Well Technician's Licence No. 3448	Signature of Technician and/or Contractor <i>Mark Mike</i>		Date Submitted 2011025

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner information package delivered

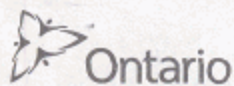
☐ Yes

☐ No

Date Package Delivered											
Y	Y	Y	Y	M	M	D	D				
Date Work Completed											
9	0	1	1	0	9	1	7				

Ministry Use Only

Audit No. **z131004**
NOV 01 2011
Received



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A113437

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☐ Imperial

9034 Page 3 of 10

Well Owner's Information

First Name Smartcentre	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 700 Applewood Crescent Suite 100		Municipality Vaughan	Province Ontario
Postal Code L4K5X3		Telephone No. (inc. area code) 416 760 6200	

Well Location

Address of Well Location (Street Number/Name) 801 St David St W.		Township	Lot	Concession
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 549216	Northing 4839984	Municipal Plan and Sublot Number
Other				

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	Sand	gravel	loose	0	5'
Grey	silt	fill	Dense	5'	15'

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)
0	1'	Concrete
1'	9'	Benseal
9'	15'	SAND

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☒ Air percussion ☒ Other, specify Direct Push	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☒ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
1.75"	PVC	0.25"	0	10'	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen					<div>☐ Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, <i>specify</i> _____ ☐ Other, <i>specify</i> _____</div>
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		
			From	To	
2"	PVC	10	10'	15'	

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From	To
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	0	15'
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		

Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 7241	
Business Address (Street Number/Name) 147 West Beaver Creek		Municipality Richmond Hill	
Province Ontario	Postal Code L4B1C6	Business E-mail Address wrcord@stratasoil.com	
Bus. Telephone No. (inc. area code) 905 764 9304		Name of Well Technician (Last Name, First Name) Mike	
Well Technician's Licence No. 3448		Signature of Technician and/or Contractor [Signature]	
Date Submitted 2011/10/25			

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason: _____	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 20 11 09 12	Ministry Use Only Audit No. z 131006 NOV 01 2011 Received
	Date Work Completed Y Y Y Y M M D D	



Ontario

Ministry of
the Environment

Well Test No. (Print Below)

A118828

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

9034 Page 4 of 10

Well Owner's Information

First Name Smartcentre	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 700 Applewood Crescent Suite 100		Municipality Vaughan	Province Ontario
		Postal Code L4K 5X3	Telephone No. (inc. area code) 416 760 6200

Well Location

Address of Well Location (Street Number/Name) 801 St David St W.		Township	Lot	Concession
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 549216	Northing 4839984	Municipal Plan and Sublot Number
				Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	Sand	gravel	Loose	0	5'
Grey	Silt	fill	Dense	5'	15'

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)
0	1'	Concrete
1'	9'	Benseal
9'	15'	SAND

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify Direct Push	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☒ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
1.75"	PVC	0.25"	0	10'	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

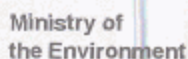
Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To	
2"	PVC	10	10'	15'	☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From	To
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	0	15'
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		

Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 7241
Business Address (Street Number/Name) 147 West Beaver Creek		Municipality Richmond Hill
Province Ontario	Postal Code L4B 1C6	Business E-mail Address wicwads@stratasoil.com
Bus. Telephone No. (inc. area code) 905 764 9304		
Name of Well Technician (Last Name, First Name) Mike		
Well Technician's Licence No. 3448		Date Submitted 2011 10 25

Results of Well Yield Testing			
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify		Draw Down	
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☐ Yes ☐ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered 2011 10 25
Date Work Completed 2011 10 25	Ministry Use Only
	Audit No. z131007
	NOV 01 2011
	Received



A113436

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

90321

Page 5 of 10

Well Owner's Information

First Name Smartcentre	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner	
Mailing Address (Street Number/Name) 700 Applewood Crescent Suite 100	Municipality Vaughan	Province Ontario	Postal Code L4K 5X3	Telephone No. (inc. area code) 416 760 6200

Well Location

Address of Well Location (Street Number/Name) 801 St David St W-		Township	Lot	Concession
County/District/Municipality	City/Town/Village Fergus		Province Ontario	Postal Code

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	549216	4839984		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

[illegible]

Method of Construction

☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☒ Sewewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☒ Air percussion		☐ Industrial		
☒ Other, specify <i>Direct Push</i>		☐ Other, specify		

Well Use

☐ Public	☐ Commercial	☐ Not used
☐ Domestic	☐ Municipal	☒ Dewatering
☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Industrial		
☐ Other, <i>specify</i>		

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Well Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, (Indefinite Closure)
			From	To	
1.75"	PVC	0.25"	0	10'	

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____
			From	To	
2"	PVC	10	10'	15'	

Water Details

Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____

Hole Diameter

Depth (m/ft)		Diameter (cm/in)
From	To	
0	15'	4.5"

Well Contractor and Well Technician Information

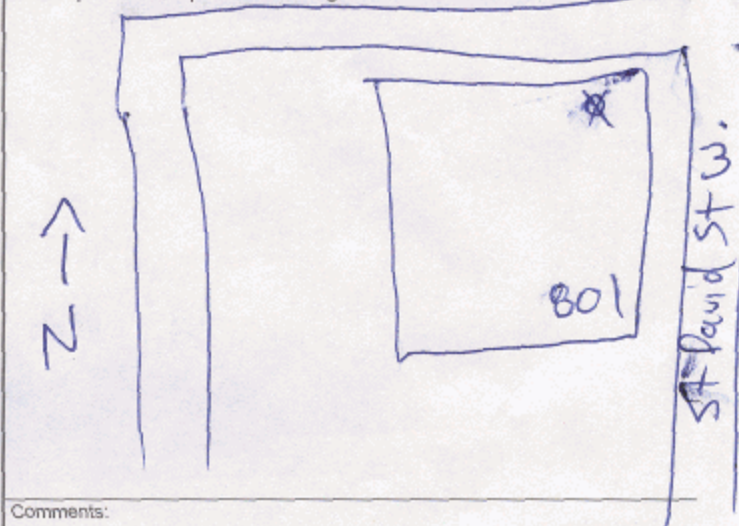
Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 7241	
Business Address (Street Number/Name) 147 West Beaver Creek		Municipality Richmond Hill	
Province Ontario	Postal Code L4B1C6	Business E-mail Address wrewards@stratasoil.com	
Bus. Telephone No. (inc. area code) 905-764-9304		Name of Well Technician (Last Name, First Name) Muit Mike	
Well Technician's Licence No. 448		Signature of Technician and/or Contractor [Signature]	Date Submitted 20111025

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
	3		3	
Pumping rate (l/min / GPM)	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
	50		50	
Well production (l/min / GPM)	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered	Date Package Delivered
	Y Y Y Y M M D D
☐ Yes ☐ No	Date Work Completed 20110912 Y Y Y Y M M D D

Ministry Use Only

Audit No. **z131005**
Received **NOV 01 2011**



Ontario

Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A113438

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

9034 Page 6 of 10

Well Owner's Information

First Name: Smart Centre Last Name / Organization: E-mail Address: ☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name): 700 Applewood Crescent Suite 100 Municipality: Vaughan Province: Ontario Postal Code: L4K 5X3 Telephone No. (inc. area code): 416 760 6200

Well Location

Address of Well Location (Street Number/Name): 801 St David St W. Township: Lot: Concession:
County/District/Municipality: City/Town/Village: Fergus Province: Ontario Postal Code:
UTM Coordinates Zone Easting Northing: NAD 83 17 549921 6 9839984 Municipal Plan and Sublot Number: Other:

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
brown	Sand	gravel	loose	0	5'
grey	silt	fill	dense	5'	15'

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)	Draw Down		Recovery
0	1'	Concrete		Time (min)	Water Level (m/ft)	Time (min)
1'	9'	Benseal		Static Level		
9'	15'	SAND		1		1
				2		2
				3		3
				4		4
				5		5
				10		10
				15		15
				20		20
				25		25
				30		30
				40		40
				50		50
				60		60

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☒ Air percussion	Direct Push	☐ Industrial		
☒ Other, specify		☐ Other, specify		

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☐ Water Supply	
1.75"	PVC	0.25"	0 10'	☐ Replacement Well	
				☐ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☒ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☐ Abandoned, other, specify	
				☐ Other, specify	

Construction Record - Screen				Map of Well Location	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	Please provide a map below following instructions on the back.	
2"	PVC	10	10' 15'		

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	0 15'	4.5"
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information				Ministry Use Only	
Business Name of Well Contractor: Strata Soil Sampling Inc.	Well Contractor's Licence No.: 7241	Business Address (Street Number/Name): 47 West Beaver Creek	Municipality: Richmond Hill	Audit No.: Z131002	NOV 01 2011
Province: Ontario	Postal Code: L4B 1C6	Business E-mail Address: wrecords@stratasoil.com		Date Package Delivered: Y Y Y Y M M D D	
Bus. Telephone No. (inc. area code): 905 764 9304	Name of Well Technician (Last Name, First Name): Mike	Well Technician's Licence No.: 3448	Signature of Technician and/or Contractor: [Signature]	Date Work Completed: 20 11 09 12	
		Date Submitted: 20 11 10 25			

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization Smart Centre	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 700 Applewood Crescent, Suite 100		Municipality Vaughan	Province ON
Postal Code L4A 5X3		Telephone No. (inc. area code) (416) 760-6200	

Well Location

Address of Well Location (Street Number/Name) 801 St. David St. North	Township	Lot	Concession
County/District/Municipality	City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83 11 54 92 16 48 39 984	Municipal Plan and Sublot Number	Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	gravel	loose	0 4
grey	silt	fill	dense, hard	4 4.8

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 31	Concrete	.0026	
31 1.5	Bentonite	.0056	
1.5 4.8	57 Lira Sand	.0154	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify Direct Bore	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☒ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
5.20	PVC	.45	0	1.8	

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	From	To
6.10	PVC	10	1.8	4.8	

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
0		0 4.8	10.9

Well Contractor and Well Technician Information	
Business Name of Well Contractor Strata Soil Sampling Inc	Well Contractor's Licence No. 72411
Business Address (Street Number/Name) 147-2 West Beaver Creek Rd	Municipality Richmond Hill
Province ON	Postal Code L4B 1C6
Business E-mail Address wreco@stratasoil.com	
Bus. Telephone No. (inc. area code) 905 764 9304	Name of Well Technician (Last Name, First Name) Eric Langan
Well Technician's Licence No. 3617	Signature of Technician and/or Contractor [Signature]
Date Submitted 2011/10/07	

Results of Well Yield Testing			
After test of well yield, water was:	Draw Down	Recovery	
☐ Clear and sand free ☐ Other, specify	Time (min)	Water Level (m/ft)	Time (min)
If pumping discontinued, give reason:	Static Level		
Pump intake set at (m/ft)	1		1
Pumping rate (l/min / GPM)	2		2
Duration of pumping hrs + min	3		3
Final water level end of pumping (m/ft)	4		4
If flowing give rate (l/min / GPM)	5		5
Recommended pump depth (m/ft)	10		10
Recommended pump rate (l/min / GPM)	15		15
Well production (l/min / GPM)	20		20
Disinfected? ☐ Yes ☐ No	25		25
	30		30
	40		40
	50		50
	60		60

Map of Well Location

Please provide a map below following instructions on the back.

1m East of fence
12m West of building

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011 09 13	Ministry Use Only Audit No. 2129637 NOV 01 2011 Received
---	---	--

Measurements recorded in: ☒ Metric ☐ Imperial

A113532

A113532

9034 Page 8 of 10

Well Owner's Information

First Name	Last Name / Organization Smart Centre	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Vaughan	ON	L4K 5X3
Telephone No. (inc. area code)		(416) 760-6200	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
801 St David St. N			
County/District/Municipality	City/Town/Village	Province	Postal Code
	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	549210	4839958
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	gravel	loose	0 3.5
grey	silt	fin	dense, hard	3.5 4.5

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 3.1	Concrete	1.0026	
3.1 1.2	Bentonite	0.0042	
1.2 4.5	Silica Sand	1.0154	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify Direct RSL	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☒ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
5.20	PVC	1.45	0	1.5	

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	From	To
6.10	PVC	10	1.5	4.5	

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
0 4.5		0 4.5	10.9

Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 72241	
Business Address (Street Number/Name) 1472 West Beaver Creek Rd		Municipality Richmond Hill	
Province On	Postal Code L4B 1C6	Business E-mail Address wrecord@strataso1.com	
Bus. Telephone No. (inc. area code) 905 764 9304		Name of Well Technician (Last Name, First Name) Erin London	
Well Technician's Licence No. 3617		Signature of Technician and/or Contractor [Signature]	
Date Submitted 2011/10/07			

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☐ Yes ☐ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

1m East of fence
50m South of N fence line.

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011 09 13	Date Work Completed Y Y Y Y M M D D 2011 09 13
---	---	--

Ministry Use Only	
Audit No.	z 129635
Received	NOV 01 2011



Ontario

Ministry of
the Environment

Well Tag No. (Place "A" in front)

Print Below

A114280

A114280

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☒ Metric ☐ Imperial

8971

Page 1 of 7

Address of Well Location (Street Number/Name) 815 St. David St. N		Township	Lot	Concession	
County/District/Municipality		City/Town/Village Fergus	Province Ontario		Postal Code
UTM Coordinates	Zone	Easting	North	Municipal Plan and Sublot Number	
NAD 83	17	549177	4840163	Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	gravel	sand	loose	0 2
brown	coarse sand		soft	2 4

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 -31	Concrete	.0026	
31 2.2	Bentonite	.0084	
2.2 4	Silica Sand	.0084	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☒ Monitoring
☐ Air percussion		☐ Industrial	☐ Cooling & Air Conditioning
☒ Other, specify Direct Push		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
5.20	PVC	.45	0 2.5	☐ Water Supply	
				☐ Replacement Well	
				☒ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☒ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☐ Abandoned, other, specify	
				☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6-10	PVC	10	2.5 4

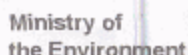
Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	From To	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	0 4	10.9
	☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		

Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 72411	
Business Address (Street Number/Name) 47-2 West Beaver Creek Rd.		Municipality Richmond Hill	
Province On	Postal Code L4B 1C6	Business E-mail Address wrecords@stratasoil.com	
Telephone No. (inc. area code) 905-764-9304		Name of Well Technician (Last Name, First Name) Eric Langdon	
Well Technician's Licence No. 36117		Signature of Technician and/or Contractor Eric Langdon	
		Date Submitted 2011/09/16	

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i>	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments: Parkside	

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011/08/27	Ministry Use Only Audit No. z129718 Received NOV 15 2011
	Date Work Completed 2011/08/27	



A114279

A114279

8971

Page 2 of 7

Measurements recorded in: ☒ Metric ☐ Imperial

Address of Well Location (Street Number/Name)

815 St. David St. N
County/District/Municipality

Township

City/Town/Village

Fergus

Lot	
-----	--

Concession

Province
Ontario

Postal Code

UTM Coordinates	Zone	Easting	Northings
-----------------	------	---------	-----------

Municipal Plan and Sublot Number

Other

NAD	8	3	1	7	5	4	9	1	7	8	4	8	4	0	1	4	1
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Depth Set at (m/ft)		Annular Space	Volume Placed (m³/ft³)
From	To	Type of Sealant Used (Material and Type)	
0	.31	Concrete	.0026
.31	1.2	Bentonite	.0042
1.2	4.5	Silica Sand	.0154

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify <u>Street Light</u>		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned,
			From	To	
5.20	PVC	.45	0	1.5	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
6.10	PVC	10	1.5	4.5

Water Details		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft)		Diameter (cm/in)
		From	To	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0	4.5	10.9
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Well Contractor and Well Technician Information									
Business Name of Well Contractor						Well Contractor's Licence No.			
Strata Soil Sampling Inc						7 2 4 1			
Business Address (Street Number/Name)						Municipality			
147-2 West Beaver Creek Rd.						Richmond Hill			
Province		Postal Code		Business E-mail Address					
On		L4B 1C6		w@cordsofstratasoil.com					
Bus. Telephone No. (inc. area code)				Name of Well Technician (Last Name, First Name)					
905 764 9304				Eric Langdon					
Well Technician's Licence No.		Signature of Technician and/or Contractor				Date Submitted			
3617		Eric Langdon				2011 09 10			

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

A hand-drawn map of a rectangular field. The top boundary is labeled "18m". The right boundary is labeled "185m". A north arrow is in the top left corner. The bottom boundary is labeled "parkside".

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2 0 1 1 1 0 8 2 7	Ministry Use Only Audit No. z129741 NOV 15 2011 Received
	Date Work Completed Y Y Y Y M M D D 2 0 1 1 1 0 8 2 7	

Address of Well Location (Street Number/Name) 815 St. David St. N		Township	Lot	Concession
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 549143	Northings 4840165	Municipal Plan and Sublot Number
				Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
From	To			From	To
Brown	gravel	Sand	loose	0	2
Brown	coarse sand		soft	2	4.5

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
From	To		
0	-31	Concrete	.0026
-31	1.2	Bentonite	.0042
1.2	4.5	Silica Sand	.0154

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☒ Test Hole ☐ Cooling & Air Conditioning
	☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
From	To				
5.20	PVC	.45	0	1.5	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		
From	To				
6.10	PVC	10	1.5	4.5	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
From	To		
0	4.5	10.9	

Business Name of Well Contractor Strata Soil Sampling Inc.		Well Contractor's Licence No. 7 2 4 1
Business Address (Street Number/Name) 147-2 West Beaver Creek Rd.		Municipality Richmond Hill
Province On	Postal Code L4B 1C6	Business E-mail Address wrecor@stratasoil.com
Bus. Telephone No. (inc. area code) 905 764 9304	Name of Well Technician (Last Name, First Name) Eric Langdon	
Well Technician's Licence No. 36 117	Signature of Technician and/or Contractor [Signature]	
Date Submitted 2011 09 16		

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☐ Yes ☐ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011 08 27	Ministry Use Only Audit No. z 129736 NOV 15 2011 Received
--	---	---

Measurements recorded in: ☒ Metric ☐ Imperial

A114277

A114277

Page 4 of 7

Address of Well Location (Street Number/Name)

Township

Lot

Concession

County/District/Municipality

City/Town/Village

Province

Postal Code

UTM Coordinates

Zone

Easting

Northing

Municipal Plan and Sublot Number

Other

NAD 83 17 549140 4840144

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Depth Set at (m/ft)		Annular Space	Volume Placed
From	To	Type of Sealant Used (Material and Type)	(m ³ /ft ³)
0	-31	Concrete	.0026
.31	1.2	Bentonite	.0042
1.2	4.5	Silica Sand	.0154

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify <i>direct push</i>		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply
			From	To	
5.70	PVC	.45	0	1.5	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
6.10	PVC	10	1.5	4.5

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	Diameter To (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0	4.5 10.9
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		

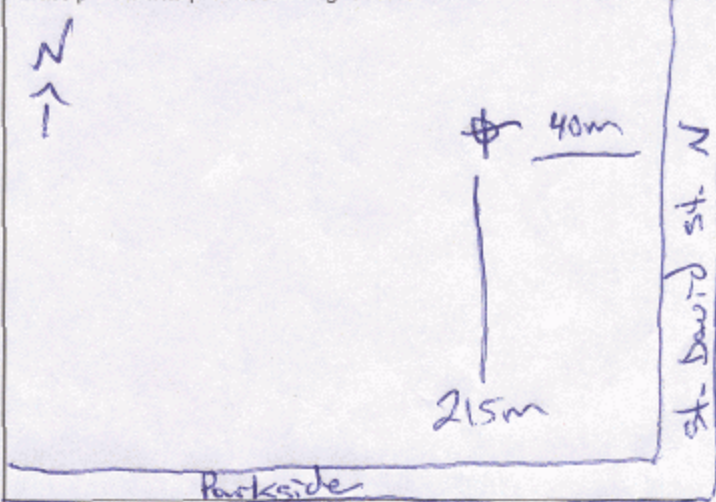
Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
Strata Soil Sampling Inc		7241	
Business Address (Street Number/Name)		Municipality	
147-2 West Beaver Creek Rd		Richmond Hill	
Province	Postal Code	Business E-mail Address	

On	24	1	16	wheelbarrowshatlas01.com
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)		
905 769 9304		Erin Longdon		
Well Technician's Licence No.		Signature of Technician and/or Contractor Date Submitted		

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
	10		10	
Final water level end of pumping (m/ft)	15		15	
	20		20	
If flowing give rate (l/min / GPM)	25		25	
	30		30	
Recommended pump depth (m/ft)	40		40	
	50		50	
Recommended pump rate (l/min / GPM)	60		60	
Well production (l/min / GPM)				
Disinfected? ☐ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.



Comments

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D	Ministry Use Only Audit No. z 129737 NOV 15 2011 Received
	Date Work Completed 2011 Y M D D	



Ontario

Ministry of
the Environment

Well Tag No. (Place in space below)

A114276

Well Tag No. (Place in space below)

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☒ Metric ☐ Imperial

8971 Page 5 of 7

Address of Well Location (Street Number/Name)		Township	Lot	Concession
815 St. David St.				
County/District/Municipality		City/Town/Village	Province	Postal Code
		Fergus	Ontario	
UTM Coordinates	Zone	Easting	North	Municipal Plan and Sublot Number
NAD 83	17	549153	4840155	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	gravel	sand	loose	0 2
brown	coarse sand		silt	2 4.5

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 - 31	Concrete	.0026	
31 - 1.2	Bentonite	.0042	
1.2 - 4.5	Silica Sand	.0154	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning
☐ Air percussion		☐ Industrial	
☒ Other, specify direct push		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
5.20	PVC	.45	0	1.5	

☐ Water Supply	☐ Replacement Well
☒ Test Hole	☐ Recharge Well
☐ Dewatering Well	☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)	☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality	☐ Abandoned, other, specify
☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6.10	PVC	10	1.5 4.5

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		From To	
		0 4.5	10.9

Business Name of Well Contractor		Well Contractor's Licence No.	
Strata Soil Sampling Inc.		7241	
Business Address (Street Number/Name)		Municipality	
147-2 West Beaver Creek Rd.		Richmond Hill	
Province	Postal Code	Business E-mail Address	
On	L4B1C6	wrecorder@stratasoil.com	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
9057649304		Eric Langdon	
Well Technician's Licence No.		Signature of Technician and/or Contractor	
3617		[Signature]	
		Date Submitted	
		2011/09/10	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify			
If pumping discontinued, give reason:		Static Level	
		1	1
Pump intake set at (m/ft)		2	2
Pumping rate (l/min / GPM)		3	3
Duration of pumping		4	4
hrs + min		5	5
Final water level end of pumping (m/ft)		10	10
If flowing give rate (l/min / GPM)		15	15
Recommended pump depth (m/ft)		20	20
Recommended pump rate (l/min / GPM)		25	25
Well production (l/min / GPM)		30	30
Disinfected?		40	40
☐ Yes ☐ No		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
[Map showing well location with street names and a north arrow]	
Comments:	
Parkside	

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Y Y Y Y M M D D	
Date Work Completed	2011/08/27	Audit No.
		z129738
		NOV 15 2011
		Received

Measurements recorded in: ☒ Metric ☐ Imperial

Address of Well Location (Street Number/Name)

815 St. David St.

County/District/Municipality

Township

City/Town/Village

Fergus

Lot

Concession

Province

Ontario

Postal Code

UTM Coordinates Zone Easting Northing

Municipal Plan and Sublot Number

Other

NAD 83 17 549161 4840145

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	gravel	sand	loose	0 2
brown	coarse sand		soft	2 4.5

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
0 -31	Concrete	.0026	
-31 1.2	Bentonite	.0042	
1.2 4.5	Silica Sand	.0154	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☒ Monitoring
☐ Air percussion		☐ Industrial	☐ Cooling & Air Conditioning
☒ Other, specify Direct Push		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	From	To
5.20	PVC	.45	0 1.5		

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	From	To
6.10	PVC	10	1.5 4.5		

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		0 4.5	10.9

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Strata Soil Sampling Inc	7 2 4 1		
Business Address (Street Number/Name)	Municipality		
147-2 West Beaver Creek Rd.	Richmond Hill		
Province	Postal Code	Business E-mail Address	
On	L4B 1C6	wreard@stratasoil.com	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
905 764 9304	Eric Langdon		
Well Technician's Licence No.	Signature of Technician and/or Contractor		
310 17	[Signature]		
Date Submitted			
2011 09 16			

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i>	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	

Well owner's information		Ministry Use Only	
Date Package Delivered	Audit No.	z 129739	
Y Y Y Y M M D D	NOV 15 2011	Received	
Date Work Completed			
2011 08 27			

Address of Well Location (Street Number/Name) 815 St. David St.		Township	Lot	Concession
County/District/Municipality		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	North	Municipal Plan and Sublot Number
NAD	8	3	17549151	4840137

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
				From To
brown	gravel	sand	loose	0 2
brown	coarse sand		soft wet	2 4.5

Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 31	Concrete	.0026
31 1.2	Bentonite	.0042
1.2 4.5	Silica Sand	.0154

Method of Construction ☐ Cable Tool ☐ Diamond ☐ Public ☐ Commercial ☐ Not used ☐ Rotary (Conventional) ☐ Jetting ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☒ Test Hole ☒ Monitoring ☐ Boring ☐ Digging ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Air percussion ☐ Industrial ☒ Other, specify Direct Ash		Well Use ☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☒ Test Hole ☒ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify	
--	--	---	--

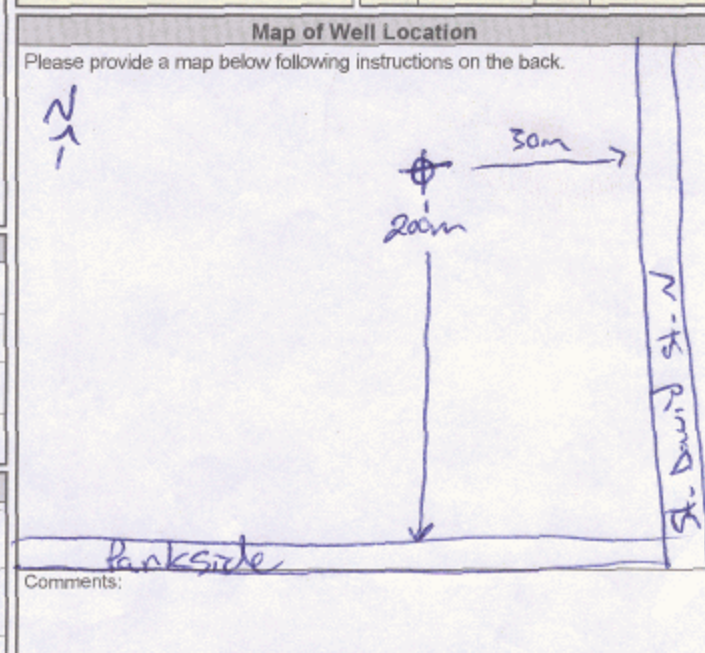
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	Status of Well
			From To	
5.20	PVC	.45	0 1.5	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	Status of Well
			From To	
6.10	PVC	10	1.5 4.5	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details Water found at Depth (m/ft) ☐ Gas ☐ Other, specify Kind of Water: ☐ Fresh ☐ Untested		Hole Diameter Depth (m/ft) ☐ Gas ☐ Other, specify Diameter (cm/in)	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	0 4.5	10.9
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information Business Name of Well Contractor Strata Soil Sampling Inc		Well Contractor's Licence No. 72411	
Business Address (Street Number/Name) 147-2 West Beaver Creek rd. Richmond Hill		Municipality Richmond Hill	
Province	Postal Code	Business E-mail Address	
On		1481106 wrecor@stratasoil.com	
Bus. Telephone No. (inc. area code) 905-764-9304		Name of Well Technician (Last Name, First Name) Eric Langdon	
Well Technician's Licence No. 3617		Signature of Technician and/or Contractor Eric Langdon	
		Date Submitted 2011/09/16	

After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free ☐ Other, specify	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
	2		2	
	3		3	
	4		4	
	5		5	
Pump intake set at (m/ft)				
Pumping rate (l/min / GPM)				
Duration of pumping hrs + min				
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
Recommended pump depth (m/ft)	20		20	
Recommended pump rate (l/min / GPM)	25		25	
Well production (l/min / GPM)	30		30	
	40		40	
	50		50	
	60		60	
Disinfected?				
☐ Yes ☐ No				

Map of Well Location Please provide a map below following instructions on the back.	
	
Comments:	

Well owner's information package delivered ☐ Yes ☐ No		Date Package Delivered Y Y Y Y M M D D 2011/08/27		Ministry Use Only Audit No. z129740 Received NOV 15 2011	
--	--	--	--	---	--

Measurements recorded in: ☐ Metric ☒ Imperial

ABANDONMENT

Address of Well Location (Street Number/Name)		Township	Lot	Concession
0015 VICTORIA CRES		NICHOL	19	15
County/District/Municipality		City/Town/Village	Province	Postal Code
WELLINGTON		FERGUS	Ontario	N1M2W3
UTM Coordinates	Zone	Easting	Northing	
NAD	8	3	175488134840019	
Municipal Plan and Sublot Number			Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

		Annular Space	
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To		

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, specify _____		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					☐ Water Supply
					☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☒ Abandoned.

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	Diameter To
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		

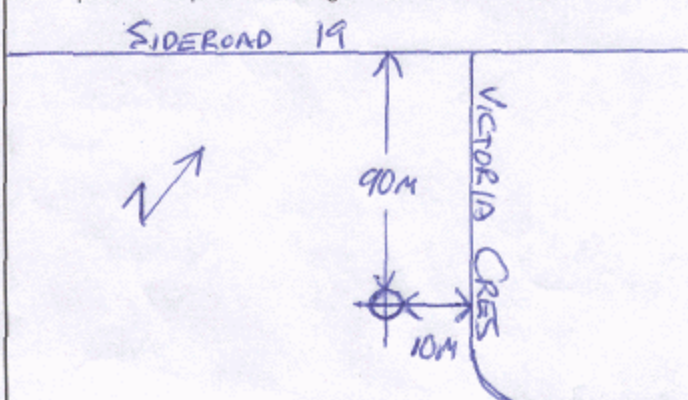
Well Contractor and Well Technician Information			
Business Name of Well Contractor WEL INITIATIVES		Well Contractor's Licence No. 7221	
Business Address (Street Number/Name) Box 416		Municipality ON	
Province EQUA	Postal Code M0B1S0	Business E-mail Address	
Bus. Telephone No. (inc. area code) 5198468289		Name of Well Technician (Last Name, First Name) H BROADFOOT	
Well Technician's Licence No. 1897	Signature of Technician and/or Contractor [Signature]		Date Submitted 2011/1/30

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Clear and sand free ☐ Other, specify _____		Static Level			
If pumping discontinued, give reason:		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
		4		4	
Duration of pumping ____ hrs + ____ min		5		5	
Final water level end of pumping (m/ft)		10		10	
If flowing give rate (l/min / GPM)		15		15	
		20		20	
Recommended pump depth (m/ft)		25		25	
		30		30	
Recommended pump rate (l/min / GPM)		40		40	
Well production (l/min / GPM)		50		50	
Disinfected?		60		60	
☒ Yes ☐ No					

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered Y Y Y Y M M D D	Ministry Use Only Audit No. 2137811 NOV 29 2011 Received
	Date Work Completed 2011/10/14	



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115509

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name Fergus Shopping Centres Ltd.	Last Name / Organization [REDACTED]	E-mail Address [REDACTED]	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 100 Applewood Cres., Suite 100		Municipality Vaughan	Province ON
Postal Code L4K1SXB		Telephone No. (inc. area code) 416 760 6200	

Well Location

Address of Well Location (Street Number/Name) St. David St. N. + Woodhill Dr.		Township Nichol	Lot 	Concession
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 549211	Northings 4840069	Municipal Plan and Sublot Number
Other 				

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
brown	sand	stones		0	3
brown	grit	stones		3	4.5

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	0.3	concrete	
0.3	1.2	bentonite chips	
1.2	4.5	sand	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify auger		☐ Other, specify _____		

Construction Record - Casing					Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____	
5.1	plastic	0.65	0	1.5		

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	
6.4	plastic	10	1.5	4.5

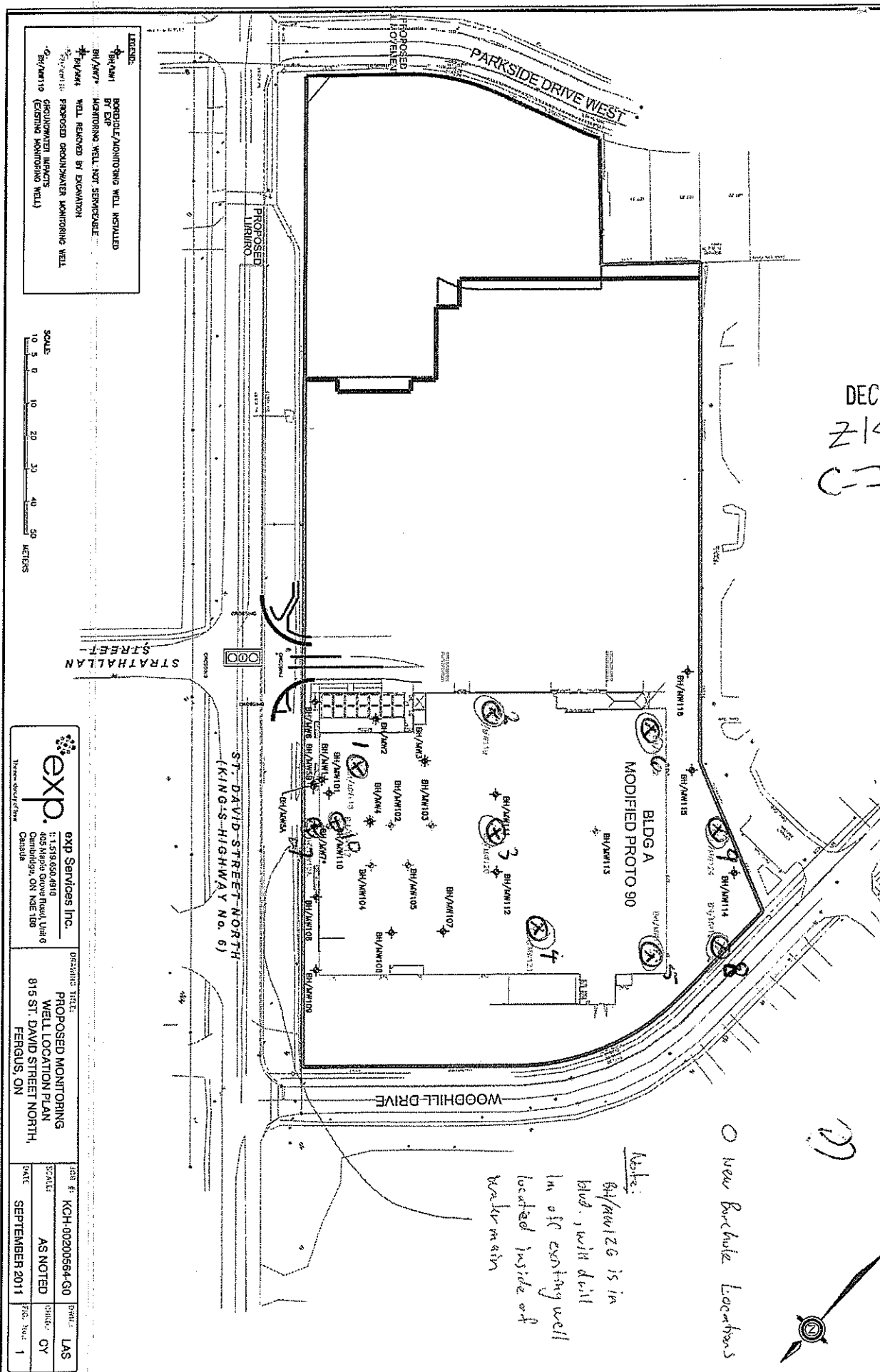
Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	0 4.5	21
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		

Business Name of Well Contractor Hardwark Drilling Inc.		Well Contractor's Licence No. 7121318
Business Address (Street Number/Name) 25 Lewis Road, Unit C		Municipality Guelph
Province ON	Postal Code N1H1E9	Business E-mail Address
Bus. Telephone No. (inc. area code) 519 826 9340	Name of Well Technician (Last Name, First Name) Gordon, Mitch	
Well Technician's Licence No. 31590	Signature of Technician and/or Contractor [Signature]	Date Submitted 2011/00/14

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason: 	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping ____ hrs + ____ min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
	15		15	
Recommended pump depth (m/ft)	20		20	
Recommended pump rate (l/min / GPM)	25		25	
Well production (l/min / GPM)	30		30	
Disinfected? ☐ Yes ☐ No	40		40	
	50		50	
	60		60	

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments: NO. 3 on map	
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D Date Work Completed 2011/10/04
Ministry Use Only Audit No. Z140390 Received DEC 28 2011	

DEC 28 2011
Z14039C
C-7238

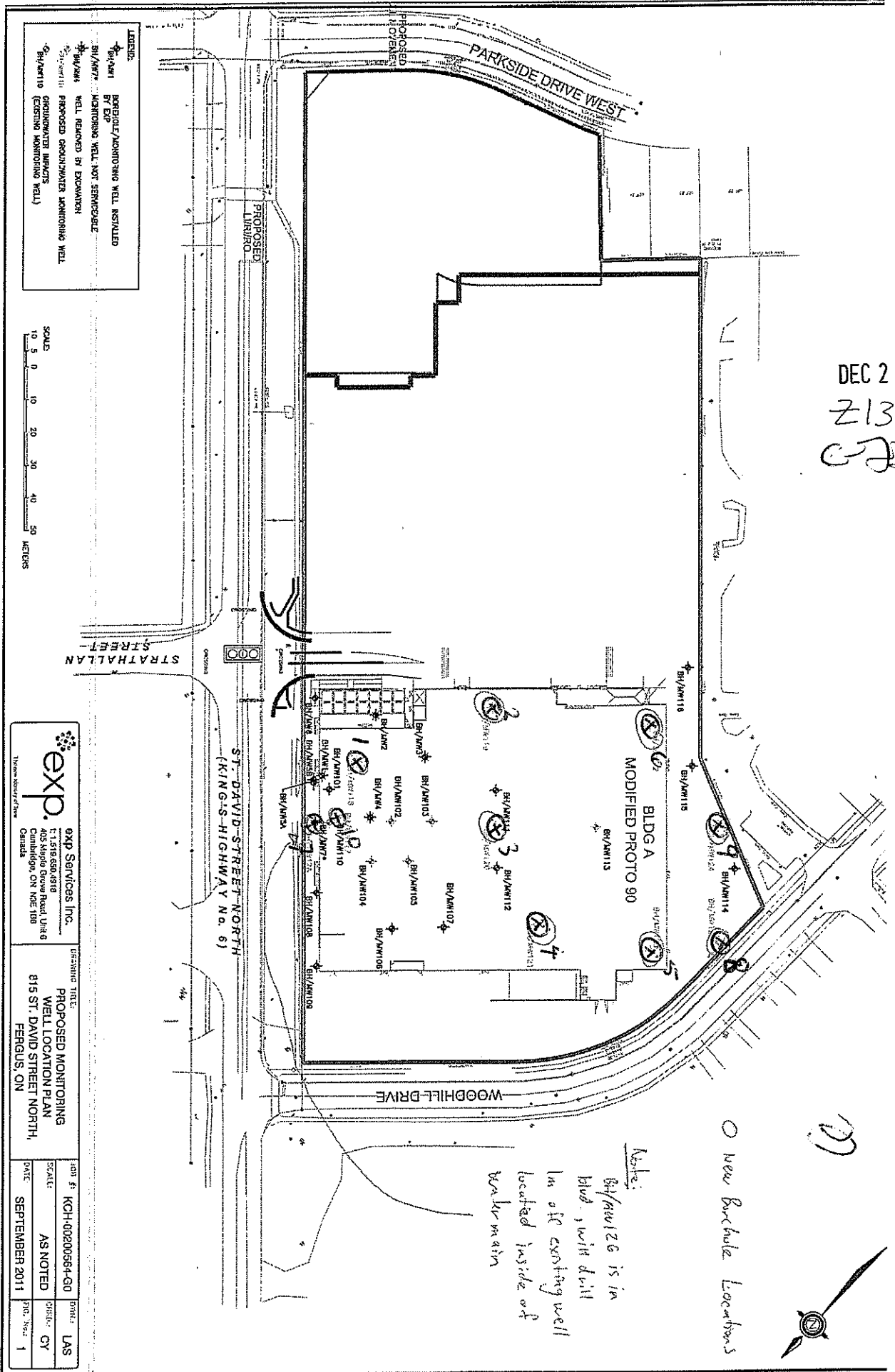


Note:
BH/AM12G is in
blvd., with drill
in of existing well
located inside of
water main

○ New Borehole Locations



DEC 28 2011
Z135906
C-238



exp.
exp. Services Inc.
1,515,550,486
405 Maple Grove Road Unit 6
Cambridge, ON N6E 1B8
Canada

PROPOSED MONITORING WELL LOCATION PLAN
815 ST. DAVID STREET NORTH,
FERGUS, ON

DATE	SCALE	CON. #	PROJ. #
SEPTEMBER 2011	AS NOTED	KCH-00200564-G0	LAS
			QTY
			1

11-0157-06



A120097

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☒ Metric ☐ Imperial

Page of

Well Owner's Information

First Name	Last Name / Organization		E-mail Address		☐ Well Constructed by Well Owner	
Ergus Shopping Centres Ltd.	[REDACTED]					
Mailing Address (Street Number/Name)		Municipality	Province	Postal Code	Telephone No. (inc. area code)	
100 Applewood Cres. Suite 100		Vaughan	ON	L4K5X3	416-716-0620	

Well Location

Address of Well Location (Street Number/Name) St. David St. No. + Woodhill Dr.		Township Nicol	Lot	Concession	
County/District/Municipality Wellington		City/Town/Village Fergus		Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	
NAD	8	3	17549175	4840	093
				Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
From	To		
0	0.3	concrete	
0.3	1.2	bentonite chips	
1.2	4.5	sand.	

Method of Construction

- | | | | | |
|---|----------------------------------|---|---|--|
| ☐ Cable Tool | ☐ Diamond | ☐ Public | ☐ Commercial | ☐ Not used |
| ☐ Rotary (Conventional) | ☐ Jetting | ☐ Domestic | ☐ Municipal | ☐ Dewatering |
| ☐ Rotary (Reverse) | ☐ Driving | ☐ Livestock | ☐ Test Hole | ☒ Monitoring |
| ☐ Boring | ☐ Digging | ☐ Irrigation | ☐ Cooling & Air Conditioning | |
| ☐ Air percussion | | ☐ Industrial | | |
| ☒ Other, specify <u>water</u> | | ☐ Other, specify _____ | | |

Well Use

- | | | | | |
|---|----------------------------------|---|---|--|
| ☐ Cable Tool | ☐ Diamond | ☐ Public | ☐ Commercial | ☐ Not used |
| ☐ Rotary (Conventional) | ☐ Jetting | ☐ Domestic | ☐ Municipal | ☐ Dewatering |
| ☐ Rotary (Reverse) | ☐ Driving | ☐ Livestock | ☐ Test Hole | ☒ Monitoring |
| ☐ Boring | ☐ Digging | ☐ Irrigation | ☐ Cooling & Air Conditioning | |
| ☐ Air percussion | | ☐ Industrial | | |
| ☒ Other, specify <u>water</u> | | ☐ Other, specify _____ | | |

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
5.1	plastic	0.65	0	1.5	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Off-site

Status of Well

- | Inside Diameter
(cm/in) | Open Hole OR Material
(Galvanized, Fibreglass, Concrete, Plastic, Steel) | Wall Thickness
(cm/in) | Depth (m/ft) | |
|----------------------------|---|---------------------------|--------------|-----|
| | | | From | To |
| 5.1 | plastic | 0.65 | 0 | 1.5 |
| | | | | |
| | | | | |
| | | | | |
-
- | Construction Record - Screen | | | | |
|------------------------------|--|----------|--------------|-----|
| Outside Diameter
(cm/in) | Material
(Plastic, Galvanized, Steel) | Slot No. | Depth (m/ft) | |
| | | | From | To |
| 6.4 | plastic | 10 | 1.5 | 4.5 |
| | | | | |
| | | | | |
| | | | | |
-
- ☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
6.4	plastic	10	1.5	4.5

☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify _____
☐ Other, specify _____

Water Details

Water Data		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0	4.5	21
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Hole Diameter

Water Data		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0	4.5	21
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Well Contractor and Well Technician Information

Business Name of Well Contractor Hardwark Drilling Inc.		Well Contractor's Licence No. 71238	
Business Address (Street Number/Name) 25 Lewis Road-Unit C		Municipality Guelph	
Province ON	Postal Code N1H1E9	Business E-mail Address	
Bus. Telephone No. (inc. area code) 5198269340		Name of Well Technician (Last Name, First Name) Gordon, Michael	
Well Technician's Licence No. 3590	Signature of Technician and/or Contractor <i>[Signature]</i>	Date Submitted 2011/10/14	

Results of Well Yield Testing

Results of Well Field Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping _____ hrs + _____ min	4		4	
	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
	50		50	
Well production (l/min / GPM)	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location

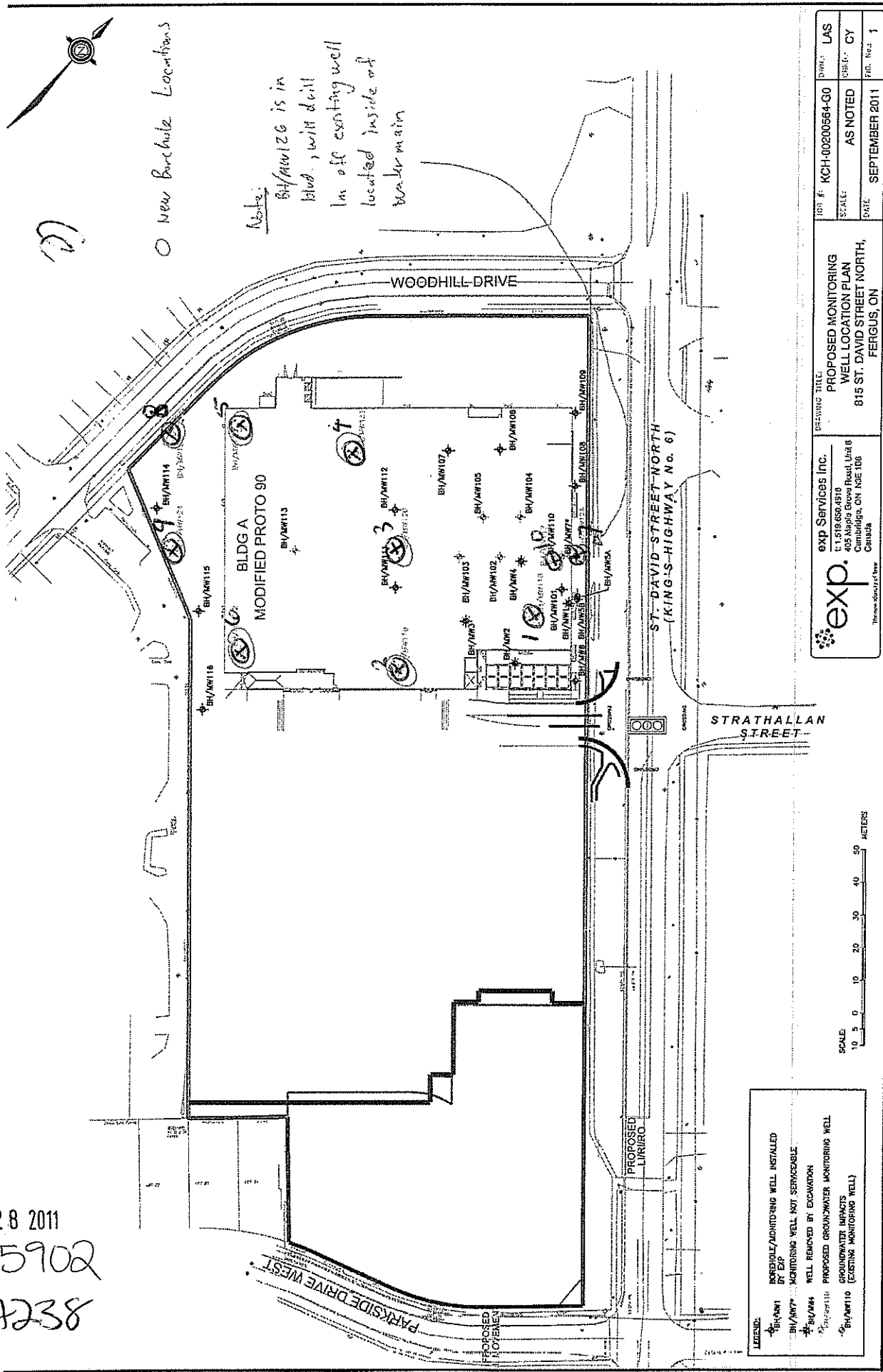
Please provide a map below following instructions on the back.

Comments:

No. 1 on map

Well owner's information package delivered	Date Package Delivered	Ministry Use Only Audit No. Z135902 DEC 28 2011 Received
	Y Y Y Y M M D D Date Work Completed 10 03 2011 09 20	
☐ Yes ☐ No		

DEC 28 2011
 Z135902
 C-7238



Note:
 BH/AM126 is in
 1300, will drill
 in old existing well
 located inside of
 water main

○ New Borehole Locations



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115505

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address		☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.				
Mailing Address (Street Number/Name)		Municipality	Province	Postal Code
700 Applewood Cres, Suite 100		Waukegan	ON	L4K 5X3

Well Location

Address of Well Location (Street Number/Name)		Township	Lot	Concession
St. David St. N. + Woodhill Dr.		Nichol		
County/District/Municipality		City/Town/Village	Province	Postal Code
Wellington		Fergus	Ontario	
UTM Coordinates	Zone	Eastings	Northings	Municipal Plan and Sublot Number
NAD 83	17	549153	4840062	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	stones		0 3.8
brown	silt	stones		3.8 6.1

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 0.3	concrete	
0.3 2.7	bentonite chips	
2.7 6.1	sand	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify auger	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☒ Monitoring ☐ Dewatering

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify
5.1	plastic	0.65	0 3.1	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6.4	plastic	10	3.1 6.1

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		0 6.1	21
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Business Name of Well Contractor		Well Contractor's Licence No.	
Hardwork Drilling Inc.		7121318	
Business Address (Street Number/Name)		Municipality	
25 Lewis Road - Unit C		Greip	
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
5198869340	Gordon, Miche		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
315910	Miche	2011/10/14	

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping _____ hrs + _____ min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
	15		15	
Recommended pump depth (m/ft)	20		20	
	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location

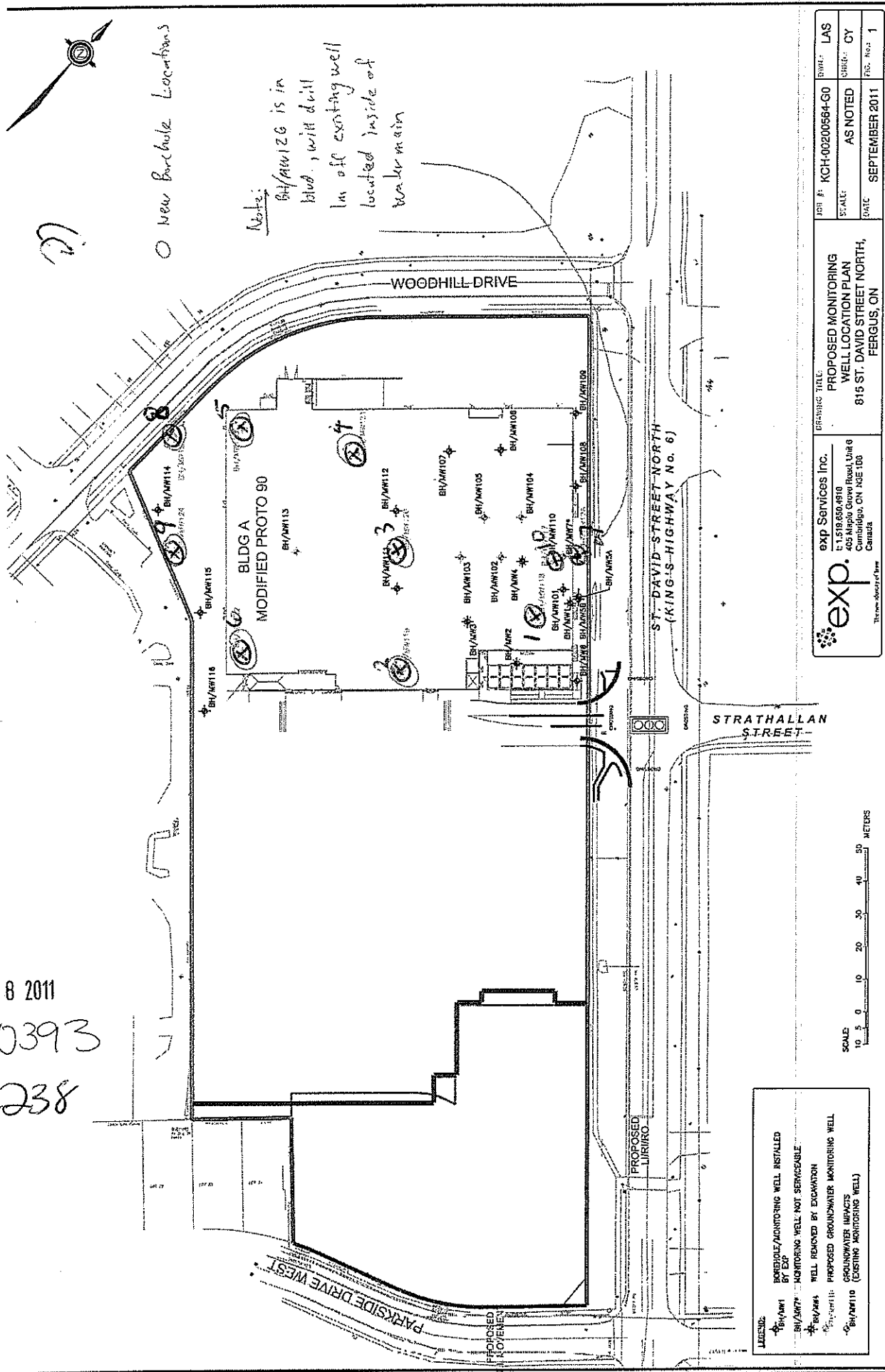
Please provide a map below following instructions on the back.

Comments:

No. 6 on map

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D	Ministry Use Only Audit No. 2140393 Received DEC 28 2011
	Date Work Completed 2011/10/05	

DEC 28 2011
 Z140393
 C-7238





Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115501

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☒ Metric ☐ Imperial

11-0159-00

Well Record

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Limited	[REDACTED]		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
100 Applewood Crescent, Suite 100	Vaughan	ON	L4H1S1X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Drive	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Eastings	Northings
NAD	83	175491	824840143
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	stones		0 3.5
brown	silt	stones		3.5 9.1

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0 0.3	concrete	
0.3 5.8	benonite chips	
5.8 9.1	sand	

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☐ Rotary (Conventional)	☐ Commercial
☐ Rotary (Reverse)	☐ Domestic
☐ Boring	☐ Livestock
☐ Air percussion	☐ Irrigation
☒ Other, specify auger	☐ Industrial
	☐ Other, specify

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5.1	plastic	0.65	0 6.1	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6.4	plastic	10	6.1 9.1

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	From To	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	0 9.1	21
	☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		

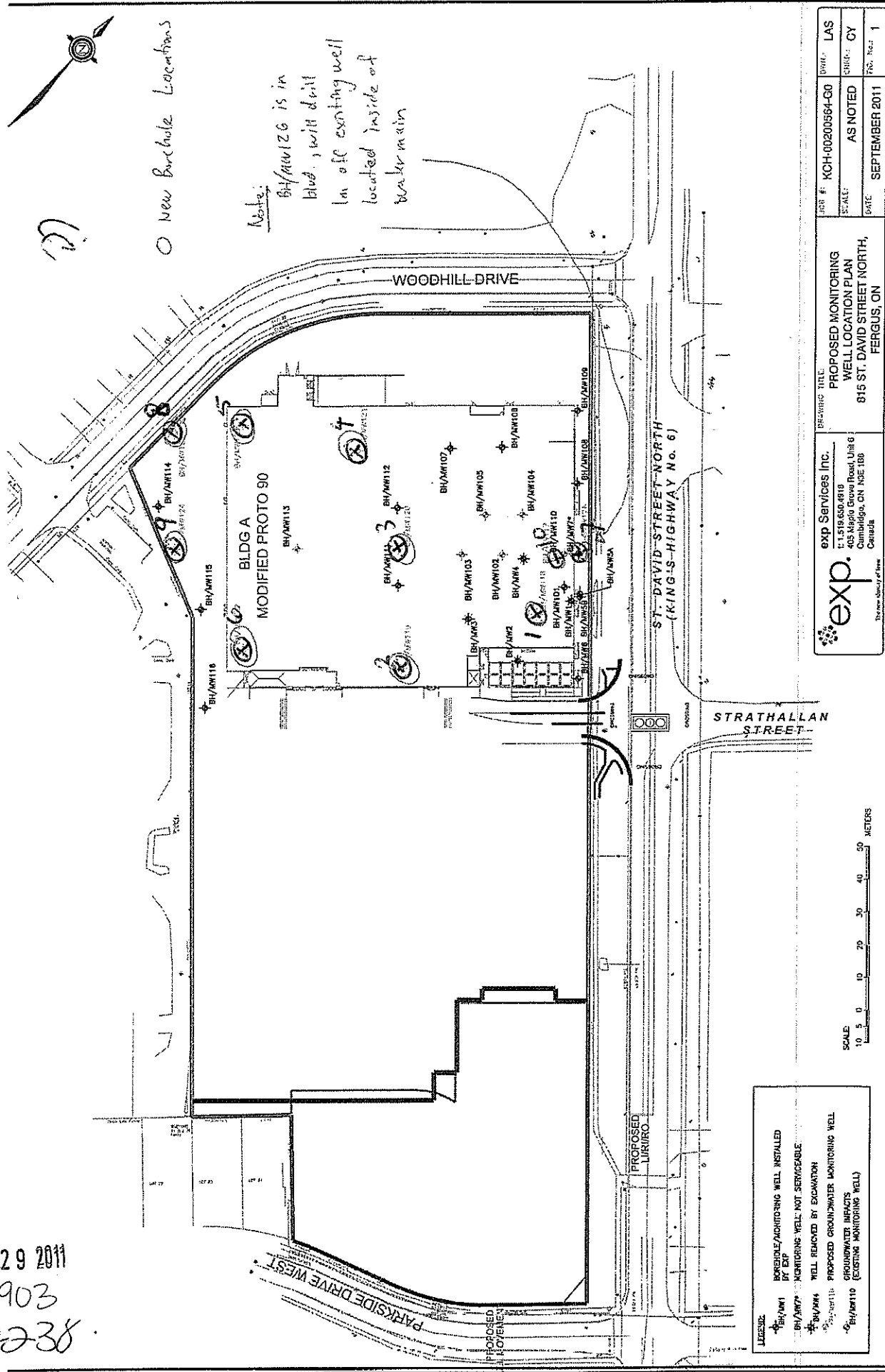
Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Hardwork Drilling Inc.	7121318		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road - Unit C	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
5198269340	Gordon, Michael		
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
3590	[Signature]		2011/10/14

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping hrs + min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
Recommended pump depth (m/ft)	15		15	
Recommended pump rate (l/min / GPM)	20		20	
Well production (l/min / GPM)	25		25	
Disinfected?	30		30	
☐ Yes ☐ No	40		40	
	50		50	
	60		60	

Map of Well Location
Please provide a map below following instructions on the back.

Comments: NO. 10 on map	Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011/10/05	Date Work Completed 2011/10/05	Ministry Use Only Audit No. Z135903 DEC 29 2011 Received
----------------------------	--	---	-----------------------------------	--

DEC 29 2011
 Z135903
 C-7238



0 New Borehole Locations

Note: BH/AM126 is in Bldg., will drill in old existing well located inside of water main

- LEGEND:
- PROPOSED MONITORING WELL INSTALLED BY EXP.
 - PROPOSED MONITORING WELL NOT SERVICABLE
 - WELL REMOVED BY EXCAVATION
 - PROPOSED GROUNDWATER MONITORING WELL
 - GROUNDWATER IMPACTS (EXISTING MONITORING WELL)

DRAWING TITLE:		JOB #:		DWG.:	
PROPOSED MONITORING WELL LOCATION PLAN		KCH-00200564-C0		LAS	
815 ST. DAVID STREET NORTH, FERGIS, ON		SCALE:		CHIEF:	
		AS NOTED		CY	
		DATE:		REV.:	
		SEPTEMBER 2011		1	

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name
Fergus Shopping Centres Ltd.

Last Name / Organization
[Redacted]

E-mail Address
[Redacted]

☐ Well Constructed by Well Owner

Mailing Address (Street Number/Name)
100 Applewood Cres., Suite 100

Municipality
Vaughan

Province
ON

Postal Code
L4K1S1B3

Telephone No. (inc. area code)
[Redacted]

Well Location

Address of Well Location (Street Number/Name)
St. David Street N. + Woodhill Dr.

Township
Nichol

Lot

Concession

County/District/Municipality
Wellington

City/Town/Village
Fergus

Province
Ontario

Postal Code

UTM Coordinates Zone (Easting)
NAD 83 1175492124840118

Northings

Municipal Plan and Sublot Number

Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
<u>brown</u>	<u>sand</u>	<u>stones</u>		<u>0 4.5</u>
<u>brown</u>	<u>cliff</u>	<u>stones</u>		<u>4.5 5.3</u>

Annular Space

Depth Set at (m/ft)
From To

Type of Sealant Used (Material and Type)

Volume Placed (m³/ft³)

0 0.3

concrete

0.3 1.8

bentonite chips

1.8 5.3

sand.

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☒ Other, specify auger

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☒ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)

Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)

Wall Thickness (cm/in)

Depth (m/ft)
From To

Status of Well
☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

5.1

plastic

0.65

0 3.3

Construction Record - Screen

Outside Diameter (cm/in)

Material (Plastic, Galvanized, Steel)

Slot No.

Depth (m/ft)
From To

Status of Well
☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

6.4

plastic

10

2.3 5.3

Water Details

Water found at Depth (m/ft) ☐ Gas ☐ Other, specify

Kind of Water: ☐ Fresh ☐ Untested

Water found at Depth (m/ft) ☐ Gas ☐ Other, specify

Kind of Water: ☐ Fresh ☐ Untested

Water found at Depth (m/ft) ☐ Gas ☐ Other, specify

Kind of Water: ☐ Fresh ☐ Untested

Hole Diameter

Depth (m/ft)
From To

Diameter (cm/in)

0 5.3

21

Well Contractor and Well Technician Information

Business Name of Well Contractor
Hardyark Drilling Inc.

Well Contractor's Licence No.
7121318

Business Address (Street Number/Name)
25 Lewis Road-Unit C

Municipality
Guelph

Province
ON

Postal Code
N1H1A59

Business E-mail Address

Bus. Telephone No. (inc. area code)
5198269340

Name of Well Technician (Last Name, First Name)
Gordon, Michael

Well Technician's Licence No.
31590

Signature of Technician and/or Contractor
[Signature]

Date Submitted
2011/10/14

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify <u> </u>		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
		1	1
Pump intake set at (m/ft)		2	2
		3	3
Pumping rate (l/min / GPM)		4	4
		5	5
Duration of pumping hrs + min		10	10
Final water level end of pumping (m/ft)		15	15
		20	20
If flowing give rate (l/min / GPM)		25	25
		30	30
Recommended pump depth (m/ft)		40	40
		50	50
Recommended pump rate (l/min / GPM)		60	60
Well production (l/min / GPM)			
Disinfected?			
☐ Yes ☐ No			

Map of Well Location

Please provide a map below following instructions on the back.

Comments:
No. 7 on map

Well owner's information package delivered
☐ Yes ☐ No

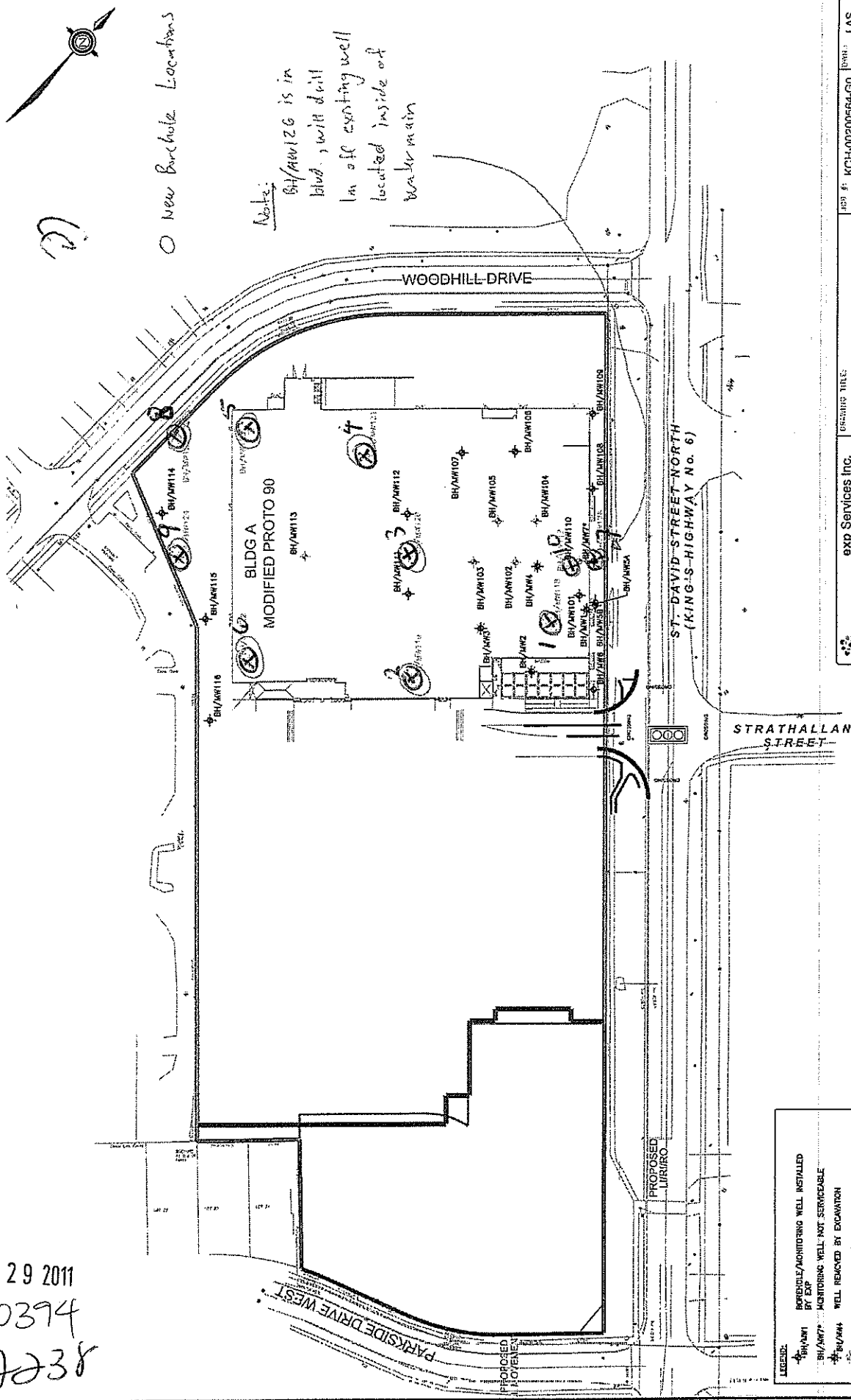
Date Package Delivered
Y Y Y Y M M D D
Date Work Completed
2011/10/05

Ministry Use Only

Audit No.
2140394

Received
DEC 29 2011

DEC 29 2011
2140394
J7238



Note:
BH/AM126 is in
blvd. with drill
in off existing well
located inside of
water main

0 New Borehole Locations

- LEGEND:
- BH/AM1 PROPOSED/EXISTING WELL INSTALLED BY EXP
 - BH/AM7 MONITORING WELL NOT SERVICED
 - BH/AM4 WELL REMOVED BY EXCAVATION
 - BH/AM11 PROPOSED GROUNDWATER MONITORING WELL
 - BH/AM10 GROUNDWATER IMPACTS (EXISTING MONITORING WELL)

exp.
The new standard of care

exp Services Inc.
1-1518-850-4910
405 Maple Grove Road, Unit 6
Cambridge, ON N1E 1B8
Canada

PROPOSED MONITORING WELL LOCATION PLAN
815 ST. DAVID STREET NORTH,
FERGUS, ON

DATE: SEPTEMBER 2011

SCALE: AS NOTED

AS NOTED

DATE: SEPTEMBER 2011

FIG. No.: 1



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115502

11-0159-00

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☒ Metric ☐ Imperial

Page _____ of _____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Inc. Ltd.			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
100 Applewood Cres. Site 100	Carleton Place	ON	L4K 5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
100 Applewood Cres. + Woodhill Dr.	Norfolk		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates Zone Easting Northing	Municipal Plan and Sublot Number	Other	
NAD 83 17 54 9 09 0 48 4 0 05 2			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	stones		0 4.5
brown	silt	stones		4.5 5.3

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 0.3	concrete	
0.3 1.8	bentonite chips	
1.8 5.3	sand.	

Method of Construction	Well Use
☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☒ Other, specify auger	☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☒ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5.1	plastic	0.65	0 2.3	

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
6.4	plastic	10	2.3 5.3	

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
		From To	
		0 5.3	2.1

Well Contractor and Well Technician Information	
Business Name of Well Contractor	Well Contractor's Licence No.
Hardwork Drilling Inc.	712318
Business Address (Street Number/Name)	Municipality
25 Lewis Road - Unit C	Georgina
Province	Postal Code
ON	N1H1H9
Business E-mail Address	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
51918269240	Gordon, Michael
Well Technician's Licence No.	Signature of Technician and/or Contractor
3590	
	Date Submitted
	20111014

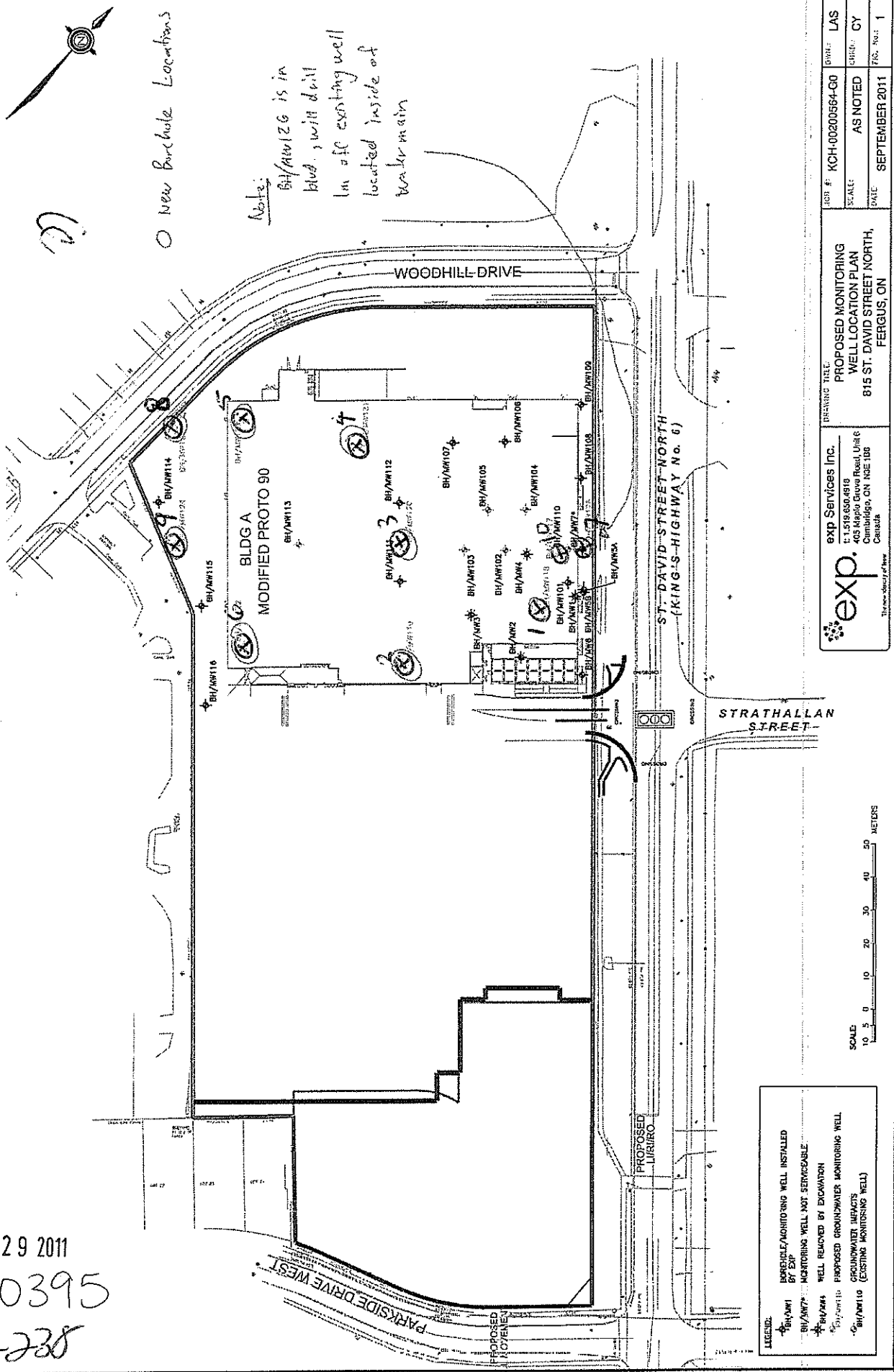
Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		Static Level	
Pumping rate (l/min / GPM)		1	1
Duration of pumping hrs + min		2	2
Final water level end of pumping (m/ft)		3	3
If flowing give rate (l/min / GPM)		4	4
Recommended pump depth (m/ft)		5	5
Recommended pump rate (l/min / GPM)		10	10
Well production (l/min / GPM)		15	15
Disinfected? ☐ Yes ☐ No		20	20
		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

Comments:	
No. 8 on map	
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered
	Y Y Y Y M M D D
	Date Work Completed
	20111014
Ministry Use Only	
Audit No.	
2140395	
DEC 29 2011	
Received	

DEC 29 2011
Z140395
C7238





Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115476

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name Erkus Shopping Centres Ltd.	Last Name / Organization [REDACTED]	E-mail Address [REDACTED]	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 100 Applewood Cres., Suite 100	Municipality Vaughan	Province ON	Postal Code L4K 5X3
Telephone No. (inc. area code) [REDACTED]			

Well Location

Address of Well Location (Street Number/Name) St. David St. N. + Woodhill Dr.	Township Norfolk	Lot [REDACTED]	Concession [REDACTED]
County/District/Municipality Wellington	City/Town/Village Fergus	Province Ontario	Postal Code [REDACTED]
UTM Coordinates Zone NAD 83	Easting 17549111	Northing 4840040	Municipal Plan and Sublot Number [REDACTED]
Other [REDACTED]			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	stones		0 4.5
brown	silt	stones		4.5 5.3

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 0.3	concrete	
0.3 1.8	bentonite chips	
1.8 5.3	sand.	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify auger	☐ Public ☐ Commercial ☐ Domestic ☐ Municipal ☐ Livestock ☐ Test Hole ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify _____

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5.1	plastic	0.65	0 2.3	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6.4	plastic	10	2.3 5.3

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	0 5.3	21
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		

Business Name of Well Contractor Aardvark Drilling Inc.		Well Contractor's Licence No. 7121318	
Business Address (Street Number/Name) 25 Lewis Road - Unit C		Municipality Guelph	
Province ON	Postal Code N1H1E9	Business E-mail Address [REDACTED]	
Bus. Telephone No. (inc. area code) 519-826-9340		Name of Well Technician (Last Name, First Name) Gordon, Mircah	
Well Technician's Licence No. 315910		Signature of Technician and/or Contractor [Signature]	
		Date Submitted 2011/10/14	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down	Recovery
If pumping discontinued, give reason: Pump intake set at (m/ft) Pumping rate (l/min / GPM) Duration of pumping ____ hrs + ____ min Final water level end of pumping (m/ft) If flowing give rate (l/min / GPM) Recommended pump depth (m/ft) Recommended pump rate (l/min / GPM) Well production (l/min / GPM) Disinfected? ☐ Yes ☐ No	Time (min)	Water Level (m/ft)
	Time (min)	Water Level (m/ft)
Static Level		
1		1
2		2
3		3
4		4
5		5
10		10
15		15
20		20
25		25
30		30
40		40
50		50
60		60

Map of Well Location

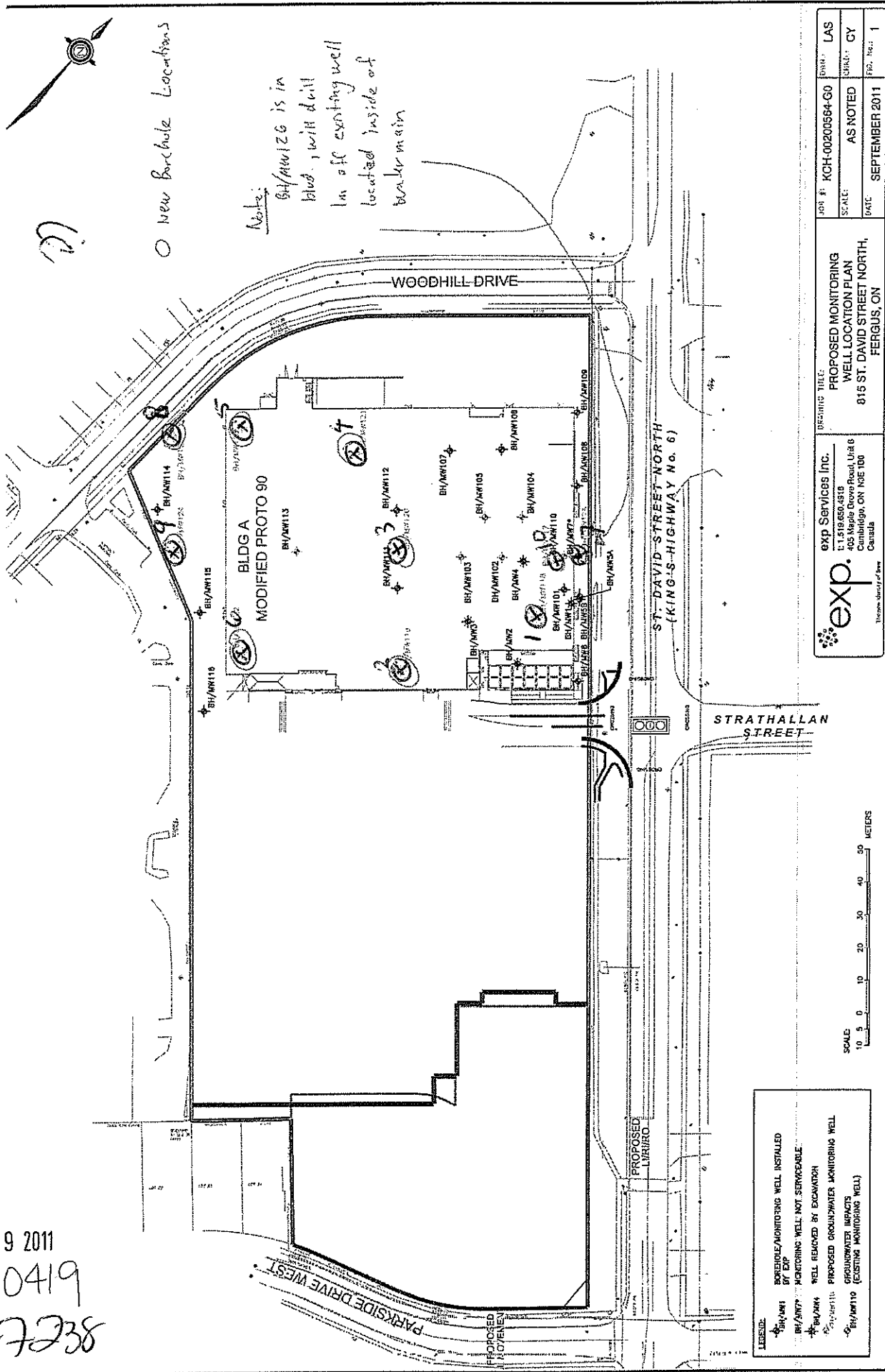
Please provide a map below following instructions on the back.

Comments:

No. 9 on map

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D Date Work Completed 2011/10/05	Ministry Use Only Audit No. 2140419 Received DEC 29 2011
---	---	--

DEC 29 2011
Z140419
C-7238



0 New Borehole Locations

Note:
BH/AM126 is in
blvd., with drill
in off existing well
located inside of
water main

PARKSIDE DRIVE WEST

WOODHILL DRIVE

BLDG A
MODIFIED PROTO 90

ST. DAVID STREET NORTH
(KING'S HIGHWAY No. 6)

STRATHALLAN STREET

SCALE
0 10 20 30 40 50 METERS



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115506

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.	[Redacted]	[Redacted]	
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
100 Applewood Cres., Suite 100	Vaughan	ON	L4K 5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Eastings	Northing
NAD 83	17	549143	4840069
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	stones		0 3
brown	silt	stones		3 4.5

Annular Space			Results of Well Yield Testing					
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
From	To				Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
0	0.3	concrete		If pumping discontinued, give reason:	Static Level			
0.3	1.2	bentonite chips			1		1	
1.2	4.5	sand			2		2	
				Pump intake set at (m/ft)				

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify auger	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
5.1	plastic	0.65	0	1.5	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
6.4	plastic	10	1.5	4.5

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify _____	Depth (m/ft)	Diameter (cm/in)
		From	To
		0	4.5
			21

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
Hobdunk Drilling Inc.		7121318	
Business Address (Street Number/Name)		Municipality	
35 Lewis Road - Unit C		Guelph	
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
519 826 9340		Gordon, Michael	
Well Technician's Licence No.		Signature of Technician and/or Contractor	
3590		[Signature]	
		Date Submitted	
		2011/10/14	

Comments:

No. 4 on map

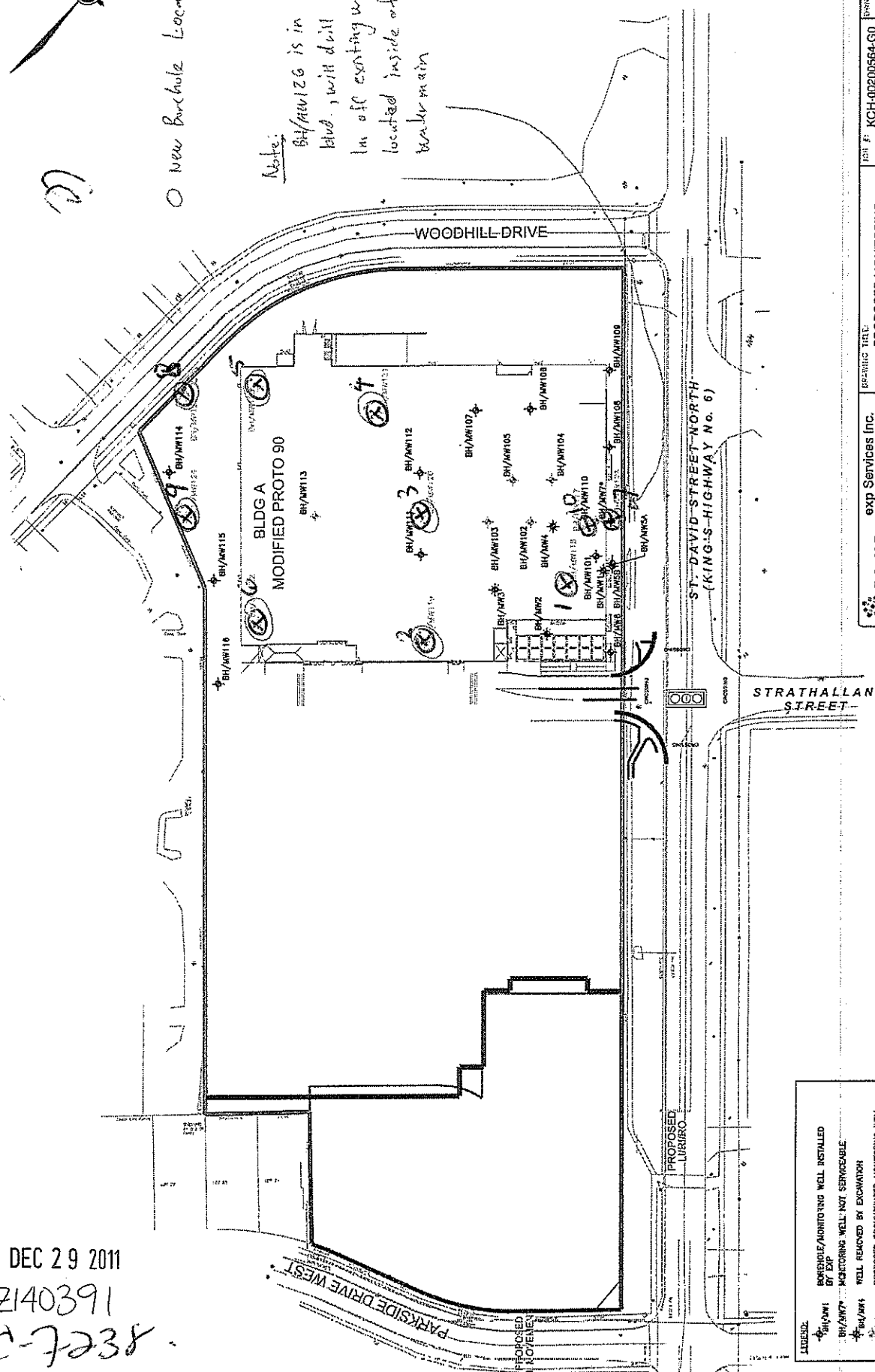
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011/10/14	Date Work Completed 2011/10/14	Ministry Use Only Audit No. Z140391 Received DEC 29 2011
---	---	-----------------------------------	---

832-C
Z140391
DEC 29 2011



0 New Borehole Locations

Note:
BH/AW126 is in
blvd, will drill
in off existing well
located inside of
work main



- LEGEND:
- BH/AW1 PROPOSED MONITORING WELL INSTALLED BY EXP.
 - BH/AW4 MONITORING WELL NOT SERVICEABLE
 - BH/AW7 WELL RECOVERED BY EXCAVATOR
 - BH/AW11 PROPOSED GROUNDWATER MONITORING WELL
 - BH/AW118 GROUNDWATER IMPACTS (EXISTING MONITORING WELL)

exp. exp Services Inc. 11519 850 Ave 405 Maple Grove Road, Unit 8 Cambridge, ON N3E 1G6 Canada Tel: 519-850-7244		SCHEMATIC TITLE: PROPOSED MONITORING WELL LOCATION PLAN 815 ST. DAVID STREET NORTH, FERGUS, ON		JOB #: KCH-00200564-G0	DRAWN BY: LAS
		SCALE: AS NOTED	CHECKED BY: CY		
		DATE: SEPTEMBER 2011	DATE: SEP 11		



Ontario

Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A115504

Regulation 903 Ontario Water Resources Act

Well Record

Page _____ of _____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Cres., Suite 100	Vaughan	ON	L4Y5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	N. York		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Eastings	Northing
NAD 83	17	549096	9840082
Municipal Plan and Sublot Number			
Other			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	stones		0 3.8
brown	clt	stones		3.8 6.1

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)	
0 0.3	concrete		
0.3 2.7	bentonite chips		
2.7 6.1	sand		

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☐ Rotary (Conventional)	☐ Domestic
☐ Rotary (Reverse)	☐ Livestock
☐ Boring	☐ Irrigation
☐ Air percussion	☐ Industrial
☒ Other, specify <u>auger</u>	☐ Other, specify _____
☐ Diamond	☐ Commercial
☐ Jetting	☐ Municipal
☐ Driving	☐ Test Hole
☐ Digging	☒ Monitoring
	☐ Cooling & Air Conditioning

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5.1	plastic	0.65	0 3.1	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify _____
				☐ Other, specify _____

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
6.4	plastic	10	3.1 6.1	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify _____
				☐ Other, specify _____

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify _____	Depth (m/ft)	Diameter (cm/in)
		From To	
		0 6.1	21
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify _____		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify _____		

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Aardark Drilling Inc.	122318		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road Unit C	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
519 806 9340	Gordon, Mike		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3590	[Signature]	2011/10/14	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify _____			
If pumping discontinued, give reason:		Static Level	
		1	1
Pump intake set at (m/ft)		2	2
Pumping rate (l/min / GPM)		3	3
Duration of pumping		4	4
____ hrs + ____ min		5	5
Final water level end of pumping (m/ft)		10	10
If flowing give rate (l/min / GPM)		15	15
Recommended pump depth (m/ft)		20	20
Recommended pump rate (l/min / GPM)		25	25
Well production (l/min / GPM)		30	30
Disinfected?		40	40
☐ Yes ☐ No		50	50
		60	60

Map of Well Location

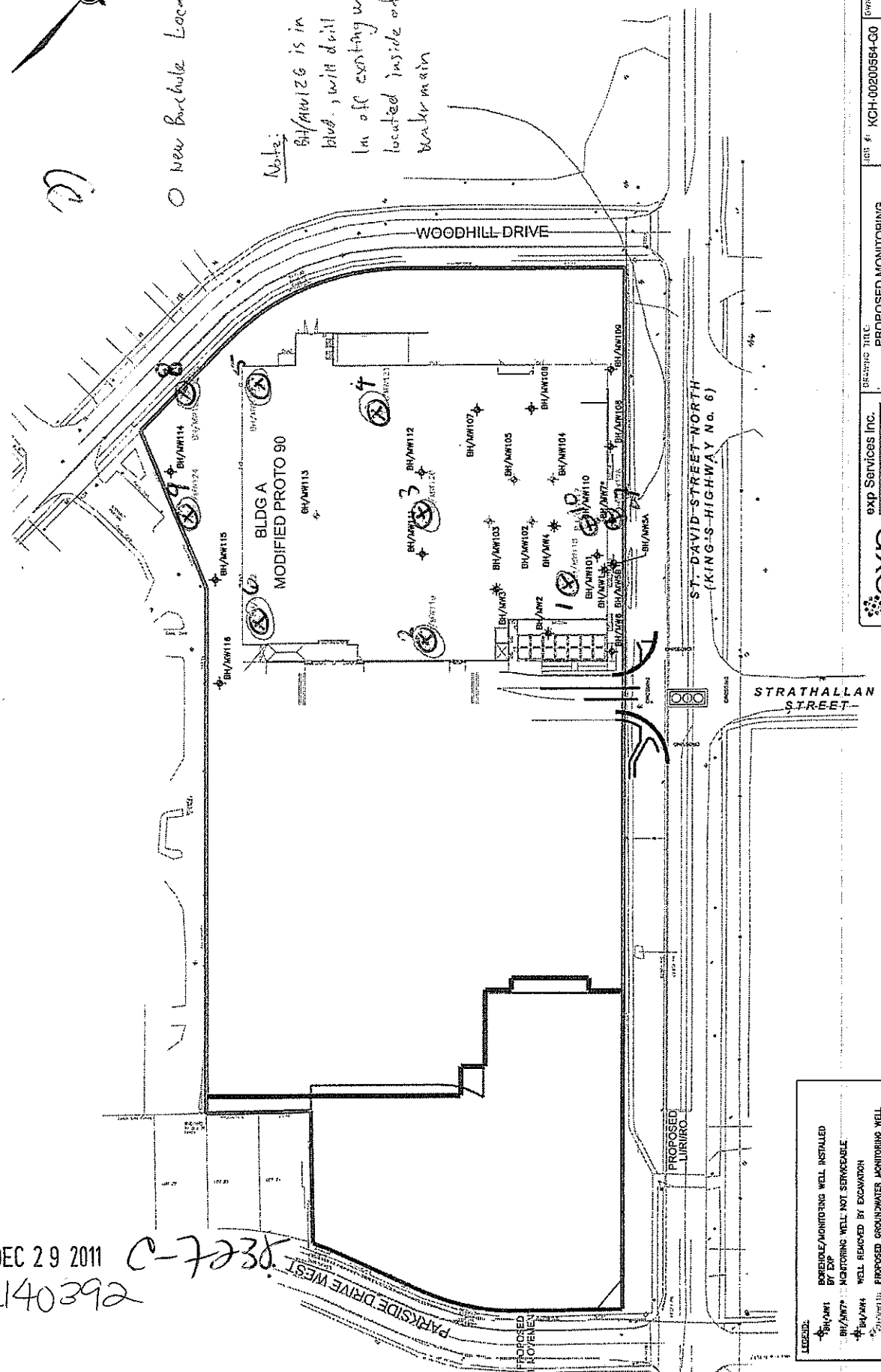
Please provide a map below following instructions on the back.

Comments:	Ministry Use Only
No. 5 on map	Audit No.
	2140392
	DEC 29 2011
Well owner's information package delivered	Received
☐ Yes	
☐ No	
Date Package Delivered	
Y Y Y Y M M D D	
20111004	
Date Work Completed	
20111004	



0 New Borehole Locations

Note:
BH/AW126 is in
blvd., with drill
in old existing well
located inside of
water main



exp. Services Inc.
t: 1.518.650.4919
405 Maple Grove Road, Unit 8
Cambridge, ON N3E 1D6
Canada
www.exp-services.com

PROPOSED MONITORING
WELL LOCATION PLAN
815 ST. DAVID STREET NORTH,
FERGUS, ON

JOB # KCH-00200584-C0
SCALE: AS NOTED
DATE: SEPTEMBER 2011

DRAWING TITLE
LAS
CY
FIG. No. 1

- LEGEND:
- BH/AW1 BOREHOLE/MONITORING WELL INSTALLED BY EXP.
 - BH/AW2 MONITORING WELL NOT SERVICEABLE
 - BH/AW4 WELL REMOVED BY EXCAVATION
 - BH/AW11 PROPOSED GROUNDWATER MONITORING WELL
 - BH/AW10 PROPOSED GROUNDWATER MONITORING WELL (EXISTING MONITORING WELL)

DEC 29 2011
2140392
C-7238

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name Marcus Shopping Centres Ltd.	Last Name / Organization [REDACTED]	E-mail Address [REDACTED]			☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 100 Applewood Crescent, Suite 100	Municipality Vaughan	Province ON	Postal Code L4K 1S3	Telephone No. (inc. area code) 416 716 0260	
Well Location [REDACTED]					

Well Location

Address of Well Location (Street Number/Name) St. David St. N. + Woodhill Dr.				Township Nipich		Lot		Concession	
County/District/Municipality Wellington				City/Town/Village Fergus				Province Ontario	
UTM Coordinates NAD 8 3 1754912011 48401129				Zone Easting Northing				Postal Code 	
				Municipal Plan and Sublot Number				Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To		
0	34'	BENTONITE CHIPS.	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify <u>AUGERING</u>		☒ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, (Reason)
			From	To	
2"	PLASTIC	SCR 40	0'	35'	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
2"	PLASTIC	#10	35'	40'

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify* _____
☐ Other, *specify* _____

Water Details		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft)		Diameter (cm/in)
		From	To	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0'	20'	5 1/2"
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	20'	40'	3 3/8"
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
Hardwork Drilling Inc.		712318	
Business Address (Street Number/Name)		Municipality	
25 Lewis Road-Unit C		Guelph	
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
5198269340		England, Matt	
Well Technician's Licence No.		Signature of Technician and/or Contractor	Date Submitted
31059		Matt England	2011/11/21

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping _____ hrs + _____ min	4		4	
	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.

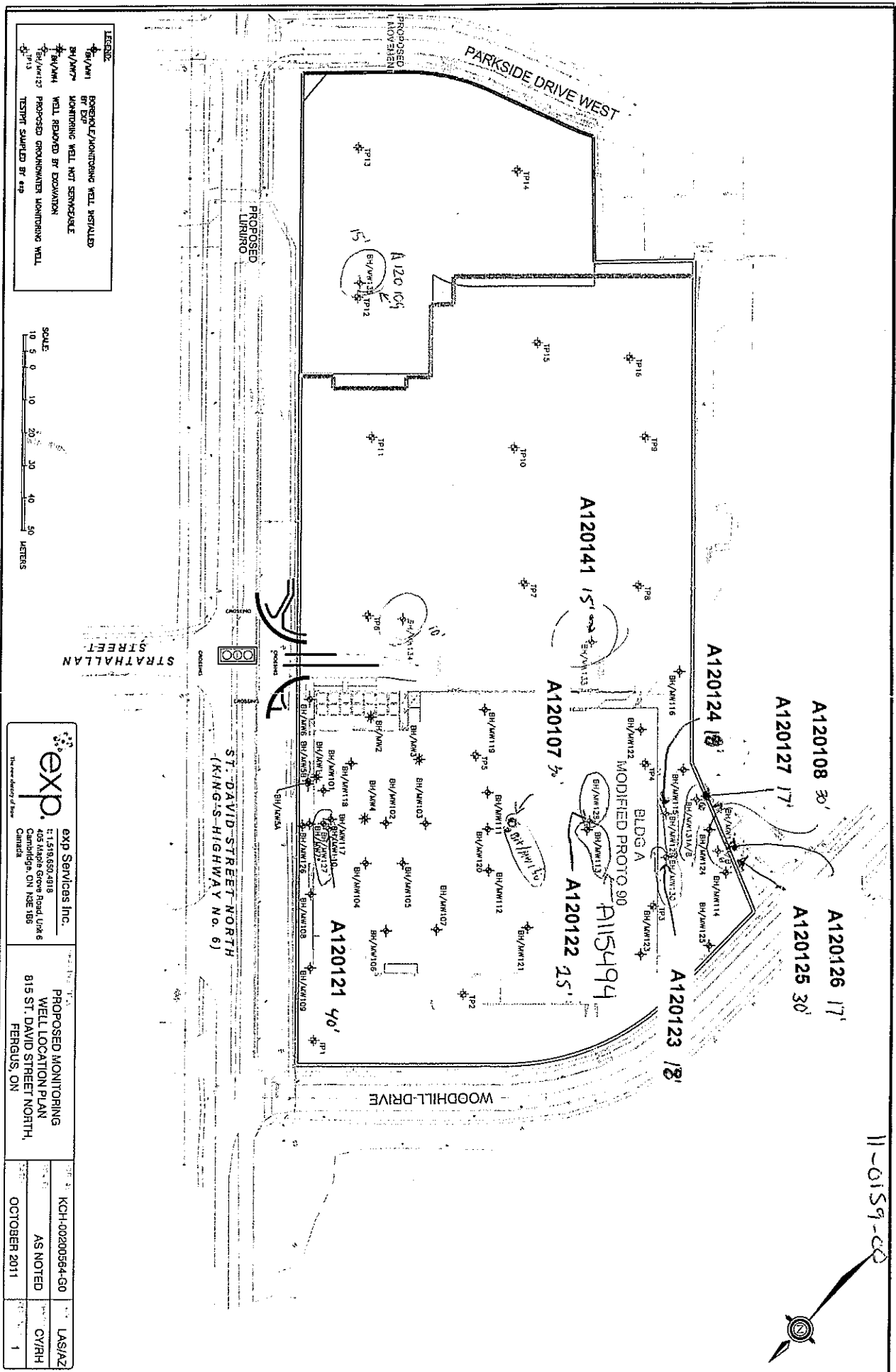
Please provide a map below following instructions on the back.

Please see
attached
map

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D	Ministry Use Only Audit No. Z140439 Re JAN 19 2012
	Date Work Completed 20111024	

11-0159-00



JAN 19 2012

C-7238
 2140439



Well Tag No. (Place Sticker and/or Print Below)

A120122

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address			☐ Well Constructed by Well Owner
Terqus Shopping Centres Ltd.	[REDACTED]				
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)	
100 Applewood Crescent, Suite 100	Vaughan	ON	L4K5X1B3	416 760 6200	

Well Location

Address of Well Location (Street Number/Name) St. David St. No. + Woodhill Dr.			Township Nipich		Lot		Concession	
County/District/Municipality Wellington			City/Town/Village Fergus				Province Ontario	
Postal Code 			UTM Coordinates Zone Easting Northing NAD 83 17 549115 548410000				Municipal Plan and Sublot Number Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
BROWN	SAND	SILT		0'	16'
GRAY	TILL	SAND & SILT		16'	20'
GRAY	SAND	GRAVEL		20'	21'6"
GRAY	TILL	SAND & SILT		21'6"	25'

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0'	19'	BENTONITE CHIPS	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify <u>Augering</u>		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
2"	PLASTIC	SC# 40	0'	20'	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
2"	PLASTIC	# 10	20'	25'

Water Details		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0'	20'	5 1/2"
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	20'	25'	3 7/8"
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
Aardvark Drilling Inc.		7238	
Business Address (Street Number/Name)		Municipality	
35 Lewis Road - Unit C			
Province	Postal Code	Business E-mail Address	
ON	M1H1E9		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
519 826 9340		England, Matt	
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
3059	[Signature]		2011-11-13

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
	3		3	
Pumping rate (l/min / GPM)	4		4	
	5		5	
Duration of pumping _____ hrs + _____ min	10		10	
	15		15	
Final water level end of pumping (m/ft)	20		20	
	25		25	
If flowing give rate (l/min / GPM)	30		30	
	40		40	
Recommended pump depth (m/ft)	50		50	
	60		60	
Recommended pump rate (l/min / GPM)				
Well production (l/min / GPM)				
Disinfected? ☐ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.

Please see
attached map.

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D	Ministry Use Only Audit No. Z140440 JAN 19 2012
	Date Work Completed 20111108	

LEGEND

- BH/MN1 BOREHOLE/MONITORING WELL INSTALLED BY EXP
- BH/MN7 MONITORING WELL, NOT SERVICEABLE
- BH/MN4 WELL REMOVED BY EXCAVATION
- BH/MN127 PROPOSED GROUNDWATER MONITORING WELL
- TP13 TESTING SAMPLED BY exp

SCALE

0 10 20 30 40 50 METERS



exp Services Inc.
 405 Maple Grove Road, Unit 8
 Cambridge, ON N6E 1B6
 Canada

PROPOSED MONITORING WELL LOCATION PLAN

815 ST. DAVID STREET NORTH, FERGUS, ON

KCH-00200564-G0

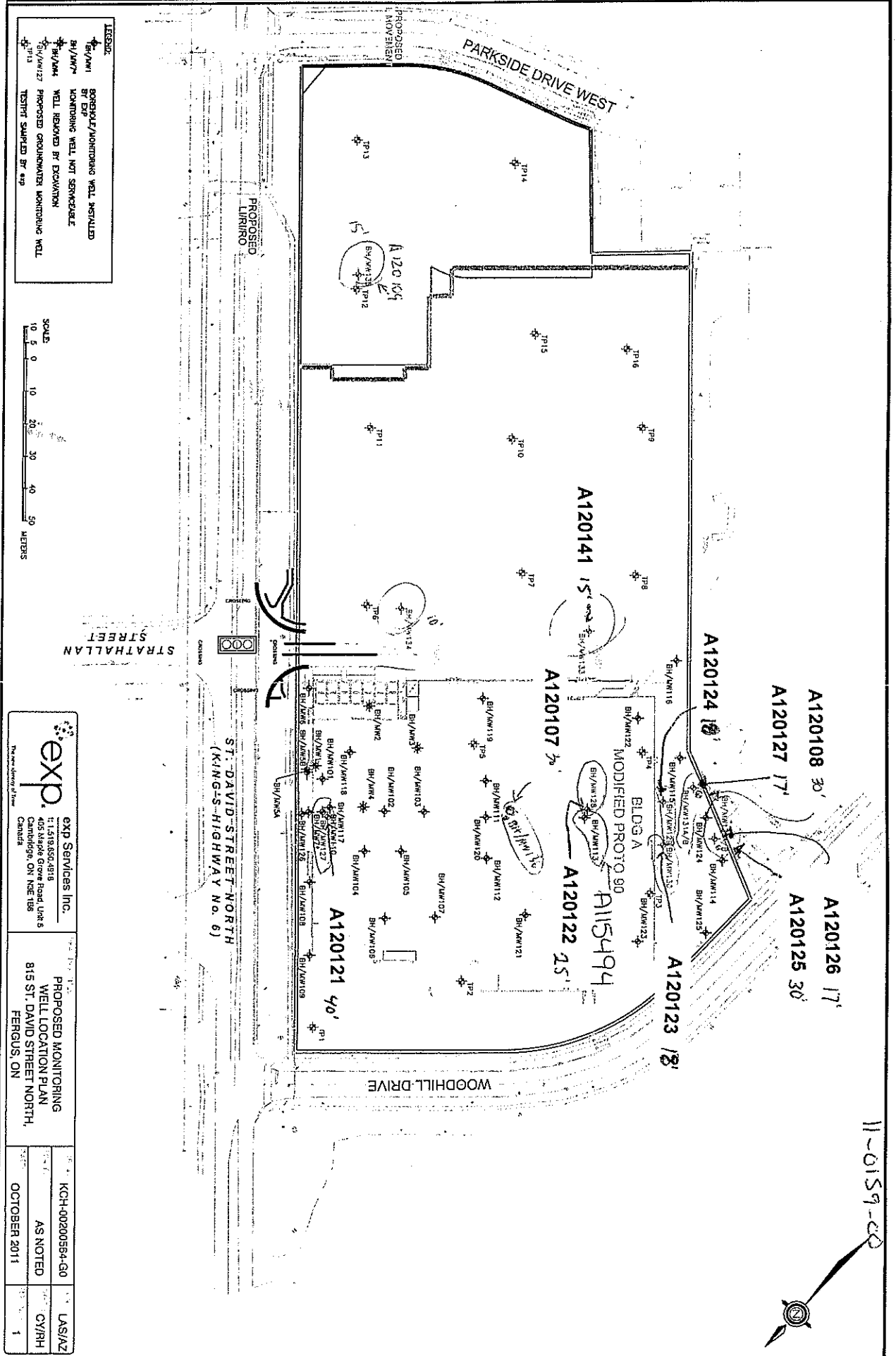
AS NOTED

OCTOBER 2011

LAS/AZ

CY/RH

1



C7238
2140410



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120123

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Site 100	Waukegan	ON	L4K5X341167606500

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St David St No + Woodhill Dr	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	5491130	48410040
Municipal Plan and Sublot Number	Other		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
BROWN	SAND	SILT & GRAVEL		0' 15'
GRAY	TILL	SAND & SILT		15' 18'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0' 7'	BENTONITE CHIPS	

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☐ Rotary (Conventional)	☐ Commercial
☐ Rotary (Reverse)	☐ Domestic
☐ Boring	☐ Livestock
☐ Air percussion	☐ Irrigation
☒ Other, specify AUGERING	☐ Industrial
	☐ Other, specify

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PLASTIC	SCH 40	0' 8'	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
2"	PLASTIC	#10	8' 18'

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	0' 18'	8"
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Hardwork Drilling Inc.	712318		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road - Unit C	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
5198269340	Engel, Matt		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3059		2011/11/13	

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping	4		4	
hrs + min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
Recommended pump depth (m/ft)	20		20	
Recommended pump rate (l/min / GPM)	25		25	
Well production (l/min / GPM)	30		30	
Disinfected?	40		40	
☐ Yes ☐ No	50		50	
	60		60	

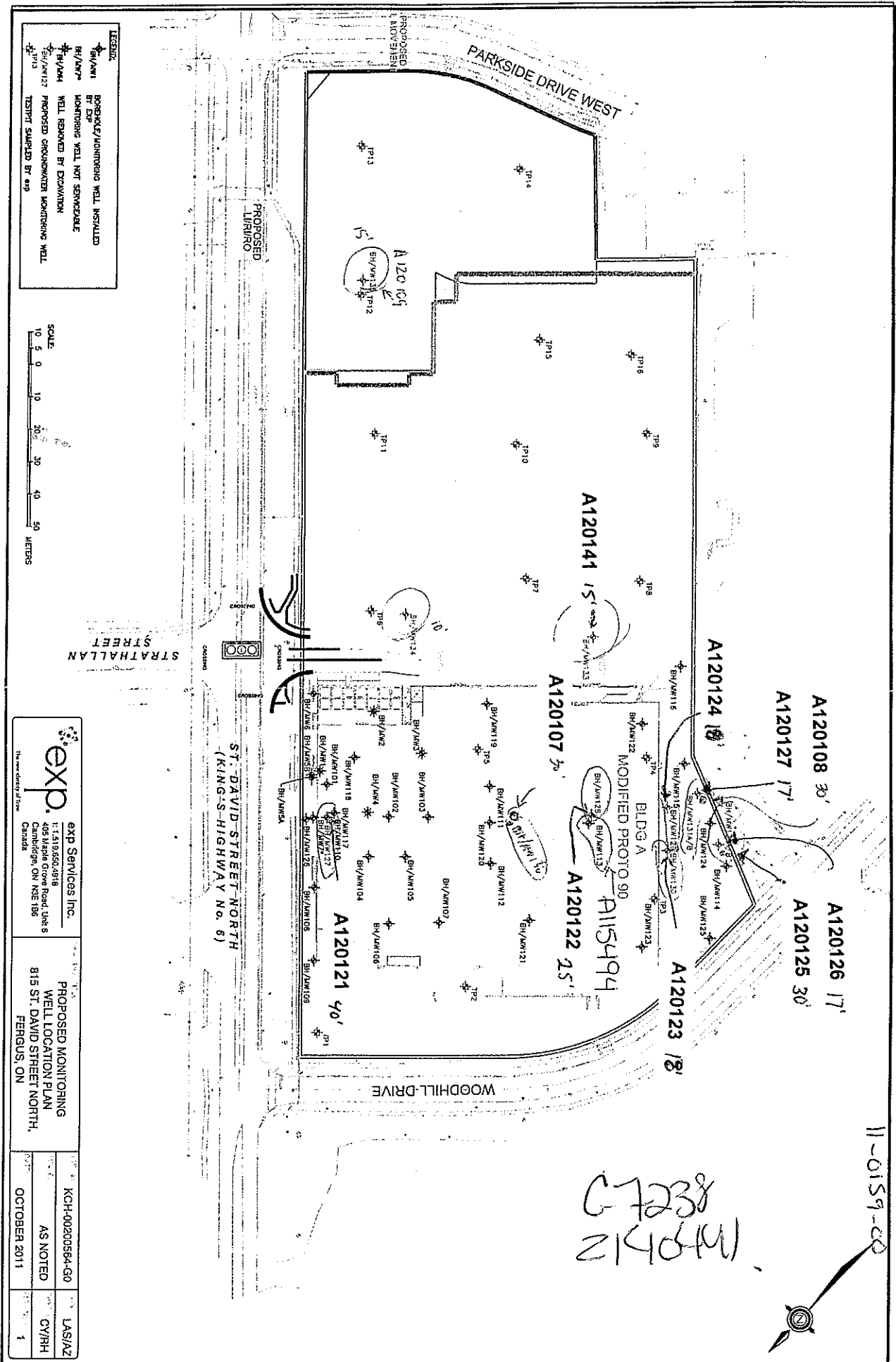
Map of Well Location	
Please provide a map below following instructions on the back.	
Please see attached map.	
Comments:	
Well owner's information package delivered	Date Package Delivered
☐ Yes ☐ No	Y Y Y Y M M D D
	Date Work Completed
	2011/11/26
Ministry Use Only	
Audit No.	Z140441
Record	IAN 19 2012

11-0159-00



C-7238
21404112

JAN 19 2012



LEGEND

BR/AM1
BY EX
BORROW/MONITORING WELL INSTALLED BY EX

BR/AM2
BY EX
MONITORING WELL NOT SERVICED BY EX

BR/AM4
BY EX
WELL REMOVED BY EXCAVATION

BR/AM127
BY EX
PROPOSED GROUNDWATER MONITORING WELL

TP13
BY EX
TEST PIT SAMPLED BY EX

SCALE

0 10 20 30 40 50 METERS

exp.
exp Services Inc.
11-1419-00-018
405 Maple Grove Road, Unit 5
Cambridge, ON N3E 1B6
Canada

PROPOSED MONITORING WELL LOCATION PLAN
815 ST. DAVID STREET NORTH,
FERGUS, ON

KCH-00200564-00
AS NOTED
CY/RH
OCTOBER 2011
1



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120124

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Ugahon	ON	L4K5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	549143	4840130
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
BROWN	SAND	SILT & GRAVEL		0' 15'
GRAY	TILL	SAND & SILT		15' 18'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0' 7'	BENTONITE CHIPS	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify <u>AUGERING</u>	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____ ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PLASTIC	SCH 40	0' 8'	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
2"	PLASTIC	10	8' 18'

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify _____	Depth (m/ft)	Diameter (cm/in)
		0' 18'	8"

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Harduark Drilling Inc.	7121318		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
519 826 9340	Spald, Matt		
Well Technician's Licence No.	Signature of Technician and/or Contractor		
3101519	[Signature]		
Date Submitted			
2011/12/13			

Results of Well Yield Testing					
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
		4		4	
Duration of pumping _____ hrs + _____ min		5		5	
Final water level end of pumping (m/ft)		10		10	
If flowing give rate (l/min / GPM)		15		15	
		20		20	
Recommended pump depth (m/ft)		25		25	
Recommended pump rate (l/min / GPM)		30		30	
		40		40	
Well production (l/min / GPM)		50		50	
Disinfected? ☐ Yes ☐ No		60		60	

Map of Well Location
Please provide a map below following instructions on the back.

Please see attached map.

Comments:	
Well owner's information package delivered	Date Package Delivered
☐ Yes ☐ No	Y Y Y Y M M D D
	Date Work Completed
	2011/12/13
Ministry Use Only	
Audit No.	
Z140442	
JAN 19 2012	

PARKSIDE DRIVE WEST

PROPOSED
MOVEMENT

PROPOSED
LIRIING

- LEGEND**
- BH/AM1 BOREROLE/MONITORING WELL INSTALLED BY EXP
 - BH/AM7 MONITORING WELL NOT SERVICEABLE
 - BH/AM4 WELL REMOVED BY EXCAVATION
 - BH/AM127 PROPOSED GROUNDWATER MONITORING WELL
 - TP13 TEST PIT SAMPLED BY EXP

SCALE
0 10 20 30 40 50 METERS

STRATHALLAN STREET

ST. DAVID STREET NORTH
(KING-S-HIGHWAY No. 6)

WOODHILL DRIVE

BLDG A
MODIFIED PROTO 90

A120141 15'
A120107 30'
A120122 25'
A115494

A120124 10'

A120108 30'
A120127 17'
A120126 17'
A120125 30'

A120123 18'

A120121 40'



exp Services Inc.
t: 1.519.850.4818
403 Maple Grove Road, Unit 6
Cambridge ON N2E 1S5
Canada

PROPOSED MONITORING
WELL LOCATION PLAN
815 ST. DAVID STREET NORTH,
FERGUS, ON

KCH-00200564-G0	LAS/AZ
AS NOTED	CY/RH
OCTOBER 2011	1

210442
C7238

11-0159-00

JAN 19 2012



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120126

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd., Attn:			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Vaughan	ON	L4K 5X13

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	549111	848401025
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brown	SAND	SILT		0' 13'
Grey	TILL	SILT & SAND		13' 17'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0' 6'	BENTONITE CHIPS	

Method of Construction	Well Use
☐ Cable Tool	☐ Diamond
☐ Rotary (Conventional)	☐ Jetting
☐ Rotary (Reverse)	☐ Driving
☐ Boring	☐ Digging
☐ Air percussion	☐ Industrial
☒ Other, specify AUGERING	☐ Other, specify
☐ Public	☐ Commercial
☐ Domestic	☐ Municipal
☐ Livestock	☐ Test Hole
☐ Irrigation	☒ Monitoring
☐ Cooling & Air Conditioning	

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PLASTIC	40	0' 7'	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
2"	PLASTIC	#10	7' 17'	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		0' 17'	8"
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Business Name of Well Contractor		Well Contractor's Licence No.
Aardark Drilling Inc.		7121318
Business Address (Street Number/Name)		Municipality
25 Lewis Road - Unit C		Guelph
Province	Postal Code	Business E-mail Address
ON	N1H1E9	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	
519 826 9340	England, Matt	
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
310159		2011/12/16

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

Please see attached map.

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Y Y Y Y M M D D	Audit No.
	Date Work Completed	Z140443
	2011/10/21	JAN 19 2012

LEGEND

BH/AM1
BFLAP
PROPOSED/MONITORING WELL INSTALLED

BH/AM7
MONITORING WELL NOT SERVICEABLE

BH/AM4
WELL REMOVED BY EDCOM/ON

BH/AM12
PROPOSED GROUNDWATER MONITORING WELL

TP13
TEST PIT SAMPLED BY exp

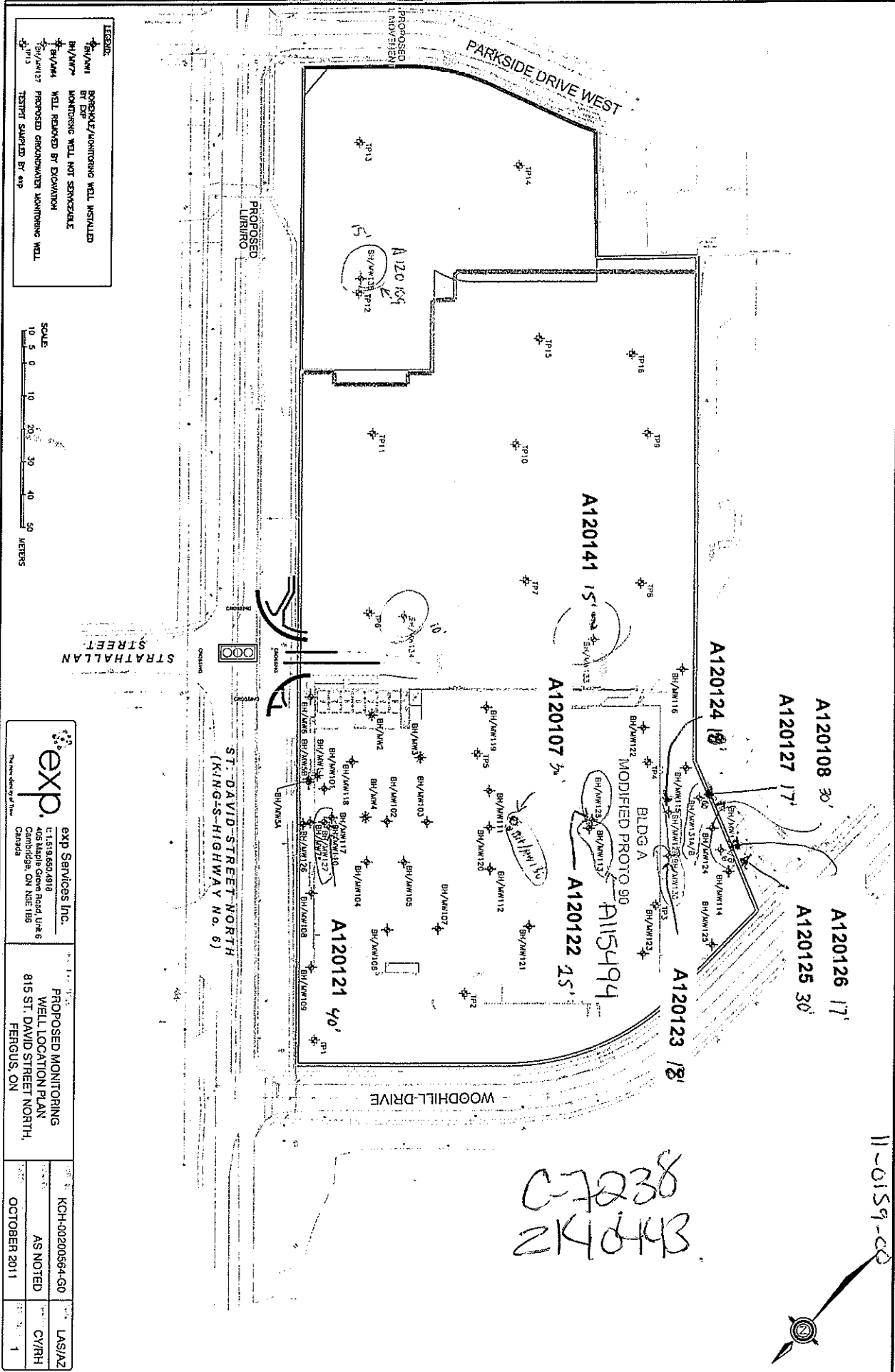
SCALE

10 5 0 10 20 30 40 50 METERS

exp.
exp Services Inc.
1.1519.650.4918
405 Maple Grove Road, Unit 6
Cambridge, ON N2E 1B9
Canada

PROPOSED MONITORING WELL LOCATION PLAN
815 ST. DAVID STREET NORTH,
FERGUS, ON

KCH-00200564-G0
AS NOTED
OCTOBER 2011
LAS/AZ
CY/RH
1





Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120125

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Vaughan	ON	L4K5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Drive	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	549111	34840029
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
BROWN	SAND	SILT		0' 13'
GRAY	TILL	SILT & SAND		13' 17'
GRAY	SAND	GRAVEL		17' 18'
GRAY	TILL	SILT & SAND		18' 30'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 24'	BENTONITE CHIPS	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify <u>AUGERING</u>	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PLASTIC	SCH 40	0' 25'	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
2"	PLASTIC	#10	25' 30'

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
0'		20'	5 1/2"
20'		30'	3 7/8"

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Hardwork Drilling Inc.	7121318		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road - Unit C	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
51918269340	England Matt		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3101519		2011/10/13	

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify	Draw Down	Recovery
If pumping discontinued, give reason:	Time (min)	Water Level (m/ft)
	Static Level	Time (min)
Pump intake set at (m/ft)	1	1
Pumping rate (l/min / GPM)	2	2
Duration of pumping ____ hrs + ____ min	3	3
Final water level end of pumping (m/ft)	4	4
If flowing give rate (l/min / GPM)	5	5
Recommended pump depth (m/ft)	10	10
Recommended pump rate (l/min / GPM)	15	15
Well production (l/min / GPM)	20	20
Disinfected?	25	25
☐ Yes ☐ No	30	30
	40	40
	50	50
	60	60

Map of Well Location

Please provide a map below following instructions on the back.

Please see attached map.

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011/10/13	Ministry Use Only Audit No. 2140445 JAN 19 2012
--	---	--

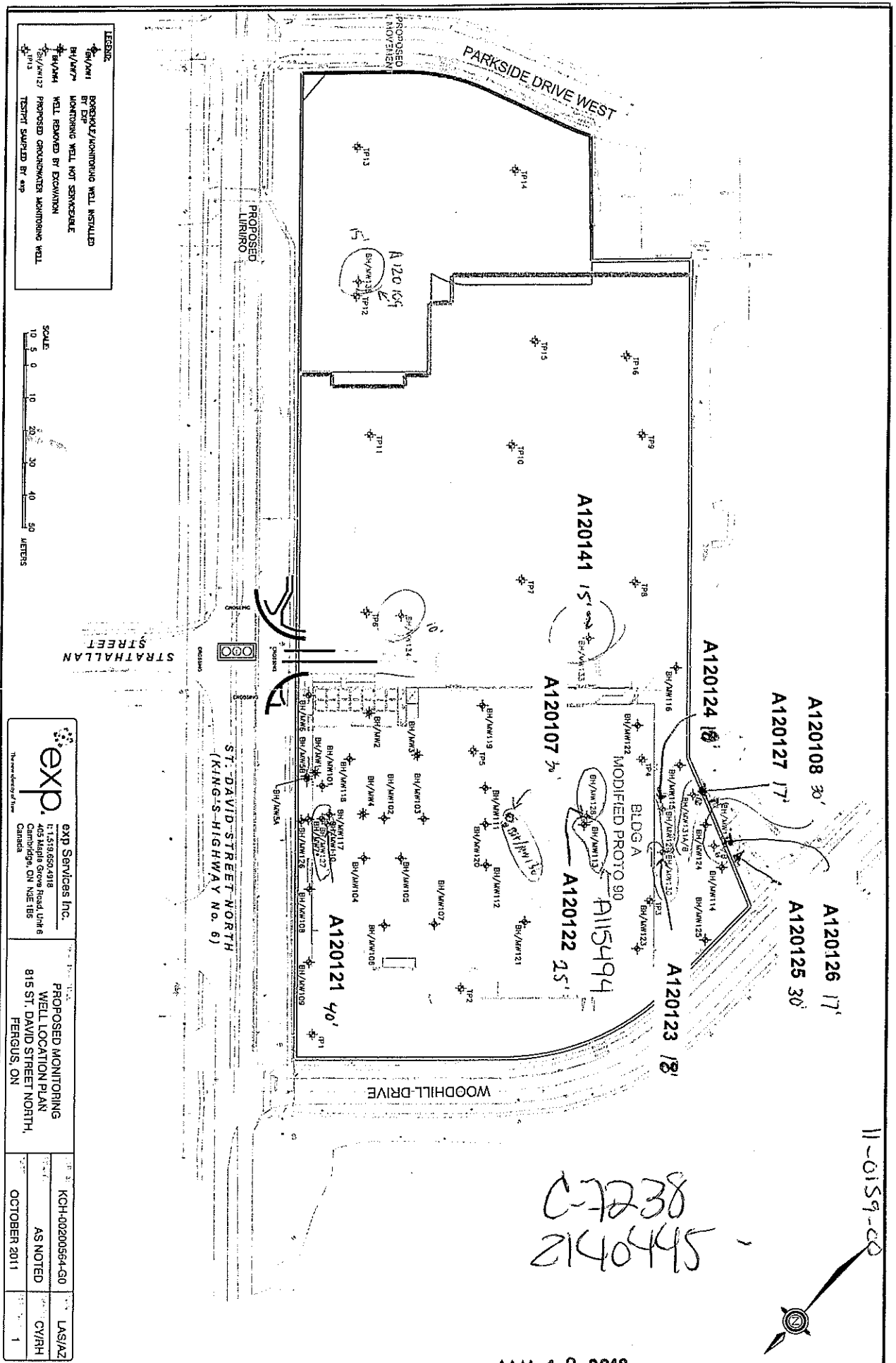
LEGEND

BH/MW1 BOREHOLE/MONITORING WELL INSTALLED BY EXP
 BH/MW7 MONITORING WELL NOT SERVICED
 BH/MW4 WELL REMOVED BY EXCAVATION
 BH/MW12 PROPOSED GROUNDWATER MONITORING WELL
 TP13 TEST PIT SAMPLED BY EXP

SCALE

10 5 0 10 20 30 40 50 METERS
 0 5 10 20 30 40 50 FEET

 <p>exp Services Inc. P. 1.519.650.4918 465 Maple Grove Road, Unit 6 Cambridge, ON N1E 1B5 Canada</p>		<p>PROPOSED MONITORING WELL LOCATION PLAN</p> <p>815 ST. DAVID STREET NORTH, FERGUSON, ON</p>		<p>KOH-00200564-G0</p> <p>AS NOTED</p> <p>OCTOBER 2011</p>	<p>LAS/AZ</p> <p>CY/RH</p> <p>1</p>
--	--	---	--	--	-------------------------------------



JAN 19 2012



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120127

11-0159-00

Well Record

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.	[REDACTED]		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
100 Applewood Crescent, Suite 100	Vaughan	ON	L4K1S8X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates Zone Easting Northing	Municipal Plan and Sublot Number	Other	
NAD 83 175491434840023			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
Brown	SAND	SILT		0' 13'
Grey	TILL	SILT & SAND		13' 17'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0' 6'	BENTONITE CHIPS	

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☐ Rotary (Conventional)	☐ Commercial
☐ Rotary (Reverse)	☐ Domestic
☐ Boring	☐ Livestock
☐ Air percussion	☐ Irrigation
☒ Other, specify AUGERING	☐ Industrial
	☐ Other, specify

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PLASTIC	SCH 40	0' 7'	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
2"	PLASTIC	#10	7' 17'

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	0' 17'	8"
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Aardark Drilling Inc.	712138		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road - Unit C	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
519 826 9340	England, Matt		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3101519	[Signature]	2011/12/13	

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping hrs + min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
Recommended pump depth (m/ft)	15		15	
Recommended pump rate (l/min / GPM)	20		20	
Well production (l/min / GPM)	25		25	
Disinfected?	30		30	
☐ Yes ☐ No	40		40	
	50		50	
	60		60	

Map of Well Location
Please provide a map below following instructions on the back.

Please see attached map.

Comments:	Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 2011/10/26	Date Work Completed 2011/10/26
Ministry Use Only		Audit No. 2140444	Recd JAN 19 2012

LEGEND

BH/MW1 BOREHOLE/MONITORING WELL INSTALLED BY EXP
 BH/MW2 MONITORING WELL NOT SERVICEABLE
 BH/MW3 WELL REMOVED BY EXCAVATION
 BH/MW122 PROPOSED GROUNDWATER MONITORING WELL
 TP13 TEST PIT SAMPLED BY EXP

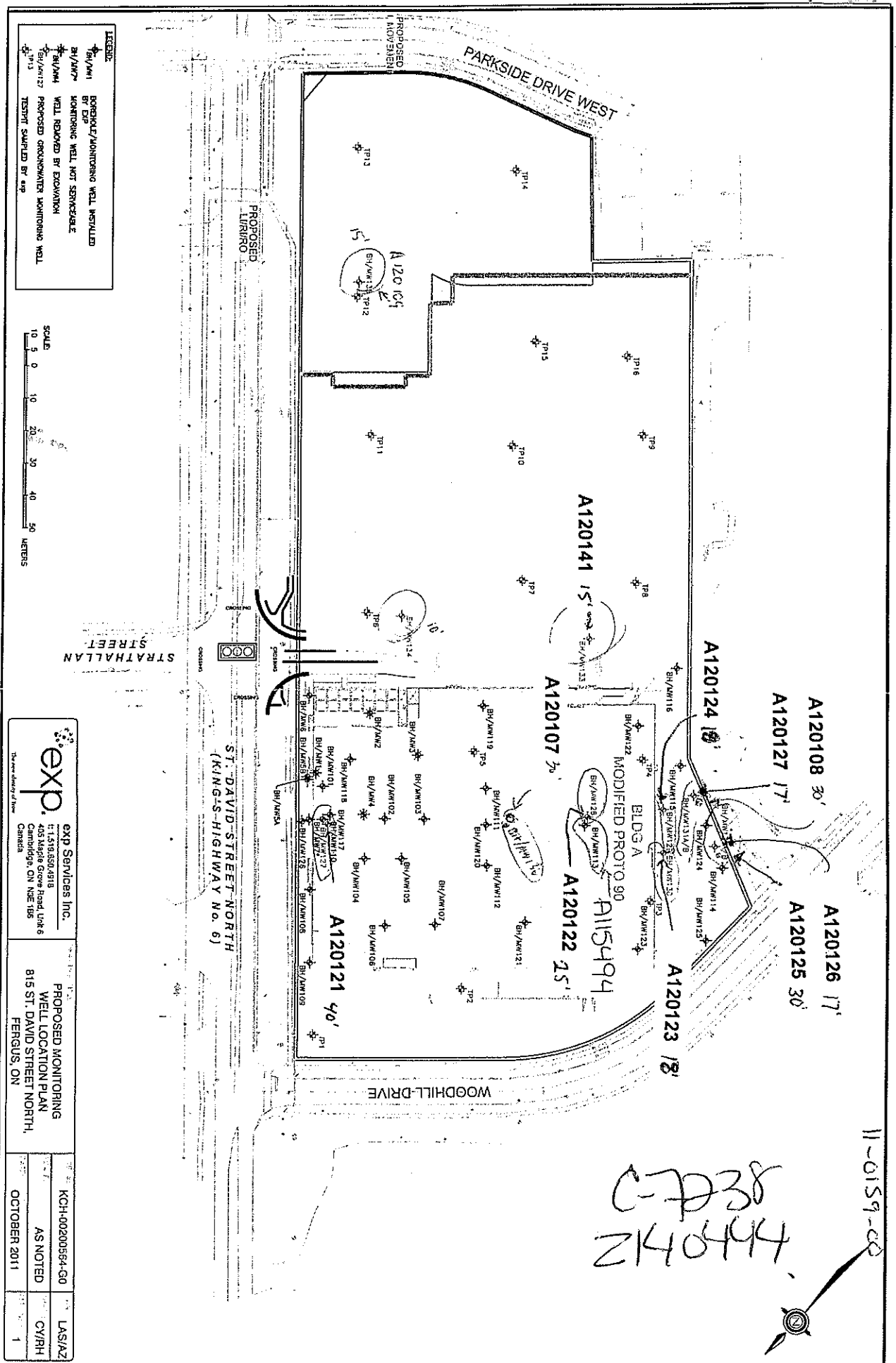
SCALE

10 5 0 10 20 30 40 50 METERS
 10 5 0 10 20 30 40 50 FEET

exp.
 exp Services Inc.
 t: 1.519.550.4818
 405 Maple Grove Road, Unit 6
 Cambridge, ON N6E 1B5
 Canada

PROPOSED MONITORING
 WELL LOCATION PLAN
 815 ST. DAVID STREET NORTH,
 FERGUS, ON

KCH-00200564-G0	LAS/AZ
AS NOTED	CY/RH
OCTOBER 2011	1



C-7D38
 214044

11-0159-00

JAN 19 2012



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120141

Regulation 903 Ontario Water Resources Act

Well Record

Page _____ of _____

Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.	[REDACTED]		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
100 Applewood Crescent, Suite 100	Vaughan	ON	L4K 5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	549119	64840039
Municipal Plan and Sublot Number			Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
BROWN	SAND	SILT & GRAVEL		0' 13'
GRAY	TILL	SAND & SILT		13' 15'

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0' 4'	BENTONITE CHIPS	

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☐ Rotary (Conventional)	☐ Commercial
☐ Rotary (Reverse)	☐ Domestic
☐ Boring	☐ Livestock
☐ Air percussion	☐ Irrigation
☒ Other, specify AUGERING	☐ Industrial
	☐ Other, specify
	☐ Not used
	☐ Dewatering
	☒ Monitoring
	☐ Cooling & Air Conditioning

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
2"	PLASTIC	SEA 40	0' 5'	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
2"	PLASTIC	#10	5' 15'

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		From To	
		0 15'	8"

Business Name of Well Contractor		Well Contractor's Licence No.	
Aardark Drilling Inc.		712318	
Business Address (Street Number/Name)		Municipality	
25 Lewis Road - Unit C		Guelph	
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
5198269340	England Matt		
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
3101519	[Signature]		2011/12/13

Results of Well Yield Testing					
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
Duration of pumping _____ hrs + _____ min		4		4	
		5		5	
Final water level end of pumping (m/ft)		10		10	
If flowing give rate (l/min / GPM)		15		15	
		20		20	
Recommended pump depth (m/ft)		25		25	
Recommended pump rate (l/min / GPM)		30		30	
Well production (l/min / GPM)		40		40	
		50		50	
Disinfected?		60		60	
☐ Yes ☐ No					

Map of Well Location

Please provide a map below following instructions on the back.

Please see attached map.

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered	Ministry Use Only
	Y Y Y Y M M D D	
	Date Work Completed	Audit No.
	2011/12/26	Z140446
		JAN 19 2012

LEGEND

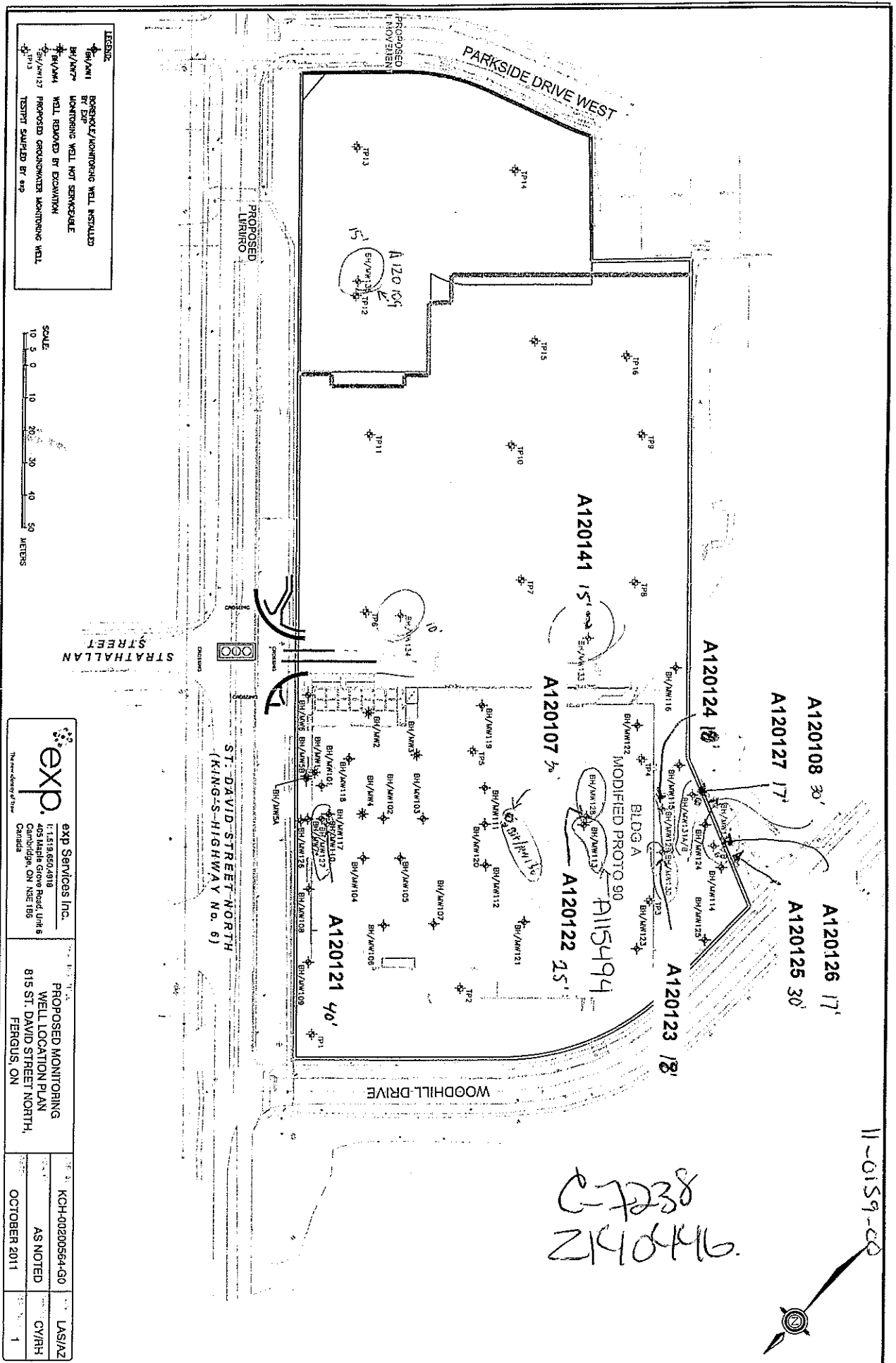
BH/AM1
 BR/AM7
 BH/AM4
 BH/AM12
 TP13

PROPOSED/EXISTING WELL INSTALLED
 BY EXP
 MONITORING WELL NOT SERVICED
 WELL REMOVED BY EXCAVATION
 PROPOSED GROUNDWATER MONITORING WELL
 TESTPIE SAMPLED BY EXP

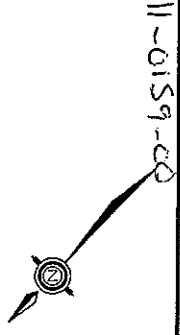
SCALE

10 5 0 10 20 30 40 50
 METERS

 <p>exp Services Inc. 11-1519-650/4918 455 Maple Grove Road, Unit 6 Cambridge, ON N3E 1B6 Canada</p>		<p>PROPOSED MONITORING WELL LOCATION PLAN 815 ST. DAVID STREET NORTH, FERGUS, ON</p>		<p>KCH-00200564-GO</p>	<p>AS NOTED</p>	<p>CY/RH</p>
<p>OCTOBER 2011</p>				<p>1</p>		



C-7238
 ZK10416





Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A 120107

11-0159-00

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.	[REDACTED]		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Vaughan	ON	L4H1K5X3411671606200

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Dr.	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	549187	4840073
Municipal Plan and Sublot Number	Other		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	gravel		0 3.6
brown	silt	clay, stones.		3.6 9.1

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)	
0 6.7	bentonite chips		
6.7 9.1	gravel		

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☒ Rotary (Conventional)	☐ Commercial
☐ Rotary (Reverse)	☐ Domestic
☐ Boring	☐ Livestock
☐ Air percussion	☐ Irrigation
☐ Other, specify _____	☐ Industrial
	☐ Other, specify _____
	☐ Not used
	☐ Dewatering
	☒ Monitoring
	☐ Cooling & Air Conditioning

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5.1	plastic	0.65	0 7.6	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify _____
				☐ Other, specify _____

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6.4	plastic	10	7.6 9.1

Water Details	Hole Diameter
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Depth (m/ft) From To
Kind of Water: ☐ Fresh ☐ Untested	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	0 9.1 9.8
Kind of Water: ☐ Fresh ☐ Untested	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	
Kind of Water: ☐ Fresh ☐ Untested	

Well Contractor and Well Technician Information			
Business Name of Well Contractor	Well Contractor's Licence No.		
Hardwark Drilling Inc.	7121318		
Business Address (Street Number/Name)	Municipality		
25 Lewis Road - Unit C	Guelph		
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
51982691840	Gordon, Michael		
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
3590	[Signature]	2011/11/07	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify _____		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☐ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

Please see attached map.

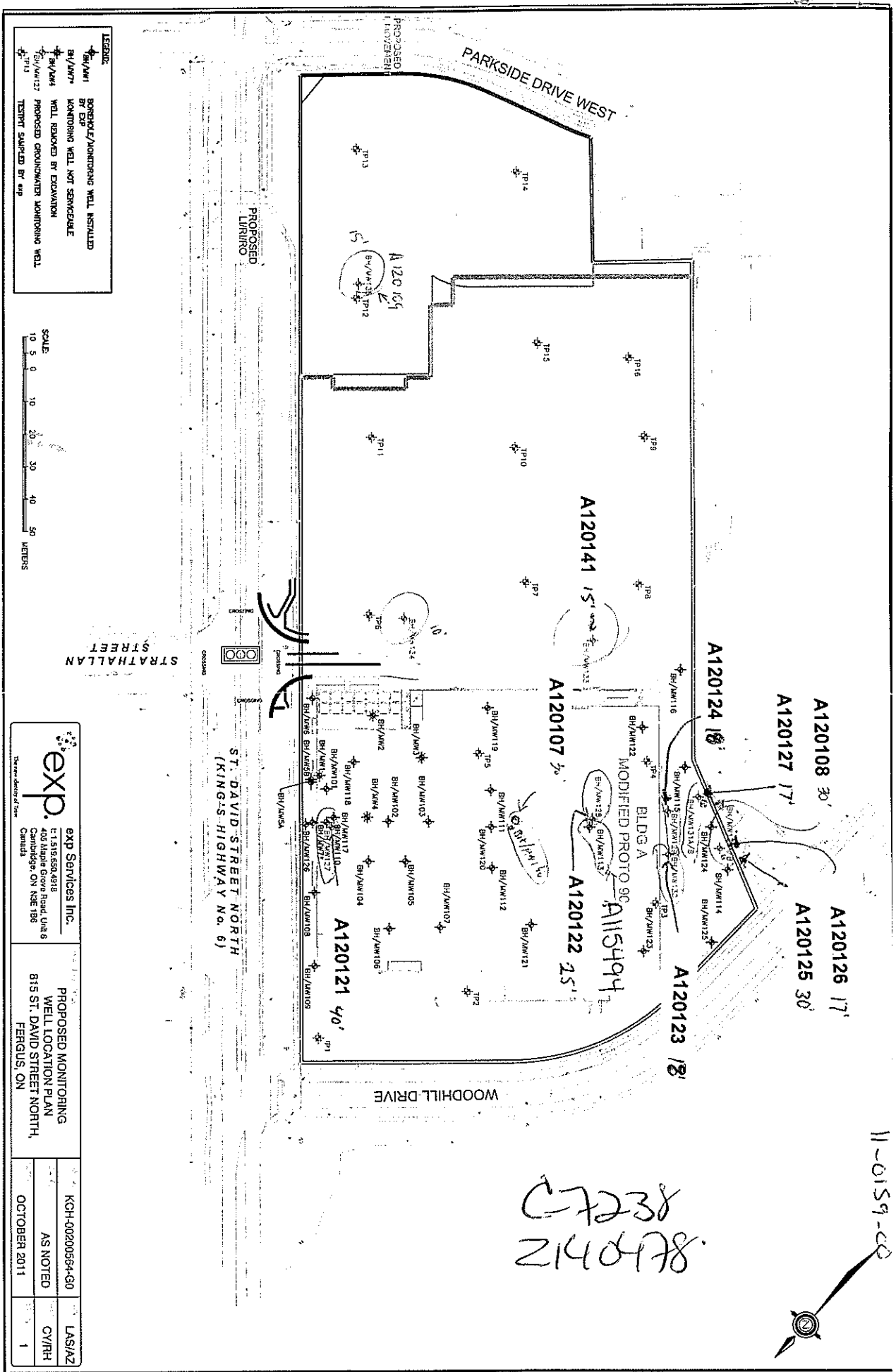
Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Y Y Y Y M M D D	Audit No.
	Date Work Completed	2140478
	2011/11/03/1	Received JAN 19 2012

11-0159-00

C7238
214078

JAN 19 2012





Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A120109

11-0159-00

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☒ Metric ☐ Imperial

Page _____ of _____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.	[REDACTED]		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Uaughan	ON	L4H1K5XB

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Drive	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD	83	17	5493034840611
Municipal Plan and Sublot Number	Other		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	gravel		0 3.6
brown	grit	clay, stones		3.6 4.5

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From To		
0 1.2	bentonite chips	
1.2 4.5	sand	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify auger	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☒ Monitoring ☐ Not used ☐ Dewatering

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
			From To	
5.1	plastic	0.65	0 1.5	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen		
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.
		Depth (m/ft)
6.4	plastic	10
		From To
		1.5 4.5

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		From To	
		0 4.5	2.1

Business Name of Well Contractor		Well Contractor's Licence No.	
Aardark Drilling Inc.		712318	
Business Address (Street Number/Name)		Municipality	
25 Lewis Road - Unit C		Guelph	
Province	Postal Code	Business E-mail Address	
ON	N1H1E9		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
5198069340		Gordon, Micah	
Well Technician's Licence No.		Signature of Technician and/or Contractor	
315910		[Signature]	
Date Submitted			
20111107			

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
	50		50	
Well production (l/min / GPM)	60		60	
Disinfected? ☐ Yes ☐ No				

Map of Well Location

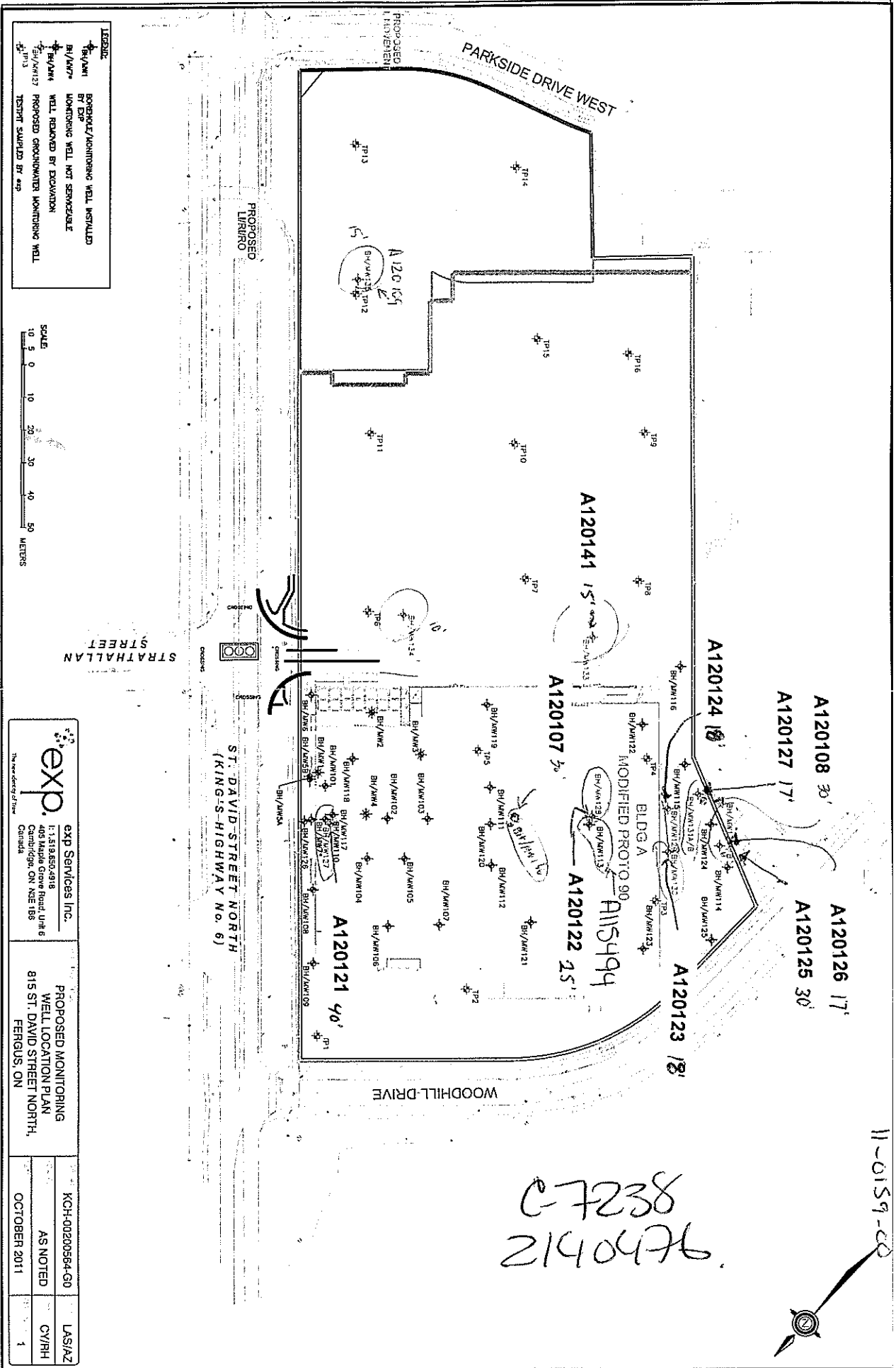
Please provide a map below following instructions on the back.

Please see
attached
map.

Comments:

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 20111107	Date Work Completed Y Y Y Y M M D D 20111107	Ministry Use Only Audit No. Z140476 JAN 19 2012
---	---	--	--

11-0159-00



C-7238
2140476



Ministry of
the Environment

Well Tag No. (Place Sticker and/or Print Below)

A 120108

11-059-00

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Fergus Shopping Centres Ltd.			
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
700 Applewood Crescent, Suite 100	Vaughan	ON	L4K5X3

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
St. David St. N. + Woodhill Drive	Nichol		
County/District/Municipality	City/Town/Village	Province	Postal Code
Wellington	Fergus	Ontario	
UTM Coordinates	Zone	Eastings	Northing
NAD 83	17	549114	4840040
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
brown	sand	gravel		0 3.6
brown	silt	clay, stones		3.6 9.1

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0 6.7	bentonite chips	
6.7 9.1	sand	

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☒ Rotary (Conventional)	☐ Commercial
☐ Rotary (Reverse)	☐ Domestic
☐ Boring	☐ Livestock
☐ Air percussion	☐ Industrial
☐ Other, specify	☐ Other, specify
☐ Diamond	☐ Not used
☐ Jetting	☐ Dewatering
☐ Driving	☒ Monitoring
☐ Digging	☐ Test Hole
	☐ Cooling & Air Conditioning

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
5.1	plastic	0.65	0 7.6	☐ Water Supply
				☐ Replacement Well
				☐ Test Hole
				☐ Recharge Well
				☐ Dewatering Well
				☒ Observation and/or Monitoring Hole
				☐ Alteration (Construction)
				☐ Abandoned, Insufficient Supply
				☐ Abandoned, Poor Water Quality
				☐ Abandoned, other, specify
				☐ Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
6.4	plastic	10	7.6 9.1

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	From To	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	0 9.1	9.8
	☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested		
	☐ Gas ☐ Other, specify		

Business Name of Well Contractor		Well Contractor's Licence No.
Aardark Drilling Inc.		7121318
Business Address (Street Number/Name)		Municipality
25 Lewis Road - Unit C		Guelph
Province	Postal Code	Business E-mail Address
ON	N1H1E9	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)
519 826 9340		Gordon, Mizah
Well Technician's Licence No.		Signature of Technician and/or Contractor
3590		
		Date Submitted
		2011/12/10

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping _____ hrs + _____ min	4		4	
	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

Please see attached map.

Comments:

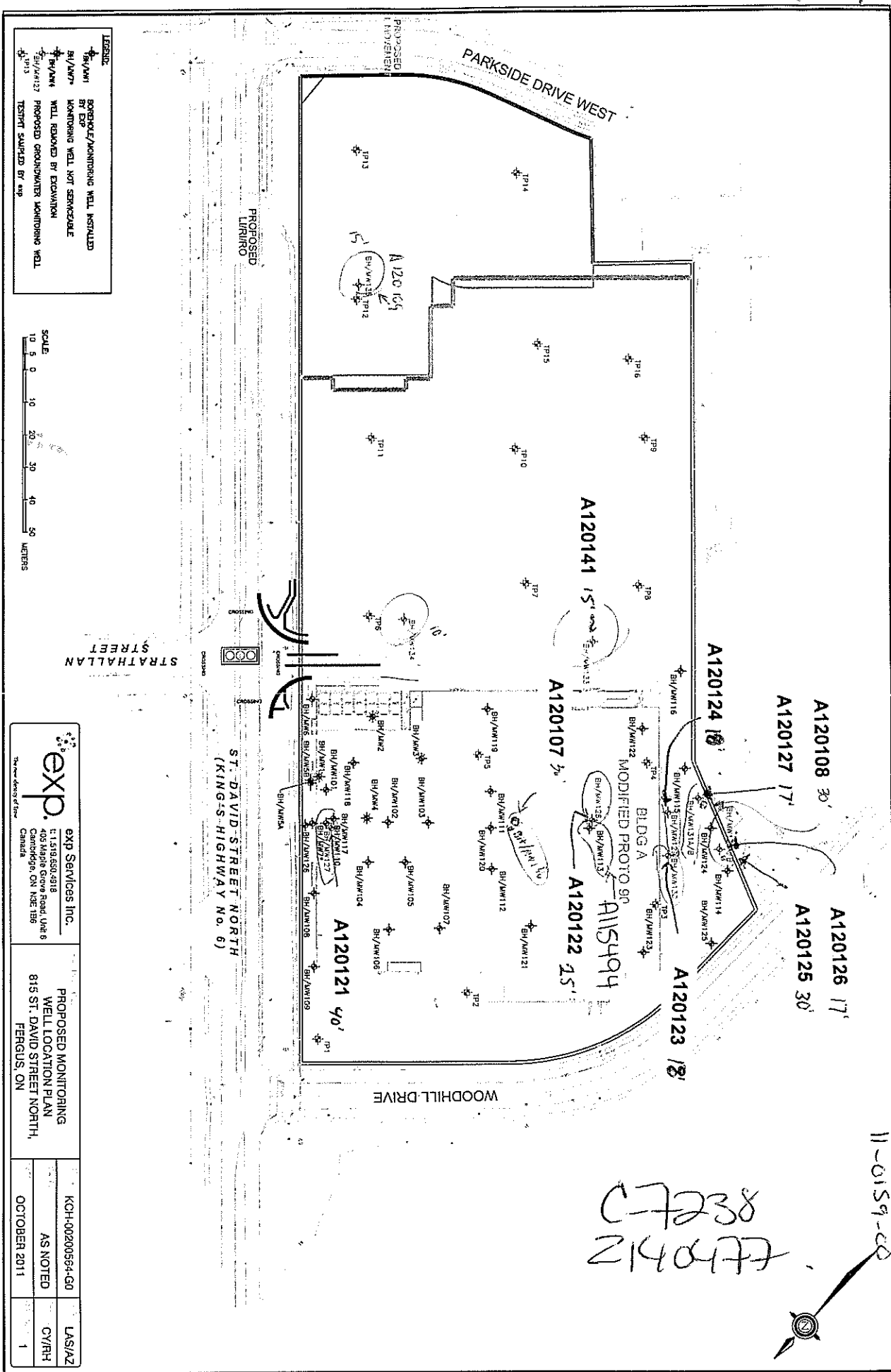
Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes	Y/Y/Y/M/M/D/D	Audit No.
☐ No	2011/12/10	Z140477
		JAN 19 2012

11-0159-00

C-7238
2140477



JAN 19 2012



exp. The new way of doing things exp. Services Inc. T: 1.519.850.4918 405 Maple Grove Road, Unit 6 Cambridge, ON N6E 1B6 Canada		PROPOSED MONITORING WELL LOCATION PLAN 815 ST. DAVID STREET NORTH, FERGUS, ON	
KOH-00200564-G0 AS NOTED OCTOBER 2011		LSI/AZ CY/PH 1	

Address of Well Location (Street Number/Name) 51 Side Rd 19 RR#1		Township Nichol	Lot Park 3	Concession
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2W3
UTM Coordinates NAD 83 17548803	Zone 18	Easting 4840120	Northings Plan 71	Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
	Deepened Previously Bored Well				
Brown	Med Sand			12 1/2	16
Brown	Clay			16	18
Grey	Clay			18	29
Grey	Fine Sand	Clay Stone		29	31

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
7	31	Un known Filter Sand	

Method of Construction ☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☒ Boring ☐ Air percussion ☐ Other, specify	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	Well Use ☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring
---	--	---	---

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
36"	Concrete	3"	+1	12 1/2	☒ Water Supply
24"	Galvanized	1/4"	7	31	☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply
					☐ Abandoned, Poor Water Quality
					☐ Abandoned, other, specify
					☐ Other, specify

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☐ Insufficient Supply

☐ Abandoned, Poor Water Quality

☐ Abandoned, other, specify

☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☒ Untested	Depth (m/ft) From	To
11	☐ Gas ☐ Other, specify	12 1/2	31

Well Contractor and Well Technician Information	
Business Name of Well Contractor Johnson & Baetz	Well Contractor's Licence No. 7492
Business Address (Street Number/Name) 52 Church Rd RR#1	Municipality Waterford
Province On	Postal Code N0E1Y0
Bus. Telephone No. (inc. area code) 519 443 0045	Name of Well Technician (Last Name, First Name) Avez Dorey
Well Technician's Licence No. 2988	Signature of Technician and/or Contractor
Date Submitted YY YY YY MM DD DD	

Results of Well Yield Testing			
After test of well yield, water was: ☒ Clear and sand free ☐ Other, specify	Draw Down Time (min)	Water Level (m/ft)	Recovery Time (min)
If pumping discontinued, give reason:	Static Level	13' 2"	15' 4"
Pump intake set at (m/ft) 25'	1		1
Pumping rate (l/min / GPM) 10 Gpm	2		2
Duration of pumping 1 hrs + 00 min	3		3
Final water level end of pumping (m/ft) 15' 4"	4		4
If flowing give rate (l/min / GPM)	5		5
Recommended pump depth (m/ft) 25'	10		10
Recommended pump rate (l/min / GPM) 5 Gpm Int	15	13 11	15 10' 6"
Well production (l/min / GPM) 7 Gpm	20		20
Disinfected? ☒ Yes ☐ No	25		25
	30	14 5	30 10' 1"
	40		40
	50		50
	60	15' 4"	60 10' 1"

Map of Well Location
Please provide a map below following instructions on the back. 19 Side Rd

Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered YY YY YY MM DD DD	Date Work Completed YY YY YY MM DD DD	Ministry Use Only Audit No. Z154219 DEC 19 2012 Received
---	---	--	---

Address of Well Location (Street Number/Name) **53 Side Rd 19** Township **Nichol** Lot **Pt 1/4 348** Concession **Moorehead Survey**
 County/District/Municipality **Wellington** City/Town/Village **Fergus** Province **Ontario** Postal Code
 UTM Coordinates Zone **18** Easting **117548784** Northing **4640098** Municipal Plan and Sublot Number **Plan 71** Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
				From To
	Deepened	Previously Bored Well		
Brown	Med Sand			12 1/2 16
Brown	Clay			16 18
Brown	Fine Sand			18 20
Grey	Clay			20 29
Grey	Fine Sand	Clay & Stone		29 30

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
From To			
6 30	Unknown Filter Sand		

Method of Construction
☐ Cable Tool ☐ Diamond ☐ Public ☐ Commercial ☐ Not used
☐ Rotary (Conventional) ☐ Jetting ☐ Domestic ☐ Municipal ☐ Dewatering
☐ Rotary (Reverse) ☐ Driving ☐ Livestock ☐ Test Hole ☐ Monitoring
☒ Boring ☐ Digging ☐ Irrigation ☐ Cooling & Air Conditioning
☐ Air percussion ☐ Industrial ☐ Other, specify
☐ Other, specify

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From To		
36"	Concrete	3"	+1 12 1/2	☒ Water Supply	
24"	Galvanized	1/4"	6 30	☐ Replacement Well	
				☐ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☐ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☐ Abandoned, other, specify 	
				☐ Other, specify 	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
			From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☒ Untested	Depth (m/ft)	Diameter (cm/in)
11	☐ Gas ☐ Other, specify 	From To	
		12 1/2 30	28"

Well Contractor and Well Technician Information
 Business Name of Well Contractor **Johnson & Baetz** Well Contractor's Licence No. **7492**
 Business Address (Street Number/Name) **52 Church Rd RR#1** Municipality **Waterford**
 Province **On** Postal Code **M0E1Y0** Business E-mail Address
 Bus. Telephone No. (inc. area code) **519 443 0045** Name of Well Technician (Last Name, First Name) **Avey Darcy**
 Well Technician's Licence No. **2988** Signature of Technician and/or Contractor **[Signature]** Date Submitted **Y Y Y Y M M D D**

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☒ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify 			
If pumping discontinued, give reason:		Static Level	Recovery
			Time (min) Water Level (m/ft)
		10'9"	13'4"
Pump intake set at (m/ft)		1	1
25'		2	2
Pumping rate (l/min / GPM)		3	3
5 Gpm		4	4
Duration of pumping		5	5
1 hrs + 00 min		10	10
Final water level end of pumping (m/ft)		15	15
13'4"		15	11'3"
If flowing give rate (l/min / GPM)		20	20
Recommended pump depth (m/ft)		25	25
24'		30	30
Recommended pump rate (l/min / GPM)		30	10'9"
5 Gpm Int		40	40
Well production (l/min / GPM)		50	50
3 Gpm		60	60
Disinfected?		15'4"	10'9"
☒ Yes ☐ No			

Map of Well Location
 Please provide a map below following instructions on the back.
 19 Side Rd
 House
 Well
 Hwy 6

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☒ No	Y Y Y Y M M D D	Audit No. z154217
	Date Work Completed	DEC 19 2012
	Y Y Y Y M M D D	Received

No Tag

Address of Well Location (Street Number/Name) 0048 Sideroad 19		Township Centre Wellington (Nichol)	Lot Pt 19	Concession 15
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2W3
UTM Coordinates Zone NAD 83 17	Easting 548789	Northings 4840173	Municipal Plan and Sublot Number	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
	Abandonment of 36" dug well		Bentonite Chips	3.05 2.43
	Concrete removed 1.2 m below grade		Natu Soil	2.43 0.00

Annular Space			
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
3.05 2.43	Bentonite Chips	0.41	
2.43 0	Clay Silt	1.60	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Public ☐ Commercial ☐ Not used ☐ Municipal ☐ Dewatering ☐ Test Hole ☐ Monitoring ☐ Cooling & Air Conditioning	

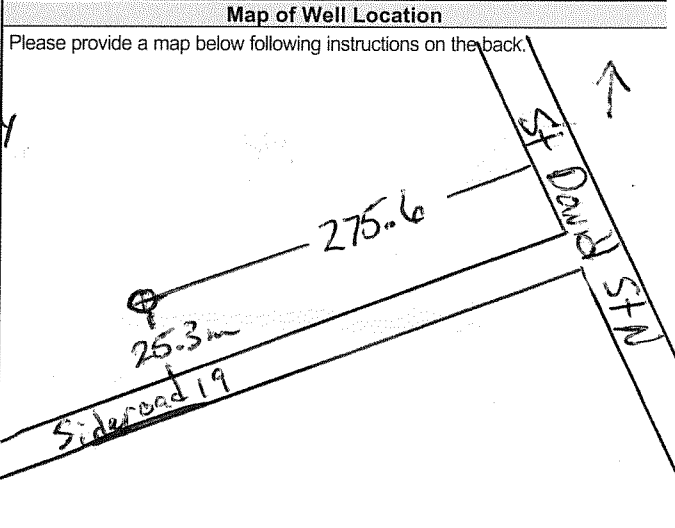
Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To		
91.4	Concrete		3.05 0.00		

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To		

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From To	Diameter (cm/in)

Well Contractor and Well Technician Information			
Business Name of Well Contractor Well Initiatives Ltd		Well Contractor's Licence No. 7 2 2 1	
Business Address (Street Number/Name) 5 Townline Rd		Municipality Orangeville	
Province ON	Postal Code L9W3R4	Business E-mail Address info@wellinitatives.com	
Bus. Telephone No. (inc. area code) 519 846 8289		Name of Well Technician (Last Name, First Name) BROADFOOT JIM	
Well Technician's Licence No. 0 3 7 0		Signature of Technician and/or Contractor [Signature]	
		Date Submitted 20121221	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☐ Yes ☐ No		30	30
		40	40
		50	50
		60	60



Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered YYYYMMDD 20121221	Date Work Completed 20121221	Ministry Use Only Audit No. Z 159310 Recd JAN 04 2013
---	--	---------------------------------	--

Measurements recorded in: ☒ Metric ☐ Imperial

Page 1 of 1

No Tag

Address of Well Location (Street Number/Name) 0140 Sideroad 19		Township Centre Wellington (Nichol)	Lot P+ 19	Concession 15
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2W3
UTM Coordinates NAD 83	Zone 17	Easting 548553	Northings 4839911	Municipal Plan and Sublot Number

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m) From To
	Abandonment of 36" dugwell.		Bentonite Chips	3.35 2.85
	Approximate depth is 3.3 m		Native Soil	2.85 0.00
	Concrete Removal 1.5m below ground		(clay-silt)	

Annular Space		
Depth Set at (m) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³)
3.35 2.85	Bentonite Chips	0.33
2.85 0	Clay-silt	1.85

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Diamond ☐ Jetting ☐ Driving ☐ Digging	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring

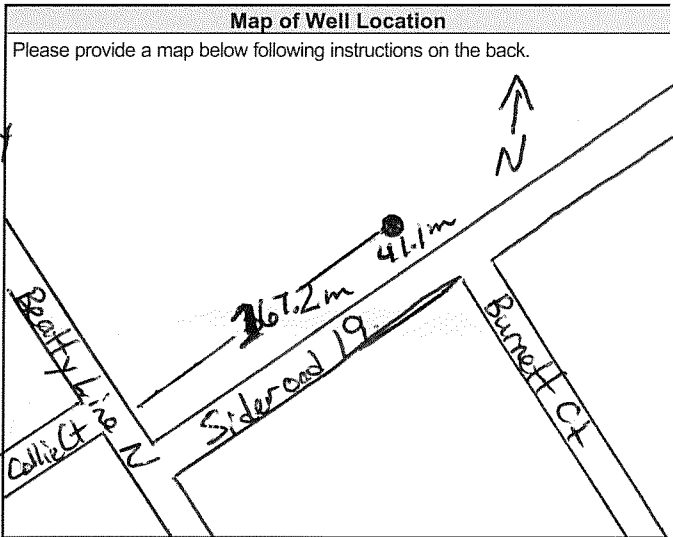
Construction Record - Casing				Status of Well
Inside Diameter (cm)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify ☐ Other, specify
91.4	concrete		3.35 0.00	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor Well Initiatives Ltd		Well Contractor's Licence No. 7221	
Business Address (Street Number/Name) 15 Townline Rd		Municipality Orangeville	
Province ON	Postal Code L9W3R4	Business E-mail Address info@wellinitatives.com	
Bus. Telephone No. (inc. area code) 5198468289		Name of Well Technician (Last Name, First Name) Graff, Dwayne	
Well Technician's Licence No. 2753		Signature of Technician and/or Contractor [Signature]	
		Date Submitted 2012/12/12	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☐ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
	

Well owner's information package delivered ☒ Yes ☐ No	Date Package Delivered YYYYMMDD 20121212	Ministry Use Only Audit No. 2159313 JAN 04 2013
---	--	--

No Tag

Address of Well Location (Street Number/Name) 0102 Sideroad 19		Township Centre Wellington (Nickel)	Lot Pt 19	Concession 15
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2W3
UTM Coordinates Zone NAD 83	Easting 17548553	Northings 4839911	Municipal Plan and Sublot Number	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m) From To
	Abandonment of a 36" dugwell		Bentonite Chips	3.35 2.65
	Approximate depth is 3.3 m			
	Concrete removed 1.6 m below ground		Native Soil (clay-silt)	2.65 0.00

Annular Space			
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
3.35 2.85	Bentonite	0.33	
2.65 0	clay-silt	0.46	
		1.67	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning
☐ Air percussion		☐ Industrial	
☐ Other, specify		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To		
91.4	concrete		3.35 0.00	☐ Water Supply	
				☐ Replacement Well	
				☐ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☐ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☒ Abandoned, other, specify Municipal Supply	
				☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor Well Initiatives Ltd		Well Contractor's Licence No. 7 2 2 1	
Business Address (Street Number/Name) 5 Townline Rd		Municipality Orangeville	
Province ON	Postal Code L9W3R4	Business E-mail Address info@wellinitiatives.com	
Business Telephone No. (inc. area code) 519 846 8289		Name of Well Technician (Last Name, First Name) Graft, Dwayne	
Well Technician's Licence No. 2 7 5 3		Signature of Technician and/or Contractor 	
		Date Submitted 20121212	

Results of Well Yield Testing					
After test of well yield, water was:		Draw Down		Recovery	
☐ Clear and sand free		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Other, specify					
If pumping discontinued, give reason:		Static Level			
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
Duration of pumping hrs + min		4		4	
Final water level end of pumping (m/ft)		5		5	
If flowing give rate (l/min / GPM)		10		10	
Recommended pump depth (m/ft)		15		15	
Recommended pump rate (l/min / GPM)		20		20	
Well production (l/min / GPM)		25		25	
Disinfected?		30		30	
☒ Yes ☐ No		40		40	
		50		50	
		60		60	

Map of Well Location	
Please provide a map below following instructions on the back.	

Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered Y Y Y Y M M D D 20121211	Date Work Completed 20121211	Ministry Use Only Audit No. 2159314 JAN 04 2013
---	---	---------------------------------	--

Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name JAMES KEATING	Last Name / Organization CONSTRUCTION LTD	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 70 MATHIESON ST	Municipality WELLINGTON	Province ON	Postal Code N0B1S0
		Telephone No. (inc. area code) 519 846 9704	

Well Location

Address of Well Location (Street Number/Name) BEATTY LINE N & MILLAGE LN	Township WHITTON	Lot	Concession
County/District/Municipality WELLINGTON	City/Town/Village FERRIS	Province Ontario	Postal Code
UTM Coordinates NAD 83 17548648	Zone 18	Easting 4839425	Northings
Municipal Plan and Sublot Number			Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
BROWN	TOPSOIL		loose	0.6
BROWN	FILL		Loose	1.5
BROWN	SILT	SAND	face on	3
GREY	SILT	CLAY		4.2

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³)	
0 to 1.9	3/8 NAEPUG	< 1	
1.9 to 4.2	#2 SAND	< 1	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify _____	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____
☐ Diamond ☐ Jetting ☒ Driving ☐ Digging	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning
	☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____
2.54	PLASTIC		0 to 1.5	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
3.3	PLASTIC	10	1.5 to 4.2

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
0 to 4.2	☐ Gas ☐ Other, specify _____	0 to 4.2	10

Well Contractor and Well Technician Information			
Business Name of Well Contractor KEATING CONSTRUCTION LTD	Well Contractor's Licence No. 7366		
Business Address (Street Number/Name) 1011 INDUSTRIAL CRES	Municipality WATERLOO		
Province ON	Postal Code N0B1M0	Business E-mail Address CAN@GOLDEN.NET	
Bus. Telephone No. (inc. area code) 519 699 5715	Name of Well Technician (Last Name, First Name) DAVIES, BUD		
Well Technician's Licence No. 3458	Signature of Technician and/or Contractor 	Date Submitted 2013 04 29	

Results of Well Yield Testing			
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery
	Time (min)	Water Level (m/ft)	Time (min)
If pumping discontinued, give reason:	Static Level		
	1		1
Pump intake set at (m/ft)	2		2
Pumping rate (l/min / GPM)	3		3
Duration of pumping ____ hrs + ____ min	4		4
Final water level end of pumping (m/ft)	5		5
If flowing give rate (l/min / GPM)	10		10
Recommended pump depth (m/ft)	15		15
Recommended pump rate (l/min / GPM)	20		20
Well production (l/min / GPM)	25		25
Disinfected?	30		30
☐ Yes ☐ No	40		40
	50		50
	60		60

Map of Well Location	
Please provide a map below following instructions on the back.	
<p>BEATTY LINE N</p>	
Comments:	

Well owner's information package delivered		Ministry Use Only	
Date Package Delivered 2013 04 29	Date Work Completed 2013 04 29	Audit No. Z 161337	
☐ Yes ☐ No		Received MAY 03 2013	



Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name JAMES KEATING	Last Name / Organization CONSTRUCTION LTD.	E-mail Address	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 70 MATHIESON ST		Municipality WELLINGTON	Province ON
		Postal Code N0B1S0	Telephone No. (inc. area code) 519 846 9704

Well Location

Address of Well Location (Street Number/Name) 6509 BEATTY LN		Township MAPLETON	Lot	Concession
County/District/Municipality WELLINGTON		City/Town/Village FERGUS	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 17	Easting 548446	Northing 4839524	Municipal Plan and Sublot Number
				Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	Topsoil		Loose	0	0.6
Brown	Fill		Loose	0.6	1.5
Brown	SILT	SAND	PACKED	1.5	3.9

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	1.5	3/8 HOLE PLUG	21
1.5	3.9	#2 SAND	21

Method of Construction	Well Use
☐ Cable Tool	☐ Public
☐ Rotary (Conventional)	☐ Domestic
☐ Rotary (Reverse)	☐ Livestock
☐ Boring	☐ Irrigation
☐ Air percussion	☐ Industrial
☐ Other, specify	☐ Other, specify
☐ Diamond	☐ Commercial
☐ Jetting	☐ Municipal
☒ Driving	☒ Monitoring
☐ Digging	☐ Cooling & Air Conditioning

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
2.54	PLASTIC		0	2.1

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☒ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
3.3	PLASTIC	10	2.1	3.9

☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From	To
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	0	3.9
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Business Name of Well Contractor CMT ENG INC		Well Contractor's Licence No. 7366
Business Address (Street Number/Name) 1011 INDUSTRIAL CRES		Municipality WATERLOO
Province ON	Postal Code N0B2M0	Business E-mail Address CMT@GODON.NET
Bus. Telephone No. (inc. area code) 519 899 5725		Name of Well Technician (Last Name, First Name) DANIEL BUD
Well Technician's Licence No. 3458		Signature of Technician and/or Contractor
		Date Submitted 20130429

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify		Static Level	Recovery
If pumping discontinued, give reason:			
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☐ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

BEATTY LINE N

MILLAGE LN

6509

21m

75m

Comments:	Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 20130429	Ministry Use Only Audit No. Z 161334 Received MAY 03 2013
-----------	--	---	--

Measurements recorded in: ☒ Metric ☒ Imperial

ABANDONMENT

Address of Well Location (Street Number/Name) 0059 VICTORIA CRES.			Township Nelson	Lot 19	Concession 15
County/District/Municipality Wellington			City/Town/Village Fergus	Province Ontario	Postal Code N1M2W3
UTM Coordinates	Zone	Easting	Northings	Municipal Plan and Sublot Number	Other
NAD 83	17	548949	4039886		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used	Volume Placed
From	To	(Material and Type)	(m ³ /ft ³)
0	6	Fill	
6	16	Fill	
		Penonite Grout	500 lbs

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, specify <u>Rotary Air</u>		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					☐ Water Supply
					☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☒ Abandoned,

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☒ Insufficient Supply
☒ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify* _____
☐ Other, *specify* _____

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____	Depth (m/ft) From	Diameter To (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____		

Well Contractor and Well Technician Information				
Business Name of Well Contractor			Well Contractor's Licence No.	
Innovative Well Services Ltd			21663	
Business Address (Street Number/Name)			Municipality	
15896 Country View Dr #7 2R#5			Guelph	
Province	Postal Code	Business E-mail Address		
ON	N1H6P2	info@innovativewell.ca		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)		
97638239		Sharon Henry		
Well Technician's Licence No.		Signature of Technician and/or Contractor		Date Submitted
0590		[Signature]		2013/06/22

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Clear and sand free ☐ Other, specify _____	Static Level			
If pumping discontinued, give reason:	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected?	60		60	
☒ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.

Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered Y Y Y Y M M D D Date Work Completed 20130527	Ministry Use Only Audit No. Z 172215 Received 10 2013
---	--	---

Ministry of
the EnvironmentMeasurements recorded in: ☐ Metric ☒ Imperial

Well Tag No. (Place Sticker and/or Print Below)

Tag#: A152843

A152843

S-14856 Well Record
Regulation 903 Ontario Water Resources Act

Page _____ of _____

1554366 ONTARIO INC.

Address of Well Location (Street Number/Name) 820 St. David St. N		Township		Lot		Concession	
County/District/Municipality		City/Town/Village Fergus		Province Ontario		Postal Code	
UTM Coordinates		Zone Easting		Northing		Municipal Plan and Sublot Number	
NAD 83		17		549205		4840167	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	Sand	Fill	soft	0	5
Grey	Sand	silt	soft	5	15

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	1	Concrete	
1	4	Bentonite	
4	15	Silica Sand	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☒ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning
☐ Air percussion		☐ Industrial	
☐ Other, specify		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
1.5	PVC	.125	0	5	☐ Water Supply
					☐ Replacement Well
					☒ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☒ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply
					☐ Abandoned, Poor Water Quality
					☐ Abandoned, other, specify
					☐ Other, specify

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To
1.75	PVC	10	5	15

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From	To
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	0	15
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Business Name of Well Contractor Strata Soil Sampling Inc.		Well Contractor's Licence No. 7241	
Business Address (Street Number/Name) 147-2 West Beaver Creek Rd		Municipality Richmond Hill	
Province On	Postal Code L4B1L6	Business E-mail Address wrecords@stratasoil.com	
Bus. Telephone No. (inc. area code) 9057649304		Name of Well Technician (Last Name, First Name) Eric McNeil	
Well Technician's Licence No. 3617		Signature of Technician and/or Contractor [Signature]	
		Date Submitted 2013/12/13	

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, <i>specify</i> _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping _____ hrs + _____ min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
	15		15	
Recommended pump depth (m/ft)	20		20	
	25		25	
Recommended pump rate (l/min / GPM)	30		30	
Well production (l/min / GPM)	40		40	
	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered YYYYMMDD 2013/11/22
Date Work Completed 2013/11/22	
Ministry Use Only Audit No. Z168936 DEC 18 2013	

Measurements recorded in: ☐ Metric ☐ Imperial

Page of

Well Owner's Information

First Name JAMES	Last Name / Organization KEATING CONSTRUCTION LTD	E-mail Address			☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 70 MITCHELSON ST		Municipality WELLINGTON	Province ON	Postal Code	Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) 6509 BEATTY LN				Township		Lot		Concession			
County/District/Municipality WELLINGTON				City/Town/Village FELGUS.				Province Ontario		Postal Code 	
UTM Coordinates		Zone		Easting		Northing		Municipal Plan and Sublot Number			
NAD 83		17		540446		4839524					
								Other			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
From	To		
0	3.9	3/8 HOLEPLUS	21

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Clear and sand free	If pumping discontinued, give reason:	Static Level			
☐ Other, <i>specify</i>		1		1	
		2		2	
		3		3	
		4		4	
		5		5	
		10		10	
		15		15	
		20		20	
		25		25	
		30		30	
		40		40	
	50		50		
	60		60		

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, *specify* _____

Well Use

☐ Public ☐ Commercial ☐ Not used
☒ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify _____

Construction Record - Casings

[illegible]

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☒ Abandoned, other, specify **Construction**
☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

Map of Well Location

Please provide a map below following instructions on the back.

A hand-drawn map of a property. At the top, the street is labeled "BEATTY LN". On the left side, a vertical line is labeled "MILLAGE". In the center of the property is a rectangular area labeled "6509". On the right side, there is a small rectangular area labeled "21m" and "75m". At the bottom right corner, there is a label "PO".

Water Details

Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____

Hole Diameter

[illegible]

Well Contractor and Well Technician Information

Business Name of Well Contractor CMT ENG INC		Well Contractor's Licence No. 7366	
Business Address (Street Number/Name) 1011 INDUSTRIAL CRTS		Municipality WATERLOO	
Province ON	Postal Code N0B1M0	Business E-mail Address CMT INC . NET	
Bus. Telephone No. (inc. area code) 519 699 5775		Name of Well Technician (Last Name, First Name) DAVIES, BLD	
Well Technician's Licence No. 3458	Signature of Technician and/or Contractor 		Date Submitted 20140602

Well owner's information package delivered	Date Package Delivered
☐ Yes ☐ No	Date Work Completed 2/1/48539

Ministry Use Only
Audit No. Z186496
JUN 09 2014

Measurements recorded in: ☐ Metric ☐ Imperial

WELL ABANDONMENT

Well Owner's Information

First Name JAMES	Last Name / Organization KEATING CONSTRUCTION LTD.	E-mail Address		☐ Well Constructed by Well Owner	
Mailing Address (Street Number/Name) 70 MATHIESON ST.		Municipality WELLINGTON	Province ON	Postal Code	Telephone No. (inc. area code)

Well Location

Address of Well Location (Street Number/Name) BEATTY LN & MILLAGE LN				Township		Lot		Concession	
County/District/Municipality WELLINGTON				City/Town/Village FERGUS		Province Ontario		Postal Code 	
UTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number		Other	
NAD 83		17	5481648	4839425					

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

[illegible]

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Clear and sand free ☐ Other, <i>specify</i> _____	Static Level			
If pumping discontinued, give reason:	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected?	60		60	
☐ Yes ☐ No				

Method of Construction

☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, specify _____		☐ Other, specify _____		

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify*

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					☐ Water Supply
					☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned,

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☒ Abandoned, other, specify
CONSULTATION
☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify <u>CONSTRUCTION</u> ☐ Other, specify
			From	To	

Water Details

Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____

Hole Diameter

Depth (m/ft)		Diameter (cm/in)
From	To	

Well Contractor and Well Technician Information

Business Name of Well Contractor CMT ENG INC		Well Contractor's Licence No. 7 3 6 6	
Business Address (Street Number/Name) 1011 INDUSTRIAL CRES		Municipality WATERLOO	
Province ON	Postal Code N0B 2M6	Business E-mail Address CMT INC - NET	
Bus. Telephone No. (inc. area code) 519 699 5775		Name of Well Technician (Last Name, First Name) DAVIES BLD	
Well Technician's Licence No. 34 58	Signature of Technician and/or Contractor 		Date Submitted 2011/4/6/02

Map of Well Location

Please provide a map below following instructions on the back.

BEATTY LN

M
I
L
L
A
C
I

L
N

854

13m

Comments:

Well owner's
information
package
delivered

☐ Yes

☐ No

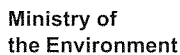
Date Package Delivered

DATE WORK COMPLETED

Ministry Use Only

Audit No. **Z 186493**

7 JUN 09 2014



Well Record

Page of

Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name	Last Name / Organization		E-mail Address		☐ Well Constructed by Well Owner
	KINGMA				
Mailing Address (Street Number/Name)		Municipality	Province	Postal Code	Telephone No. (inc. area code)
SIDE RD 19 0054		fergus	ONT		

Well Location

Address of Well Location (Street Number/Name)				Township NICHOL		Lot 15		Concession 15	
County/District/Municipality WELLINGTON				City/Town/Village				Province Ontario	
								Postal Code 	
UTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number			Other
NAD 83		17	548758	4840116					

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)[illegible]

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To		
0	6ft	bentonite clay fill	
6ft	112ft	BENTONITE	
112ft	185ft	CLEAN SAND	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, <i>specify</i> _____		☐ Other, <i>specify</i> _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					☐ Water Supply
					☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☒ Abandoned, other, *specify* _____
☐ Other, *specify* _____

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From	Diameter (cm/in) To
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information

Business Name of Well Contractor										Well Contractor's Licence No.									
KEITH LANG WELL DRILLING INC										7154									
Business Address (Street Number/Name)										Municipality									
51 ELDON ST GODERICH																			
Province					Postal Code					Business E-mail Address									
ONT					N7A3R9														
Bus. Telephone No. (inc. area code)										Name of Well Technician (Last Name, First Name)									
										KEITH LANG									
Well Technician's Licence No.					Signature of Technician and/or Contractor					Date Submitted									
T445										Y Y Y Y M M D D									

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Other, <i>specify</i> _____				
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
	15		15	
If flowing give rate (l/min / GPM)	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected?	60		60	
☒ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.

House

Way
#6

X WELL
↓ 60H

County 19#
SIDEROAD

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
	Date Work Completed	Audit No. Z198021
☐ Yes ☒ No	2015 4 10	Received MAY 21 2015

Measurements recorded in: ☐ Metric ☒ Imperial

Well Tag No. (Place Sticker and/or Print Below)

No Tag

Well Record

Regulation 903 Ontario Water Resources Act

Page 7 of 7

Address of Well Location (Street Number/Name) 69 Sideroad 19			Township Cen Wellington (Nichol)		Lot	Concession	
County/District/Municipality Wellington			City/Town/Village Fergus		Province Ontario		Postal Code N1M2W4
UTM Coordinates			Municipal Plan and Sublot Number		Other		
NAD	8	3	175487154840045				

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (ft) From	To
			A bandonment of 36" concrete dugwell	0	8'
			native fill		
			concrete tile removed 6' below grade	8'	11'9"
			bentonite chips		

Annular Space			
Depth Set at (ft) From To		Type of Sealant Used (Material and Type)	Volume Placed (ft ³)
0	8	native Fill	
8	11'9"	bentonite chips	26.49

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, <i>specify</i> _____		☐ Other, <i>specify</i> _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm /in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
36	concrete				☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply

Construction Record - Screen					
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		
			From	To	

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☒ Abandoned, other, specify **Municipal**
☐ Other, specify _____

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	Diameter To (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
Well Initiatives Limited		7 2 2 1	
Business Address (Street Number/Name)		Municipality	
15 Townline Oranville			
Province	Postal Code	Business E-mail Address	
ON	L9W3R4	info@wellinitiatives.com	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
5198468289		Weed, Patrick	
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
3 8 0 0	Patrick		20150602

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Other, specify _____	Static Level			
If pumping discontinued, give reason:	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping _____ hrs + _____ min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
Recommended pump depth (m/ft)	15		15	
Recommended pump rate (l/min / GPM)	20		20	
Well production (l/min / GPM)	25		25	
Disinfected?	30		30	
☒ Yes ☐ No	40		40	
	50		50	
	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

Side road 19

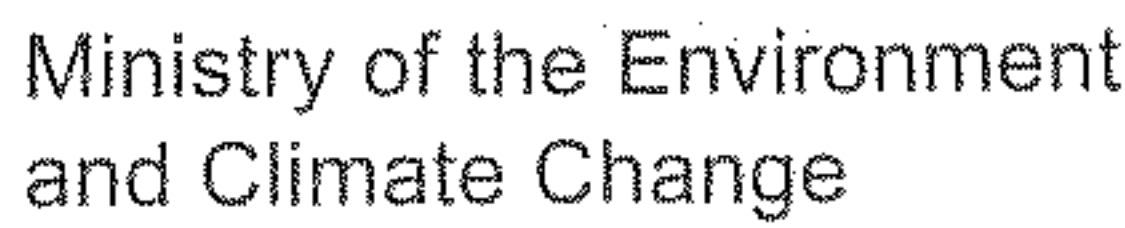
65m

62.2m

Victoria Crescent

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only Audit No. Z 211482 JUN 23 2015 Received
	Y Y Y Y M M D D Date Work Completed 20150526	



Tag#: A176776 A176776

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☒ Imperial

Page 1 of 1

FOOTNOTES

Address of Well Location (Street Number/Name) 810 St. David St. N.			Township	Lot	Concession
County/District/Municipality			City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	17	549230	4840184		

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
From	To		
0	1	Concrete	
1	4	Bentonite	
4	15	Silica Sand	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion	<i>Direct Push</i>	☐ Industrial		
☒ Other, specify <i>Direct Push</i>		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
1.5	PVC	.125	0	5	☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
1.75	PVC	10	5	15

Water Details		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	0	15	3.5
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Well Contractor and Well Technician Information											
Business Name of Well Contractor						Well Contractor's Licence No.					
Strata Soil Sampling Inc.						7 2 4 1					
Business Address (Street Number/Name)						Municipality					
165 Shields Ct.						Markham					
Province		Postal Code		Business E-mail Address							
On		L3R8V2		wrecords@stratasoil.com							
Telephone No. (inc. area code)				Name of Well Technician (Last Name, First Name)							
057649304				Hellyer, Nathan							
Well Technician's Licence No.				Signature of Technician and/or Contractor				Date Submitted			
3 7 7 2								2016 0629			

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Other, specify _____	Static Level			
If pumping discontinued, give reason:	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping	4		4	
_____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
Recommended pump depth (m/ft)	20		20	
Recommended pump rate (l/min / GPM)	25		25	
Well production (l/min / GPM)	30		30	
Disinfected?	40		40	
☐ Yes ☐ No	50		50	
	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

See Map

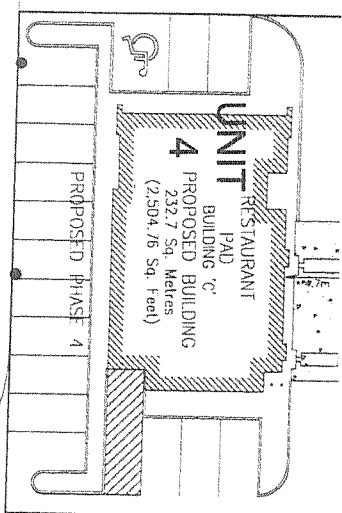
Mw-4

Comments:

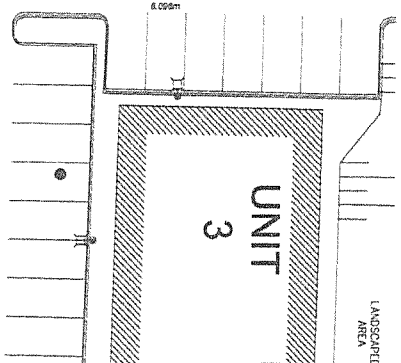
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y M M D D 2 0 1 6 0 6 1 6	Ministry Use Only Audit No. Z 210010 Rejected: 0
--	--	--

Released
JUL 04 2016
© Queen's Printer for Ontario, 2014

DIRECTIONAL SIGN POST LOCATION
SIGN PROVIDED BY OTHERS
(SIGN DESIGN TO MEET ALL BY-LAWS)



PART 2, PLAN 61r-10768
EASEMENT TO PUBLIC UTILITIES
COMMISSION OF THE CORPORATION
OF THE TOWN OF FERGUS
6/20/2011



5-18725

Bilal / Well over

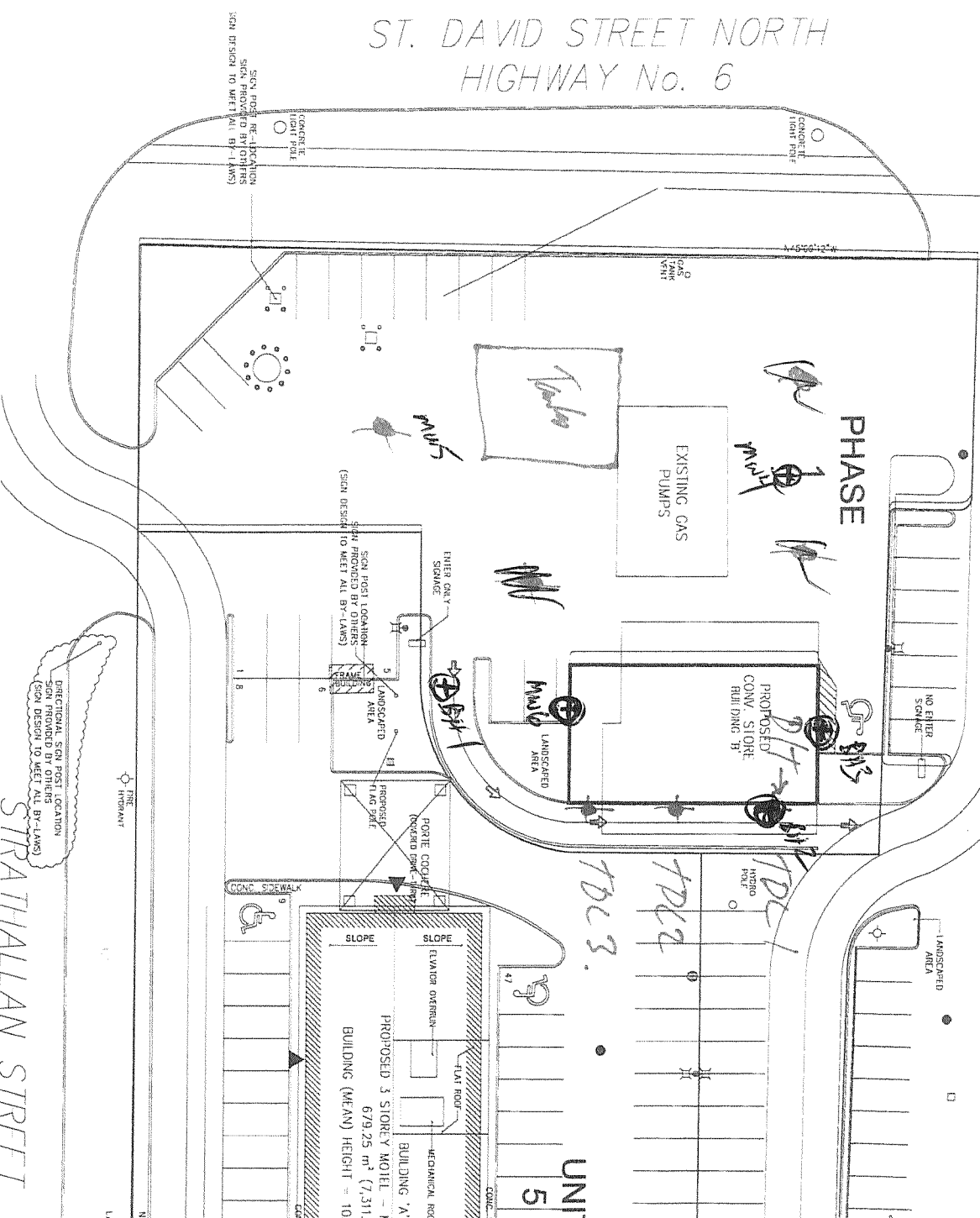
Robert D'Hall

810 ST DAVID ST
NORTH

Fergus Allan & Co

Perndir_21@chroma7.com

519 835 6410



STRA THALLAN STREET

C-744
7210010
JUL 04 2016

Measurements recorded in: ☐ Metric ☒ Imperial

Page: A176777 A176777

S-18725 Page _____ of _____

Address of Well Location (Street Number/Name) 810 St. David St. N		Township	Lot	Concession	
County/District/Municipality		City/Town/Village Fergus		Province Ontario	Postal Code
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	
NAD	8	3	175492484840144	Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To		
0	1	Concrete	
1	4	Bentonite	
4	15	Silica Sand	

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☒ Test Hole	☒ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify <u>Direct Push</u>		☐ Other, specify _____		

Construction Record - Casing					Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☒ Test Hole ☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply
			From	To	
1.5	PVC	.125	0	5	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To
1.75	PVC	10	5	15

☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify* _____
☐ Other, *specify* _____

Water Details		Hole Diameter		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____	Depth (m/ft)		Diameter (cm/in)
		From	To	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____	0	15	3.5
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, <i>specify</i> _____			

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
Strata Soil Sampling Inc.		7 2 4 1	
Business Address (Street Number/Name)		Municipality	
165 Shields Ct.		Markham	
Province	Postal Code	Business E-mail Address	
On	L3R8U2	wrecords@stratasoil.com	
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
9057649304		Hellyer, Nathan	
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
3729			20160629

Results of Well Yield Testing

After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
☐ Other, specify _____	Static Level			
If pumping discontinued, give reason:	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping hrs + min	5		5	
Final water level end of pumping (m/ft)	10		10	
	15		15	
If flowing give rate (l/min / GPM)	20		20	
	25		25	
Recommended pump depth (m/ft)	30		30	
	40		40	
Recommended pump rate (l/min / GPM)	50		50	
	60		60	
Well production (l/min / GPM)				
Disinfected?				
☐ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back

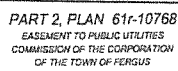
See Map

MW-~~8~~5

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only Audit No. Z 210008 Received <i>Jul 1 2020</i>
	YY YY MM DD Date Work Completed 20160616	
☐ Yes ☐ No		

DIRECTIONAL SIGN POST LOCATION
SIGN PROVIDED BY OTHERS
(SIGN DESIGN TO MEET ALL BY-LAWS)



C-7241
7210008
JUL 04 2016

JUL 04 2016

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

Well Owner's Name: (Carguest Auto Parts) E-mail Address: _____
 Mailing Address (Street Number/Name): 4 Erinville Drive Municipality: Erin Province: Ont
☐ Well Constructed by Well Owner

Well Location

Address of Well Location (Street Number/Name): 75 Sideroad 18 Township: Center Wellington Lot: _____ Concession: _____
 County/District/Municipality: Center Wellington City/Town/Village: Fergus Province: Ontario Postal Code: _____
 UTM Coordinates: Zone 18 Easting 0810235704 Northing 342500 Municipal Plan and Sublot Number: _____ Other: _____

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
				From To
	"Well Decommission"			
36" dia bored well 13' deep - pumped 1 volume of water from the well, chlorinated the well, removed concrete, placed bentonite seal, back fill with fill material to grade.				

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
From To		
	bentonite seal	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Dewatering
☒ Boring	☐ Digging	☐ Irrigation	☐ Monitoring
☐ Air percussion		☐ Industrial	☐ Cooling & Air Conditioning
☐ Other, specify		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From To		
36"	concrete	3"	0 13	☐ Water Supply	
				☐ Replacement Well	
				☐ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☐ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☒ Abandoned, other, specify	unused.
				☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
			From To

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information			
Business Name of Well Contractor: <u>S.D. Smith Drilling Co. Ltd.</u>		Well Contractor's Licence No.: <u>4868</u>	
Business Address (Street Number/Name): <u>P.O. Box 787</u>		Municipality: <u>Erin</u>	
Province: <u>Ont</u>	Postal Code: <u>N0B 1T0</u>	Business E-mail Address: _____	
Bus. Telephone No. (inc. area code): <u>519 853 3717</u>		Name of Well Technician (Last Name, First Name): <u>Smith, Simon</u>	
Well Technician's Licence No.: <u>T346</u>		Signature of Technician and/or Contractor: <u>[Signature]</u>	
		Date Submitted: <u>20160609</u>	

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping hrs + min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
Recommended pump depth (m/ft)	15		15	
Recommended pump rate (l/min / GPM)	20		20	
Well production (l/min / GPM)	25		25	
Disinfected? ☒ Yes ☐ No	30		30	
	40		40	
	50		50	
	60		60	

Map of Well Location

Please provide a map below following instructions on the back.

Comments: Well Decommissioning

Well owner's information package delivered		Ministry Use Only	
☒ Yes	Date Package Delivered: <u>20160609</u>	Audit No: <u>2216893</u>	
☐ No	Date Work Completed: <u>20160603</u>	Received: <u>AUG 10 2016</u>	



Measurements recorded in: ☐ Metric ☒ Imperial

Page _____ of _____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	WRIGHTHAUSE HOMES		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
11 SPENCER DR.	ELORA	ON	N0B1S0	5198296199

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
14 SIDE RD 19	NICHOL	18	15.

County/District/Municipality	City/Town/Village	Province	Postal Code
WELLINGTON	FERGUS	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD	8	3	17548882	4940322	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
				From To
		ABANDONMENT RECORD		
			36" BORED WELL	0 19
			WASHED GRAVEL	19 17
			BENTONITE	17 15
			CLAY FILL & BENTONITE	15 0
			TILES REMOVED.	0 6

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From To		

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify _____	☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____ ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring

Construction Record - Casing			Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
			From To	
				☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify NOT USED ☐ Other, specify _____

Construction Record - Screen			Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From To	
				☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify NOT USED ☐ Other, specify _____

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify _____	Depth (m/ft)	Diameter (cm/in)
		From To	

Well Contractor and Well Technician Information	
Business Name of Well Contractor	Well Contractor's Licence No.
JIM WILSON WELL DRILLING	7385
Business Address (Street Number/Name)	Municipality
551 EBYCREST RD	WATERLOO
Province	Postal Code
ON	N2T4G8
Business E-mail Address	

us Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
5196482412	WILSON Jim
Well Technician's Licence No.	Signature of Technician and/or Contractor
71924	[Signature]
	Date Submitted
	20160831

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify _____		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
Pump intake set at (m/ft)		Static Level	
Pumping rate (l/min / GPM)		1	1
Duration of pumping _____ hrs + _____ min		2	2
Final water level end of pumping (m/ft)		3	3
If flowing give rate (l/min / GPM)		4	4
Recommended pump depth (m/ft)		5	5
Recommended pump rate (l/min / GPM)		10	10
Well production (l/min / GPM)		15	15
Disinfected? ☐ Yes ☐ No		20	20
		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location
Please provide a map below following instructions on the back.

Comments:	Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered YYY Y M M D D 20160824	Date Work Completed 20160824
	Ministry Use Only		Audit No. 2239262
	SEP 08 2016		Received

Measurements recorded in: ☐ Metric ☒ Imperial

Page _____ of _____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	WRIGHTHAUSE HOMES		
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code
11 SPENCER DR.	ELORA	ON	N0B1S0
Telephone No. (inc. area code)		51 982 961 99	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
14 SIDE RD 19	NICHOL	18	15
County/District/Municipality	City/Town/Village	Province	Postal Code
WELLINGTON	FERGUS	Ontario	
UTM Coordinates	Zone	Easting	Northing
NAD 83	17	548932	4840297
Municipal Plan and Sublot Number		Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
		ABANDONMENT RECORD		
			5" DRILLED	0 320
			WASHED GRAVEL	320 300
			BENTONITE	300 5
			CASING CUT & BACK FILLED	5 0

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From	To	

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning
☐ Air percussion		☐ Industrial	
☐ Other, specify		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	☒ Water Supply	
			From To	☐ Replacement Well	
				☐ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☐ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☒ Abandoned, other, specify	NOT USED
				☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
			From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
		From To	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Business Name of Well Contractor		Well Contractor's Licence No.	
TIM WILSON WELL DRILLING LTD		7 3 8 5	
Business Address (Street Number/Name)		Municipality	
551 EBYCREST RD.		WATERLOO	
Province	Postal Code	Business E-mail Address	
ON	N2T4G8		
us. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
7196482412		WILSON TIM	
Well Technician's Licence No.		Signature of Technician and/or Contractor	
1 9 2 4		20160831	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify			
If pumping discontinued, give reason:		Static Level	
		1	1
Pump intake set at (m/ft)		2	2
Pumping rate (l/min / GPM)		3	3
Duration of pumping _____ hrs + _____ min		4	4
Final water level end of pumping (m/ft)		5	5
If flowing give rate (l/min / GPM)		10	10
Recommended pump depth (m/ft)		15	15
Recommended pump rate (l/min / GPM)		20	20
Well production (l/min / GPM)		25	25
Disinfected?		30	30
☒ Yes ☐ No		40	40
		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

↑

30'

SIDE RD 19

6 HWY

FERGUS.

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☒ No	Y Y Y Y M M D D	
Date Work Completed		Audit No. 2239261
20160824		SEP 08 2016

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	Exams for Dental Professionals Ex		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
600 WOODBINE AVENUE SUITE 30055	TORONTO	ONT.	M4C 5Y2	416 895 3495

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
875 ST. DAVID ST. N	CENTRE WELLINGTON	PT LOT 103	—

County/District/Municipality WELLINGTON	City/Town/Village FERGUS	Province Ontario	Postal Code M1M 2W3
---	------------------------------------	----------------------------	-------------------------------

UTM Coordinates		Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD	83	17	549009	4840198	Pr. Lot 1 on 61R-11688 (PLAN 71)	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space	Results of Well Yield Testing
---------------	-------------------------------

Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)	After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
From	To				Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
				If pumping discontinued, give reason:	Static Level			
					1		1	
					2		2	

Method of Construction		Well Use			
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used	
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering	
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring	
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning		
☐ Air percussion		☐ Industrial			
☐ Other, specify _____		☐ Other, specify _____			
				Pumping rate (l/min / GPM)	3
				Duration of pumping _____ hrs + _____ min	4
				Final water level end of pumping (m/ft)	5
				If flowing pipe rate (l/min / GPM)	10
					15

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned,

Construction Record - Screen					Map of Well Location	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify UNUSED ☐ Other, specify _____	Please provide a map below following instructions on the back. 
			From	To		

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
MARTIN'S WATER SYSTEMS LTD.		6231	
Business Address (Street Number/Name)		Municipality	
2090 BRICKER SCHOOL LANE		EUMIRA	
Province	Postal Code	Business E-mail Address	
ONT.	N3B2Z3	info@martinswater.ca	
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)		
5196642580	MARTIN LESTER		
Well Technician's Licence No.	Signature of Technician and/or Contractor		Date Submitted
3520			2017/1/22

5000

3

0

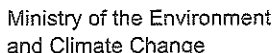
Comments:

Well owner's information package delivered	Date Package Delivered
☐ Yes	Y Y Y Y M M D D
☐ No	Date Work Completed
	2017/1/14

Ministry Use Only	
Audit No.	2250086
DEC 6 4 2017	
Received	

Results of Well Yield Testing				
After test of well yield, water was:	Draw Down		Recovery	
☐ Clear and sand free ☐ Other, <i>specify</i> _____	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected?				
☐ Yes ☐ No				

Map of Well Location									
Please provide a map below following instructions on the back.									
<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="text-align: center; margin-right: 10px;"> N </div> <div style="flex-grow: 1;"> </div> </div>									
Comments:									
Well owner's information package delivered ☐ Yes ☐ No	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date Package Delivered</td> <td style="padding: 5px;">Ministry Use Only</td> </tr> <tr> <td style="padding: 5px;"> <div style="display: flex; justify-content: space-between;"> Y Y Y Y M M D D </div> </td> <td style="padding: 5px;"> Audit No. Z250086 </td> </tr> <tr> <td style="padding: 5px;">Date Work Completed</td> <td style="padding: 5px;"> <div style="text-align: center;"> DEC 6 4 2017 </div> </td> </tr> <tr> <td style="padding: 5px;"> <div style="font-size: 1.2em;">2017/11/14</div> </td> <td style="padding: 5px;">Received</td> </tr> </table>	Date Package Delivered	Ministry Use Only	<div style="display: flex; justify-content: space-between;"> Y Y Y Y M M D D </div>	Audit No. Z250086	Date Work Completed	<div style="text-align: center;"> DEC 6 4 2017 </div>	<div style="font-size: 1.2em;">2017/11/14</div>	Received
Date Package Delivered	Ministry Use Only								
<div style="display: flex; justify-content: space-between;"> Y Y Y Y M M D D </div>	Audit No. Z250086								
Date Work Completed	<div style="text-align: center;"> DEC 6 4 2017 </div>								
<div style="font-size: 1.2em;">2017/11/14</div>	Received								



Well Record

Regulation 903 Ontario Water Resources Act

Page of

Measurements recorded in: ☐ Metric ☒ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner		
	FERGUS (ST. DAVID) DEVELOPMENTS INC				
Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)	
500 WOODBINE AVENUE, SUITE 300/55	TORONTO	ONT.	M4C 1V2	416 819 5341	

Well Location

Address of Well Location (Street Number/Name)				Township		Lot		Concession	
875 ST. DAVID ST. N.				CENTRE WELLINGTON PT 143				/	
County/District/Municipality				City/Town/Village				Province	
WELLINGTON				NORTH FERGUS				Ontario	
UTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number			Other
NAD		8	3	1125420008	4340198	PT LOT 1 ON 61R-11689 (PLAN 71)			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
			NATIVE SOIL	0	5
			BENTONITE	5	6
			GRAVEL	6	13
			BENTONITE	13	14
			GRAVEL	14	19

Angular Space

Depth Set at (<i>m/ft</i>)		Type of Sealant Used (<i>Material and Type</i>)	Volume Placed (<i>m³/ft³</i>)
From	To		

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping _____ hrs + _____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
If flowing give rate (l/min / GPM)	15		15	
	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
	40		40	
Well production (l/min / GPM)	50		50	
Disinfected? ☐ Yes ☐ No	60		60	

Construction Record - Casing

inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☒ Abandoned,
			From	To	

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify _____ ☐ Other, specify _____
			From	To	

Water Details

Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft)		Diameter (cm/in)
		From	To	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Hole Diameter

Depth (m/ft)		Diameter (cm/in)
From	To	

Well Contractor and Well Technician Information

Business Name of Well Contractor		Well Contractor's Licence No.
MARTIN'S WATER SYSTEMS LTD.		61281
Business Address (Street Number/Name)		Municipality
3090 BREYER SCHOOL LINE		ELMIRA
Province	Postal Code	Business E-mail Address
ONT.	N3B2Z9	kmw@martinswater.co
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	
519 664 2580	MARTIN LESTER	
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3154219	LM -	2014/11/22

Map of Well Location

Please provide a map below following instructions on the back.

St. David St. N.

St. Road 19

331 FT.

331 FT.

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only	
	Y Y Y Y M M D D		Audit No. 2250084
	Date Work Completed		DEC 04 2017
☐ Yes	2017/11/14	Received	
☐ No			

Address of Well Location (Street Number/Name) 127 sd rd 18		Township Centre Wellington P+R+K	Lot	Concession
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M 2G3
UTM Coordinates Zone NAD 83	Easting 175148217	Northings 17984101119	Municipal Plan and Sublot Number Plan 87	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
Brown	sand	clay	soft	0	18
Brown	Clay	sand, stones	soft	18	80
Brown	Shale	limestone	soft layered	80	84
Brown	lime stone		Hard	84	215

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)
0	84	Bentonite slurry
		Volume Placed (m³/ft³) 7.45 ft³

Method of Construction	Well Use
☐ Cable Tool ☒ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring	

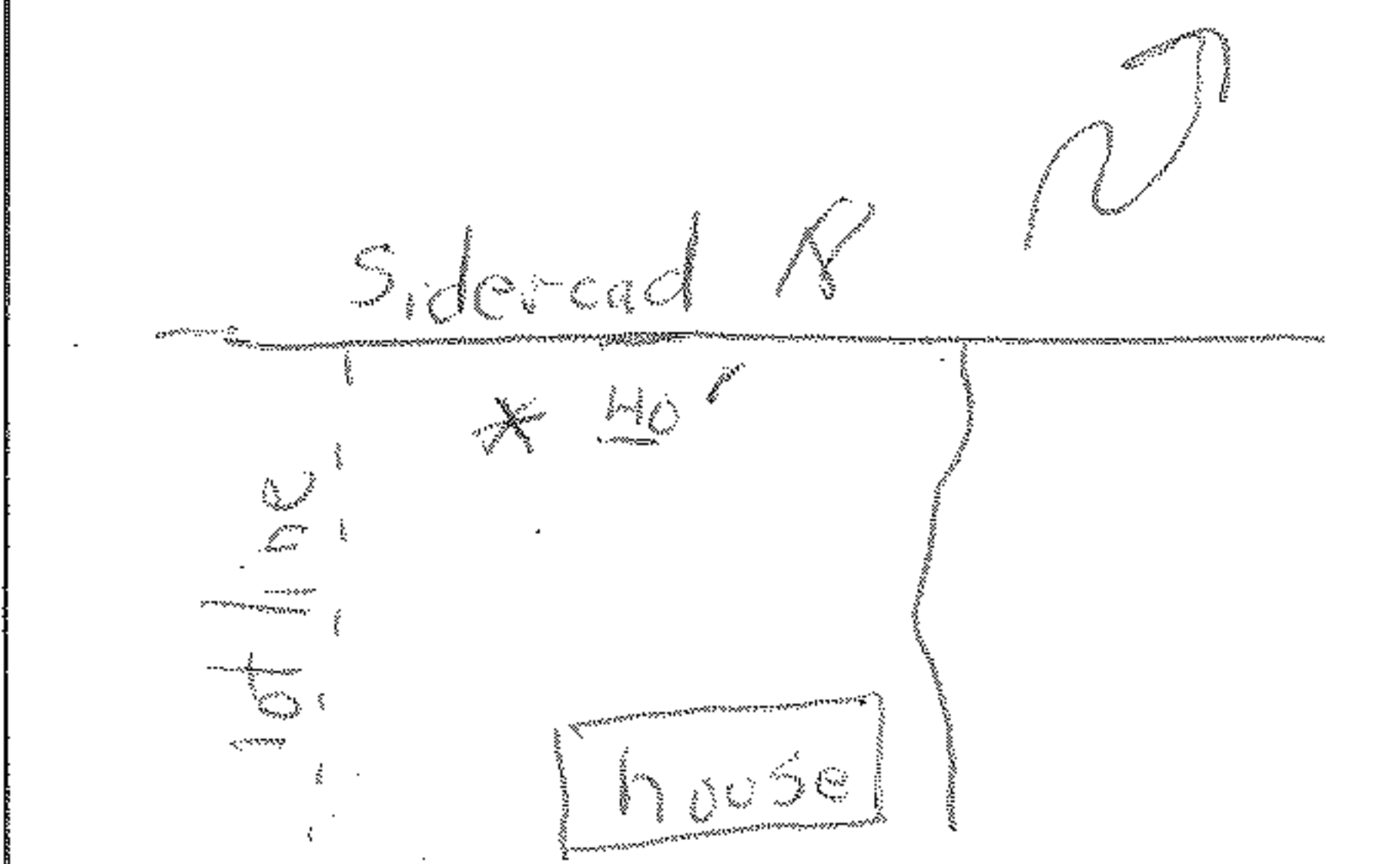
Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify
6 1/4	Steel	1.88	12 84	
5"	Plastic		82 120	

Construction Record - Screen				☐ Other, specify
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	

Water Details		Hole Diameter	
Water found at Depth	Kind of Water: ☒ Fresh ☐ Untested	Depth (m/ft) From	To
180 (m/ft)	☐ Gas ☐ Other, specify	0	84
Water found at Depth	Kind of Water: ☒ Fresh ☐ Untested	84	215
205 (m/ft)	☐ Gas ☐ Other, specify		
Water found at Depth	Kind of Water: ☐ Fresh ☐ Untested		
(m/ft)	☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor Martin Well Drilling Inc.		Well Contractor's Licence No. 715517	
Business Address (Street Number/Name) Box 60 Alma		Municipality Wellington	
Province Ontario	Postal Code N0B 1A10	Business E-mail Address	
Bus. Telephone No. (inc. area code) 519 846 9162		Name of Well Technician (Last Name, First Name) Martin Mike	
Well Technician's Licence No. 34130		Signature of Technician and/or Contractor [Signature] Date Submitted 2017/12/27	

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☒ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	Recovery
Pump intake set at (m/ft) 120		1	75
Pumping rate (l/min / GPM) 15		2	76
Duration of pumping 1 hrs + 0 min		3	77
Final water level end of pumping (m/ft) 90		4	78
If flowing give rate (l/min / GPM)		5	79
Recommended pump depth (m/ft) 120		10	80
Recommended pump rate (l/min / GPM) 18		15	83
Well production (l/min / GPM) 20+		20	85
Disinfected? ☒ Yes ☐ No		25	87
		30	89
		40	90
		50	90
		60	90

Map of Well Location	
Please provide a map below following instructions on the back.	
	
Comments:	
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 20171227
Date Work Completed 20171227	
Ministry Use Only Audit No. 2252834 Received JAN 19 2018	



Measurements recorded in: ☐ Metric ☒ Imperial

Page 1 of 1

HANDY MAN SERVICES

Address of Well Location (Street Number/Name) 67 Victoria Cres.		Township Centre Wellington	Lot 19	Concession 12/9
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2K3
UTM Coordinates Zone NAD 83	Easting 17548920	Northing 4840116	Municipal Plan and Sublot Number Plan 72	Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
			Extend well - head of 30"		
			galvanized dug well	-1	+2
			well depth 15"		

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type) Volume Placed (m³/ft³)
0	1	Bentonite chips 4.75ft³

Method of Construction		Well Use	
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole
☒ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning
☐ Air percussion		☐ Industrial	
☐ Other, specify		☐ Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☒ Water Supply	
30"	Galvanized		-1 15	☐ Replacement Well	
36	cement	3"	-1 +2	☐ Test Hole	
				☐ Recharge Well	
				☐ Dewatering Well	
				☐ Observation and/or Monitoring Hole	
				☐ Alteration (Construction)	
				☐ Abandoned, Insufficient Supply	
				☐ Abandoned, Poor Water Quality	
				☐ Abandoned, other, specify	
				☐ Other, specify	

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor Martin well Drilling Inc.		Well Contractor's Licence No. 7557	
Business Address (Street Number/Name) Box 60 Alma		Municipality Wellington	
Province Ontario	Postal Code N0B1A0	Business E-mail Address	
Bus. Telephone No. (inc. area code) 5198469162		Name of Well Technician (Last Name, First Name) Martin Mike	
Well Technician's Licence No. 3430		Signature of Technician and/or Contractor Mike Martin	
		Date Submitted 20180319	

Results of Well Yield Testing			
After test of well yield, water was: ☒ Clear and sand free ☐ Other, specify		Draw Down	
If pumping discontinued, give reason:		Time (min)	Water Level (m/ft)
		Static Level	8
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☒ Yes ☐ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	
Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered Y Y Y Y M M D D 20180319
Date Work Completed 20180319	
Ministry Use Only Audit No. 2252817 MAY 11 2018 Received	

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

Address of Well Location (Street Number/Name) 127 Sideroad 18		Township Centre Wellington	Lot 9	Concession 87
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2X7
UTM Coordinates Zone NAD 83	Easting 17548231	Northing 4840115	Municipal Plan and Sublot Number	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
			Decommission dug well		
			according to Reg 903	0	13
			Well diameter	36"	
5	0	sand	35.35ft		

Annular Space		
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)
14	13	sand
13	12	bentonite chips
12	7	sand
7	5	bentonite chips

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☒ Boring ☐ Air percussion ☐ Other, specify	☐ Public ☒ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify

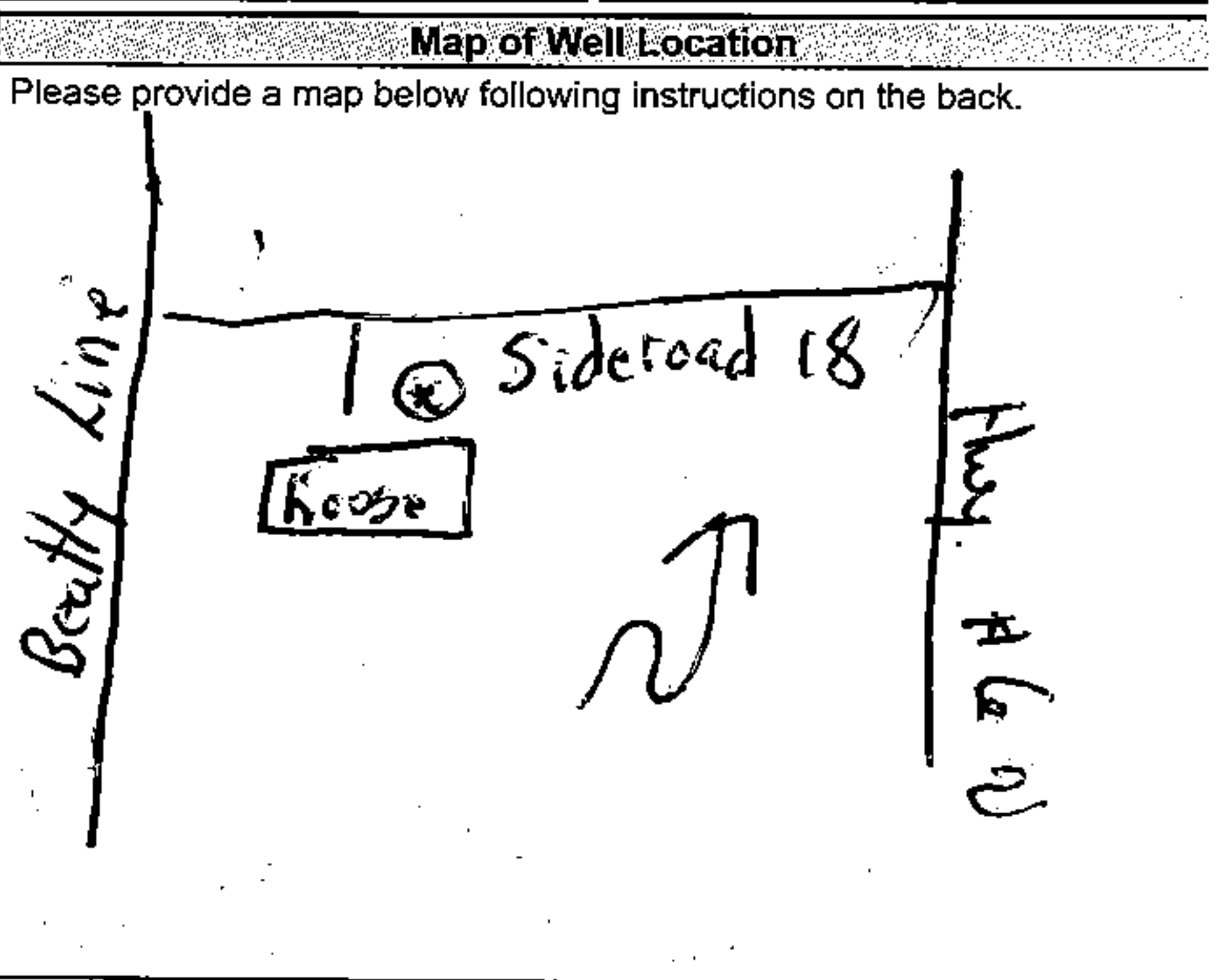
Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From	To
14			
		36"	

Business Name of Well Contractor Martin Well Drilling Inc.		Well Contractor's Licence No. 7557
Business Address (Street Number/Name) Box 60 Alma		Municipality Wellington
Province Ontario	Postal Code N0B1A0	Business E-mail Address
Bus. Telephone No. (inc. area code) 5198469162		Name of Well Technician (Last Name, First Name) Martin Mike
Well Technician's Licence No. 34130		Signature of Technician and/or Contractor [Signature]
		Date Submitted 20170627

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☒ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected?		25	25
☒ Yes ☐ No		30	30
		40	40
		50	50
		60	60

Map of Well Location	
Please provide a map below following instructions on the back.	
	

Comments:	Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered YYYYMMDD 20170627	Date Work Completed 20170627
Ministry Use Only		Audit No. 2252796	Received OCT 01 2016

WRIGHT HAVEN HOMES LIMITED

Address of Well Location (Street Number/Name) 112 Side Rd 19		Township Fergus	Lot	Concession
County/District/Municipality Wellington County		City/Town/Village	Province Ontario	Postal Code
UTM Coordinates Zone Easting Northing NAD 83 17 54847 18839931		Municipal Plan and Sublot Number		Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)					
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
Brown	SAND & GRAVEL			0	15
Brown	SAND	SILT	WLT.	15	20

Annular Space			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
20	SILICA SAND		
14	HYDRATED Bentonite		

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify Auger	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
2"	Pvc	3/16"	15	+3	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify
4x4	Steel	1/8"	+3	-1	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
2"	Pvc	010	20	15

Water Details		Hole Diameter	
Water found at Depth 15 (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft)	Diameter (cm/in)
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	0	20 8
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify		

Well Contractor and Well Technician Information	
LONDON SOIL TEST LTD. 712078 Southgate Sdrd. 71 Dundalk, ON N0C 1B0 519-455-5777 info@londonsoil.com	Well Contractor's Licence No. 711910 Municipality

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name) WATTS Mike
Well Technician's Licence No. 116711	Signature of Technician and/or Contractor Date Submitted 20190306

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	15
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☐ Yes ☒ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location
Please provide a map below following instructions on the back.
SEE ATTACHED MAP
Comments: STEEL STICK UP CASING

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered YYY YYY M M D D Date Work Completed 20190214	Ministry Use Only Audit No. Z305972 APR 01 2019 Received
---	--	---

112 side road 19 Fergus
A264318 z305972

Legend

- 📍 112 Side Rd 19
- 📍 Stick up well



Google Earth

© 2018 Google
Image © 2019 DigitalGlobe

200 ft



Measurements recorded in: ☐ Metric ☒ Imperial

A264316

COLLINGWOOD INDUSTRIAL PROPERTIES INC

Address of Well Location (Street Number/Name)		Township	Lot	Concession	
112 Side Rd 19					
County/District/Municipality		City/Town/Village		Province	Postal Code
Wellington County		Fergus		Ontario	
UTM Coordinates Zone Easting Northing		Municipal Plan and Sublot Number		Other	
NAD 83 1754839914839938					

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)					
General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
Brown	SAND & GRAVEL			0	15
Brown	SAND	SILT	WLT.	15	20

Annular Space			
Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
20	14	SILICA SAND	
14	0	HYDRATED Bentonite	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☒ Other, specify AUGER	☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify ☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☒ Monitoring

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To	
2"	PVC	3/16"	15	+3	☐ Water Supply
4x4	Steel	1/8"	+3	-1	☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☒ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply
					☐ Abandoned, Poor Water Quality
					☐ Abandoned, other, specify
					☐ Other, specify

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To	
2"	PVC	.010	20	15	☐ Water Supply
					☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☒ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply
					☐ Abandoned, Poor Water Quality
					☐ Abandoned, other, specify
					☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify	Depth (m/ft) From	Depth (m/ft) To
15		0	20

Well Contractor and Well Technician Information	
LONDON SOIL TEST LTD. 712078 Southgate Sdrd. 71 Dundalk, ON N0C 1B0 519-455-5777 info@londonsoil.com	Well Contractor's Licence No. 11910 Municipality

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
1671	WATTS, Mike
Well Technician's Licence No.	Signature of Technician and/or Contractor Date Submitted
1671	Mike Watts 20190306

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free ☐ Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	15'
Pump intake set at (m/ft)		1	1
Pumping rate (l/min / GPM)		2	2
Duration of pumping hrs + min		3	3
Final water level end of pumping (m/ft)		4	4
If flowing give rate (l/min / GPM)		5	5
Recommended pump depth (m/ft)		10	10
Recommended pump rate (l/min / GPM)		15	15
Well production (l/min / GPM)		20	20
Disinfected? ☐ Yes ☒ No		25	25
		30	30
		40	40
		50	50
		60	60

Map of Well Location
Please provide a map below following instructions on the back.

Comments: SEE ATTACHED MAP STEEL STICK OF CASING

Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered Y Y Y Y M M D D 20190214	Date Work Completed 20190214	Ministry Use Only Audit No. 2305973 APR 01 2019 Received
--	--	---------------------------------	---

112 side road 19 Fergus

A264316 z3659773

Legend

- 112 Side Rd 19
- Stick up well

Stick up well A264317

A264318 stick up well

112 Side Rd 19

Stick up well A264316

19

Google Earth

© 2018 Google
Image © 2019 DigitalGlobe

200 ft

N

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 (<https://data.ontario.ca/dataset/well-records>) .

Go Back to Map

Well ID

Well ID Number: 7330873
Well Audit Number: Z305974
Well Tag Number: A264317

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

Well Location

Address of Well Location	112 SIDE RD 19
Township	NICHOL TOWNSHIP
Lot	019
Concession	CON 15
County/District/Municipality	WELLINGTON
City/Town/Village	FERGUS
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 548464.00 Northing: 4839857.00
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	SAND	GRVL		0 ft	15 ft
BRWN	SAND	SILT	WBRG	15 ft	20 ft

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
14 ft	0 ft	HYDRATED BENTONITE	
20 ft	10 ft	SILICA SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Other Method	
AUGER	Monitoring

Status of Well

Observation Wells

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
2 Inch	PLASTIC	15 ft	-3 ft

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
2 inch	PLASTIC	20 ft	15 ft

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7190

Results of Well Yield Testing

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

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL	15 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
15 ft	

Hole Diameter

Depth From	Depth To	Diameter
0 ft	20 ft	8 Inch

Audit Number: Z305974

Date Well Completed: February 14, 2019

Date Well Record Received by MOE: April 01, 2019

Related

How to use a Ministry of the Environment map (<https://www.ontario.ca/page/how-use-ministry-environment-map#wells>)

Technical documentation: Metadata record (<https://data.ontario.ca/dataset/well-records/resource/3031344e-e3f2-48d5-888c-c1deadfd2f77>)

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 (<https://data.ontario.ca/dataset/well-records>) .

Go Back to Map

Well ID

Well ID Number: 7338945
Well Audit Number: Z311965
Well Tag Number:

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

Well Location

Address of Well Location	875 ST DAVID ST N
Township	NICHOL TOWNSHIP
Lot	
Concession	
County/District/Municipality	WELLINGTON
City/Town/Village	FERGUS
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 548906.00 Northing: 4840224.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

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

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	3.1 m	BENTONITE 3/8 HOLEPLUG	

Method of Construction & Well Use

Method of Construction	Well Use

Status of Well

Abandoned-Other

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7320

Results of Well Yield Testing

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

Draw Down & Recovery

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

Water Details

Water Found at Depth	Kind
3.1 m	Untested

Hole Diameter

Depth From	Depth To	Diameter
0 m	1.8 m	21 cm

Audit Number: Z311965

Date Well Completed: June 10, 2019

Date Well Record Received by MOE: August 01, 2019

Related

How to use a Ministry of the Environment map (<https://www.ontario.ca/page/how-use-ministry-environment-map#wells>)

Technical documentation: Metadata record (<https://data.ontario.ca/dataset/well-records/resource/3031344e-e3f2-48d5-888c-c1deadfd2f77>)

No Tag Found.

Measurements recorded in: ☒ Metric ☐ Imperial

Well Owner's Information

First Name FERGUS (ST. DAVID)	Last Name / Organization DAVID FRANKIKOS INC.	E-mail Address ATTN: NICK FRANKIKOS	☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 1500 WOODBINE AVE	Municipality TORONTO	Province ONT	Postal Code M4L5R0
Telephone No. (inc. area code)			

Well Location

Address of Well Location (Street Number/Name) 875 St David St N	Township -	Lot -	Concession -
County/District/Municipality	City/Town/Village Fergus	Province Ontario	Postal Code
UTM Coordinates Zone Easting Northing NAD 83 17 548906 4840224	Municipal Plan and Sublot Number	Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
	well	Abandonment		
	Bentonite 3/8 Hdrply		Bentonite 3/8 Hdrply	0 6.1

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring	

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)	
			From To	

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From To	

Water Details		Hole Diameter	
Water found at Depth 4.5 m	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft)	Diameter (cm/in)
	☐ Gas ☐ Other, specify	From To	

Business Name of Well Contractor Direct Environmental Dredging Inc.		Well Contractor's Licence No. 7320
Business Address (Street Number/Name) 37 Shaw Valley Dr		Municipality St Thomas
Province Ont	Postal Code N5R4G5	Business E-mail Address central@directenvironmentaldredging.com
Bus. Telephone No. (inc. area code) 5198680175	Name of Well Technician (Last Name, First Name) Armstrong Anthony	
Well Technician's Licence No. 2772	Signature of Technician and/or Contractor <i>[Signature]</i>	Date Submitted 20190617

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
☐ Clear and sand free		Time (min)	Water Level (m/ft)
☐ Other, specify		Static Level	
If pumping discontinued, give reason:		1	1
Pump intake set at (m/ft)		2	2
Pumping rate (l/min / GPM)		3	3
Duration of pumping		4	4
hrs + min		5	5
Final water level end of pumping (m/ft)		10	10
If flowing give rate (l/min / GPM)		15	15
Recommended pump depth (m/ft)		20	20
Recommended pump rate (l/min / GPM)		25	25
Well production (l/min / GPM)		30	30
Disinfected?		40	40
☐ Yes ☐ No		50	50
		60	60

Map of Well Location

Please provide a map below following instructions on the back.

St David St N

17m

25m

property line

No Tag Found

E 548906

N 4840224

Comments: **pull MW filled with 3/8 Hdrply to 6.1m overdrilled to 1.8m 3/8 Hdrply filled with 3/8 Hdrply**

Well owner's information package delivered	Date Package Delivered Y Y Y Y M M D D	Ministry Use Only
☒ Yes ☐ No	Date Work Completed 20190610	Audit No. 3311961
		AUG 01 2019
		Received

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *

A279200

Type *

☒ Construction ☐ Abandonment

Measurement recorded in: *

☒ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name

First Name

Organization

IMPERIAL OIL

Email Address

Current Address

Unit Number

Street Number *

Street Name *

City/Town/Village

Country

CANADA

Province

ALBERTA

Postal Code

Telephone Number

2. Well Location

Address of Well Location

Unit Number

Street Number *

Street Name *

Township

Lot

Concession

County/District/Municipality

City/Town

FERGUS

Province

Ontario

Postal Code

UTM Coordinates

Zone *

Easting *

Northing *

Municipal Plan and Sublot Number

NAD 83

17

548959

4840432

Test UTM in Map

Other

MW 19-01

3. Overburden and Bedrock Material *

Well Depth *

3.9

(m)

General Colour	Most Common Material	Other Materials	General Description	Depth From (m)	Depth To (m)
Grey	Silt	Clay	Dense	0	3.9

4. Annular Space *

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	0.3	CONCRETE	0.01
0.3	0.6	BENTONITE	0.01

5. Method of Construction *

☐ Cable Tool
 ☐ Rotary (Conventional)
 ☐ Rotary (Reverse)
 ☒ Boring
 ☐ Air percussion
 ☐ Diamond

☐ Jetting
 ☐ Driving
 ☐ Digging
 ☐ Rotary (Air)
 ☐ Augering
 ☐ Direct Push

☐ Other (specify)

6. Well Use *

☐ Public
 ☐ Industrial
 ☐ Cooling & Air Conditioning

☐ Domestic
 ☐ Commercial
 ☐ Not Used

☐ Livestock
 ☐ Municipal
 ☒ Monitoring

☐ Irrigation
 ☐ Test Hole
 ☐ Dewatering

☐ Other (specify)

7. Status of Well *

☐ Water Supply
 ☐ Replacement Well
 ☐ Test Hole

☐ Recharge Well
 ☐ Dewatering Well
 ☒ Observation and/or Monitoring Hole

☐ Alteration (Construction)
 ☐ Abandoned, Insufficient Supply
 ☐ Abandoned, Poor Water Quality

☐ Abandoned, other (specify)

☐ Other (specify)

8. Construction Record - Casing * (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5.1	Plastic	0.65	0.1	0.9

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.4	Plastic	10	0.9	3.9

10. Water Details

Water found at Depth 1.5 (m)
 ☐ Gas
 Kind of Water
 ☐ Fresh
 ☒ Untested
 ☐ Other (specify)

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0	3.9	21

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain _____

If flowing give rate

☐ Flowing _____ (L/min)

Draw down *

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery *

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

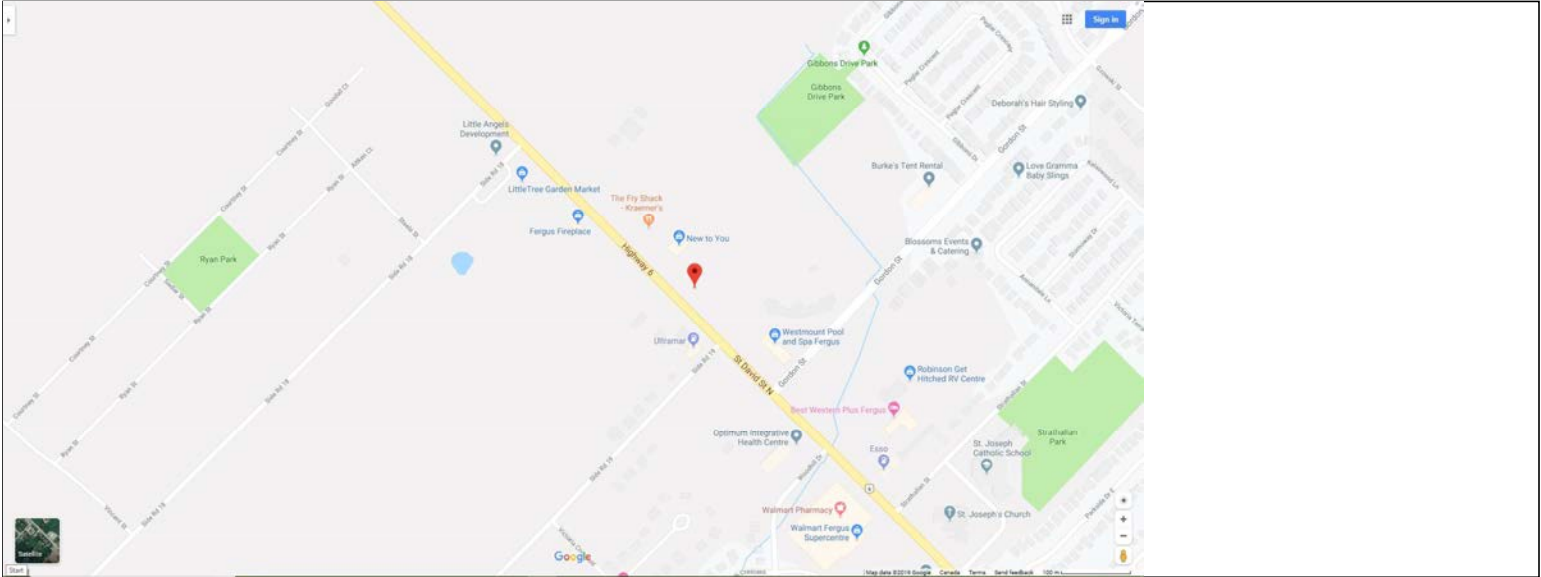
After test of well yield, water was

☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? * ☐ Yes ☒ No
Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)		

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
		2019/09/19

Comments

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
Geo-Environmental Drilling Inc.	6607

Business Address

Unit Number	Street Number	Street Name *
	1	Mansewood Court

City/Town/Village *	Province	Postal Code *
Halton Hills	Ontario	L7J 0A1

Business Telephone Number	Business Email Address
905-876-3388	dgunn@geo-environmentaldrilling.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
BLUHM	MATT	3748

16. Declaration *

☒ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
BLUHM	MATT	romana@geo-environmentaldrilling.com

Signature	Date Submitted (yyyy/mm/dd)
 Digitally signed by Matt Bluhm Date: 2019.10.04 10:15:14 -04'00'	2019/10/04

17. Ministry Use Only

Audit Number
5KYH 9DTK

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *

A279225

Type *

☒ Construction ☐ Abandonment

Measurement recorded in: *

☒ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name

First Name

Organization

IMPERIAL OIL

Email Address

Current Address

Unit Number

Street Number *

Street Name *

City/Town/Village

Country

CANADA

Province

ALBERTA

Postal Code

Telephone Number

2. Well Location

Address of Well Location

Unit Number

Street Number *

Street Name *

Township

Lot

Concession

County/District/Municipality

City/Town

FERGUS

Province

Ontario

Postal Code

UTM Coordinates

Zone *

Easting *

Northing *

Municipal Plan and Sublot Number

NAD 83

17

549033

4840377

Test UTM in Map

Other

MW 19-03

3. Overburden and Bedrock Material *

Well Depth *

3.3

(m)

General Colour	Most Common Material	Other Materials	General Description	Depth From (m)	Depth To (m)
Brown	Sand	Silt	Soft	0	1.5
Grey	Silt	Sand	Soft	1.5	3.3

4. Annular Space *

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	0.3	CONCRETE	0.01
0.3	0.6	BENTONITE	0.01

5. Method of Construction *

- ☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☒ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify) _____

6. Well Use *

- ☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☒ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify) _____

7. Status of Well *

- ☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☐ Abandoned, other (specify) _____
☐ Other (specify) _____

8. Construction Record - Casing * (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5.1	Plastic	0.65	0.1	0.9

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.4	Plastic	10	0.9	3.3

10. Water Details

Water found at Depth (m) ☐ Gas Kind of Water ☐ Fresh ☐ Untested ☐ Other (specify) _____

11. Hole Diameter		
Depth From (m)	Depth To (m)	Diameter (cm)
0	3.3	21

12. Results of Well Yield Testing

☐ Pumping Discontinued
 Explain

If flowing give rate

☐ Flowing
 (L/min)

Draw down *

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery *

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

☐ Clear and sand free
 ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? * ☐ Yes ☒ No
---------------------------	-------------------------	----------------------------------	---	---

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)
-------------------------------	----------------------------------	----------------------------

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map.

☐ Make map area bigger

14. Information

Well owner's information package delivered

☐ Yes ☐ No

Date Package Delivered (yyyy/mm/dd)

Date Work Completed (yyyy/mm/dd) *

2019/09/18

Comments

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *

Geo-Environmental Drilling Inc.

Well Contractor's License Number *

6607

Business Address

Unit Number

Street Number

1

Street Name *

Mansewood Court

City/Town/Village *

Halton Hills

Province

Ontario

Postal Code *

L7J 0A1

Business Telephone Number

905-876-3388

Business Email Address

dgunn@geo-environmentaldrilling.com

Last Name of Well Technician *

BLUHM

First Name of Well Technician *

MATT

Well Technician's License Number *

3748

16. Declaration *

☒ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name

BLUHM

First Name

MATT

Email Address

romana@geo-environmentaldrilling.com

Signature

Matt Bluhm

Digitally signed by Matt Bluhm
Date: 2019.10.04 10:04:19 -04'00'

Date Submitted (yyyy/mm/dd)

2019/10/04

17. Ministry Use Only

Audit Number

ARXJ UJAI

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *

A279224

Type *

☒ Construction ☐ Abandonment

Measurement recorded in: *

☒ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name

First Name

Organization

IMPERIAL OIL

Email Address

Current Address

Unit Number

Street Number *

Street Name *

City/Town/Village

Country

CANADA

Province

ALBERTA

Postal Code

Telephone Number

2. Well Location

Address of Well Location

Unit Number

Street Number *

Street Name *

Township

Lot

Concession

County/District/Municipality

City/Town

FERGUS

Province

Ontario

Postal Code

UTM Coordinates

Zone *

Easting *

Northing *

Municipal Plan and Sublot Number

NAD 83

17

549007

4840408

Test UTM in Map

Other

MW 19-02

3. Overburden and Bedrock Material *

Well Depth *

3.9

(m)

General Colour	Most Common Material	Other Materials	General Description	Depth From (m)	Depth To (m)
Brown	Sand		Loose	0	2.1
Grey	Silt	Clay	Dense	2.1	3.9

4. Annular Space *

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	0.3	CONCRETE	0.01
0.3	0.6	BENTONITE	0.01

5. Method of Construction *

- ☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☒ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify) _____

6. Well Use *

- ☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☒ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify) _____

7. Status of Well *

- ☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☐ Abandoned, other (specify) _____
☐ Other (specify) _____

8. Construction Record - Casing * (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5.1	Plastic	0.65	0.1	0.9

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.4	Plastic	10	0.9	3.9

10. Water Details

Water found at Depth 1.5 (m) ☐ Gas Kind of Water ☐ Fresh ☒ Untested ☐ Other (specify) _____

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0	3.9	21

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain _____

If flowing give rate

☐ Flowing _____ (L/min)

Draw down *

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery *

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

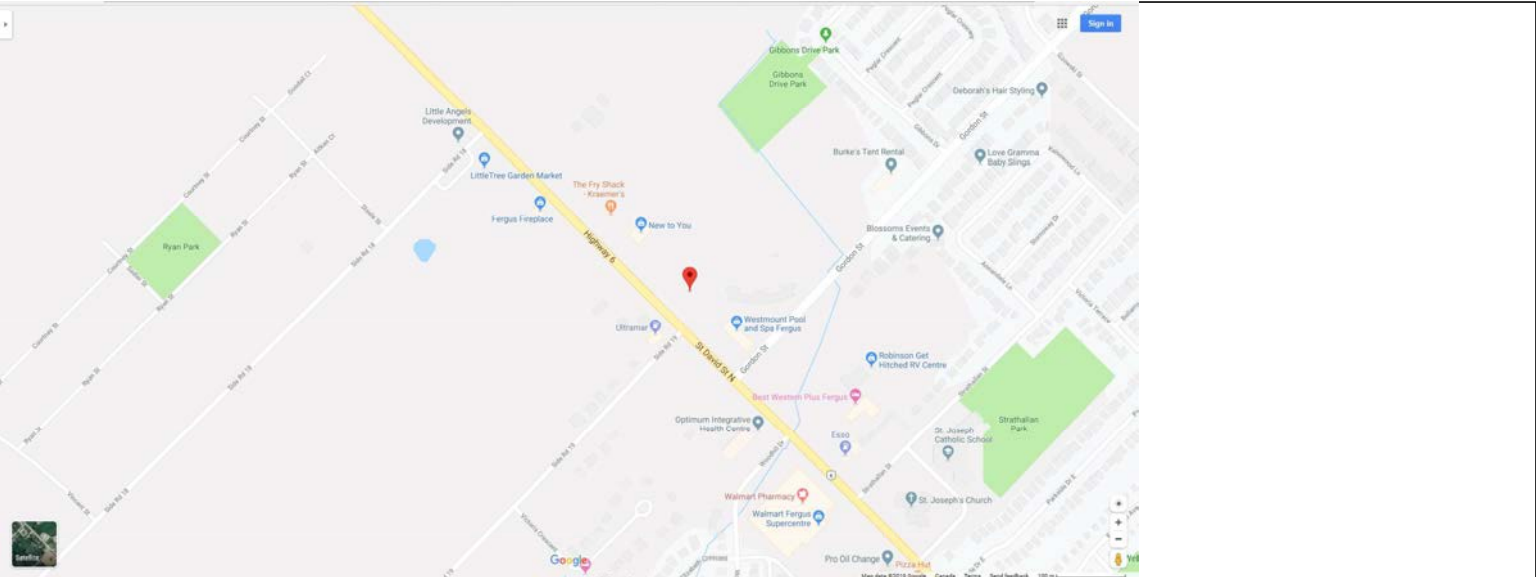
After test of well yield, water was

☐ Clear and sand free ☐ Other (specify) _____

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? * ☐ Yes ☒ No
Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)		

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered

☐ Yes ☐ No

Date Package Delivered (yyyy/mm/dd)

Date Work Completed (yyyy/mm/dd) *

2019/09/19

Comments

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *

Geo-Environmental Drilling Inc.

Well Contractor's License Number *

6607

Business Address

Unit Number

Street Number

1

Street Name *

Mansewood Court

City/Town/Village *

Halton Hills

Province

Ontario

Postal Code *

L7J 0A1

Business Telephone Number

905-876-3388

Business Email Address

dgunn@geo-environmentaldrilling.com

Last Name of Well Technician *

BLUHM

First Name of Well Technician *

MATT

Well Technician's License Number *

3748

16. Declaration *

☒ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name

BLUHM

First Name

MATT

Email Address

romana@geo-environmentaldrilling.com

Signature

Matt Bluhm

Digitally signed by Matt Bluhm
Date: 2019.10.04 11:10:14 -04'00'

Date Submitted (yyyy/mm/dd)

2019/10/04

17. Ministry Use Only

Audit Number

WPLI 7CAI

Measurements recorded in: ☐ Metric ☒ Imperial

Address of Well Location (Street Number/Name) 66 Sideroad 18		Township Centre Wellington	Lot 18	Concession 15
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M 5Z6
UTM Coordinates Zone NAD 83	Easting 175484111	Northing 4840396	Municipal Plan and Sublot Number	Other 263

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
			Decommission dug well according	
			to Reg 903	0 17
			Well diameter 36"	
			Top 2 tiles removed.	
8	0	sand	56.56.	

Annular Space			
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)	
18 17	sand.	7.07	
17 15	bentonite chips	14.14	
15 10	sand.	35.35	
10 8	bentonite chips	14.14	

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify
☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring	

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☒ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen				Status of Well
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☒ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor Martin Well Drilling Inc.		Well Contractor's Licence No. 75517	
Business Address (Street Number/Name) Box 60 Alma		Municipality Wellington	
Province Ontario	Postal Code N0B 1A0	Business E-mail Address	
Bus. Telephone No. (inc. area code) 5198469162	Name of Well Technician (Last Name, First Name) Martin Mike		
Well Technician's Licence No. 3430	Signature of Technician and/or Contractor Mike Martin		Date Submitted 2019 08 27

Results of Well Yield Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level	13		
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
Duration of pumping hrs + min	4		4	
Final water level end of pumping (m/ft)	5		5	
If flowing give rate (l/min / GPM)	10		10	
Recommended pump depth (m/ft)	15		15	
Recommended pump rate (l/min / GPM)	20		20	
Well production (l/min / GPM)	25		25	
Disinfected?	30		30	
☒ Yes ☐ No	40		40	
	50		50	
	60		60	

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☐ Yes ☐ No	Y Y Y Y M M D D 2019 08 27	Audit No. 2319766 Date 04 2019 Received

Measurements recorded in: ☐ Metric ☒ Imperial

Address of Well Location (Street Number/Name)		Township	Lot	Concession
70 Sideroad 18		Centre Wellington	18	15
County/District/Municipality		City/Town/Village	Province	Postal Code
Wellington		Fergus	Ontario	N1M 3E6
UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number
NAD	8	3	175218403	4840370
			Other	263

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
			Decommission 24" dug well		
			according to Reg 903	0	26
G	0	sand.	18.84		

Annular Space			
Depth Set at (m/ft) From To		Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
26	13	sand	40.82
13	11	ben tonite chips	6.28
11	7	sand	12.56
7	6	ben tonite chips	3.14

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, specify _____		☐ Other, specify _____		

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☒ Abandoned, Insufficient Supply
			From	To	

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☐ Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify* _____
☐ Other, *specify* _____

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____		

Well Contractor and Well Technician Information									
Business Name of Well Contractor					Well Contractor's Licence No.				
Martin Well Drilling Inc.					7 5 5 7				
Business Address (Street Number/Name)					Municipality				
Box 60 Alma					Wellington				
Province		Postal Code		Business E-mail Address					
Ontario		N0B 1P0							
Bus. Telephone No. (inc. area code)				Name of Well Technician (Last Name, First Name)					
519 846 9162				Martin Mike					
Well Technician's Licence No.			Signature of Technician and/or Contractor				Date Submitted		
3 4 3 0			[Signature]				20190827		

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
☐ Clear and sand free ☐ Other, specify _____		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	10		
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
Duration of pumping _____ hrs + _____ min		4		4	
Final water level end of pumping (m/ft)		5		5	
If flowing give rate (l/min / GPM)		10		10	
Recommended pump depth (m/ft)		15		15	
		20		20	
Recommended pump rate (l/min / GPM)		25		25	
Well production (l/min / GPM)		30		30	
		40		40	
Disinfected?		50		50	
☒ Yes ☐ No		60		60	

Map of Well Location

Please provide a map below following instructions on the back.

A hand-drawn sketch map. At the top is a rectangle labeled "house". A vertical line descends from the house to a circle containing an asterisk (*). To the right of the asterisk is the text "T 80'" with a short horizontal line underneath. Below this is a horizontal line labeled "Sideroad 18". To the right of the horizontal line, written vertically, is "Hwy #6 North".

Comments:	
Well owner's information package delivered	Date Package Delivered Y Y Y Y M M D D Date Work Completed 2019 08 27
☐ Yes ☐ No	Ministry Use Only Audit No. 319765 Received NOV 04 2019



Tag#: A277591

Measurements recorded in: ☐ Metric ☒ Imperial

Page _____ of _____

Well Location

Address of Well Location (Street Number/Name) 64 SIDE RD #18		Township CENTRE WELLINGTON	Lot 1E	Concession 15
County/District/Municipality WELLINGTON		City/Town/Village FERGUS	Province Ontario	Postal Code N1M 2W3
UTM Coordinates Zone Easting Northing NAD 83 175483854840397		Municipal Plan and Sublot Number		Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
BROWN	SAND			0	35
GREY	CLAY		SOFT	35	40
GREY	CLAY	GRAVEL		40	94
GREY	LIMESTONE			94	165

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	20	BENTONITE	
		SWAMP	75 GAL.

Method of Construction		Well Use		
☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☒ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☐ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☒ Other, specify	Dura Packer	☐ Other, specify		

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To	
6 1/8	STEEL	0.219	+2	96	☒ Water Supply
6	OPEN HOLE		96	165	☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply
					☐ Abandoned, Poor Water Quality
					☐ Abandoned, other, specify
					☐ Other, specify

Construction Record - Screen				
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☐ Abandoned, Poor Water Quality

☐ Abandoned, other, specify

☐ Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☒ Untested	Depth (m/ft) From	To
165 (m/ft)	☐ Gas ☐ Other, specify	0	20
		20	96
		96	165

Business Name of Well Contractor HANNON WELL DRILLING & PUMPING		Well Contractor's Licence No. 75516
Business Address (Street Number/Name) #5896 WELLINGTON RD 7		Municipality GUELPH
Province ON	Postal Code N1H6V2	Business E-mail Address info@hannonwelldrilling.com
Bus. Telephone No. (inc. area code) 519-763-2339	Name of Well Technician (Last Name, First Name) HANNON KEVIN	
Well Technician's Licence No. 051910	Signature of Technician and/or Contractor [Signature]	Date Submitted 2019/10/10

Results of Well Yield Testing				
After test of well yield, water was: ☒ Clear and sand free ☐ Other, specify	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level	42		77.5
	1	47.7	1	70
Pump intake set at (m/ft) 160	2	50.1	2	60.5
	3	51.3	3	61
Pumping rate (l/min / GPM) 10	4	52.4	4	57.8
	5	53.4	5	55.5
Duration of pumping 1 hrs + min	10	55.9	10	50.3
	15	57.2	15	48.8
Final water level end of pumping (m/ft) 77.5	20	58	20	
	25	62.4	25	47
If flowing give rate (l/min / GPM)	30	66	30	45
	40	73.9	40	42
Recommended pump depth (m/ft) 150	50	76.2	50	
	60	77.5	60	
Recommended pump rate (l/min / GPM) 10				
Well production (l/min / GPM) 10				
Disinfected? ☒ Yes ☐ No				

Map of Well Location

Please provide a map below following instructions on the back.

Comments:

Well owner's information package delivered ☒ Yes ☐ No	Date Package Delivered 2019/08/06	Date Work Completed 2019/10/10	Ministry Use Only Audit No. Z291585 DEC 24 2019 Received
---	--------------------------------------	-----------------------------------	---

Well Location
Address of Well Location (Street Number/Name)
70 Side road 18

Township
Centre Wellington

Lot
P4 16

Concession

County/District/Municipality
Wellington

City/Town/Village
Fergus

Province
Ontario

Postal Code
N1M2L3

UTM Coordinates Zone Easting Northing
NAD 83 17 548404 18090377

Municipal Plan and Sublot Number
Plan 87

Other

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)					
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
Brown	Topsoil			0	2
Brown	Sand Course		Soft	2	26
Brown	Clay	Sand	Soft	26	40
Brown	clay	Stones	hard	40	90
Brown	limestone	Shale	layered	90	92
brown	limestone		Fractured	92	118
Brown	limestone		hard	118	155

Annular Space
Depth Set at (m/ft) From To
0 92

Type of Sealant Used (Material and Type)
Bentonite Slurry

Volume Placed (m³/ft³)
12

Method of Construction
☐ Cable Tool
☒ Rotary (Conventional)
☐ Rotary (Reverse)
☐ Boring
☐ Air percussion
☐ Other, specify

☐ Diamond
☐ Jetting
☐ Driving
☐ Digging

Well Use
☐ Public
☒ Domestic
☐ Livestock
☐ Irrigation
☐ Industrial
☐ Other, specify

☐ Commercial
☐ Municipal
☐ Test Hole
☐ Cooling & Air Conditioning

☐ Not used
☐ Dewatering
☐ Monitoring

Construction Record - Casing
Inside Diameter (cm/in) Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel) Wall Thickness (cm/in) Depth (m/ft) From To
6.25 steel 1.88 +2 92
6.25 open hole 92

Construction Record - Screen
Outside Diameter (cm/in) Material (Plastic, Galvanized, Steel) Slot No. Depth (m/ft) From To

Status of Well
☒ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details
Water found at Depth (m/ft) Kind of Water: ☒ Fresh ☐ Untested ☐ Gas ☐ Other, specify
100 (m/ft)
Water found at Depth (m/ft) Kind of Water: ☒ Fresh ☐ Untested ☐ Gas ☐ Other, specify
105 (m/ft)
Water found at Depth (m/ft) Kind of Water: ☒ Fresh ☐ Untested ☐ Gas ☐ Other, specify
130 (m/ft)

Hole Diameter
Depth (m/ft) From To Diameter (cm/in)

Well Contractor and Well Technician Information
Business Name of Well Contractor
Martin Well Drilling Inc.

Well Contractor's Licence No.
7 5 5 7

Business Address (Street Number/Name)
Box 60 Alma

Municipality
Wellington

Province
Ontario

Postal Code
N0B1A0

Business E-mail Address

Bus. Telephone No. (inc. area code)
519 846 9162

Name of Well Technician (Last Name, First Name)
Martin Mike

Well Technician's Licence No.
3430

Signature of Technician and/or Contractor
[Signature]

Date Submitted
2018/10/10

Well owner's information package delivered
☐ Yes
☐ No

Date Package Delivered
Y Y Y Y M M D D
2018 10 10

Date Work Completed

Ministry Use Only
Audit No.
2319757

Received
MAY 11 2020

Comments:



0506E (2018/12)

Ministry's Copy

© Queen's Printer for Ontario, 2018

Measurements recorded in: ☐ Metric ☒ Imperial

New Owner's Information

First Name Exact	Last Name / Organization Construction	E-mail Address			☐ Well Constructed by Well Owner
Mailing Address (Street Number/Name) 89 Victoria Cres.		Municipality Wellington	Province Ontario	Postal Code M1M 2W3	Telephone No. (inc. area code) 519 835 2559

Well Location

Address of Well Location (Street Number/Name) 89 Victoria Cres				Township Centre Wellington		Lot A 8		Concession	
County/District/Municipality Wellington				City/Town/Village Fergus				Province Ontario	
JTM Coordinates		Zone	Easting	Northing		Municipal Plan and Sublot Number Plan 71		Postal Code N1M2L3	
NAD 83		1754	8862	4840015				Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)	
				From	To
			Decommission 6" drilled well		
			according to Reg 903	3	78
			Well depth	78	
			Well diameter	6"	

Annular Space

Depth Set at (m/ft) From To		Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
3	78	Bentonite chips	

Method of Construction

☐ Cable Tool	☐ Diamond	☐ Public	☐ Commercial	☐ Not used
☐ Rotary (Conventional)	☐ Jetting	☐ Domestic	☐ Municipal	☐ Dewatering
☐ Rotary (Reverse)	☒ Driving	☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Boring	☐ Digging	☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Air percussion		☐ Industrial		
☐ Other, specify _____		☐ Other, specify _____		

Well Use

☐ Public	☐ Commercial	☐ Not used
☐ Domestic	☐ Municipal	☐ Dewatering
☐ Livestock	☐ Test Hole	☐ Monitoring
☐ Irrigation	☐ Cooling & Air Conditioning	
☐ Industrial		
☐ Other, <i>specify</i> _____		

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
					☐ Water Supply
					☐ Replacement Well
					☐ Test Hole
					☐ Recharge Well
					☐ Dewatering Well
					☐ Observation and/or Monitoring Hole
					☐ Alteration (Construction)
					☐ Abandoned, Insufficient Supply

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☒ Abandoned, other, *specify*
 Town well
☐ Other, *specify*

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		☐ Water Quality ☒ Abandoned, other, specify <i>Town water</i> ☐ Other, specify
			From	To	

Water Details

Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested			
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested			

Hole Diameter

Depth (m/ft)		Diameter (cm/in)
From	To	

Well Contractor and Well Technician Information

Business Name of Well Contractor		Well Contractor's Licence No.	
Martin Well Drilling Inc.		7557	
Business Address (Street Number/Name)		Municipality	
Box 60 Alma		Wellington	
Province	Postal Code	Business E-mail Address	
Ontario	N0B1A0		
Bus. Telephone No. (inc. area code)		Name of Well Technician (Last Name, First Name)	
5198469162		Martin Mike	
Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted	
31130	Mike Martin	30200501	

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
☐ Clear and sand free ☐ Other, <u>specify</u>		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	30		
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
Duration of pumping ____ hrs + ____ min		4		4	
Final water level end of pumping (m/ft)		5		5	
If flowing give rate (l/min / GPM)		10		10	
Recommended pump depth (m/ft)		15		15	
Recommended pump rate (l/min / GPM)		20		20	
Well production (l/min / GPM)		25		25	
Disinfected?		30		30	
☒ Yes ☐ No		40		40	
		50		50	
		60		60	

Map of Well Location

Please provide a map below following instructions on the back.

County Rd 19

house

(X) 40'

Victoria Cres

Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only Audit No Z319822 SEP 16 2020 Received
	Y Y Y Y M M D D Date Work Completed 20200608	
☐ Yes ☐ No		

Address of Well Location (Street Number/Name) 920 ST DAVID ST N		Township NICHOL	Lot 19	Concession 16
County/District/Municipality WELLINGTON		City/Town/Village FERGUS	Province Ontario	Postal Code N1M2W3
UTM Coordinates Zone NAD 83	Easting 17549046	Northings 4840355	Municipal Plan and Sublot Number Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
			WASHED STONE	0 3'
			BENTONITE	3' 26'
			WASHED STONE	26' 95'
			BENTONITE	95' 102'
			WASHED STONE	102' 223'
			BENTONITE	223' 230'

Annular Space		
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)

Method of Construction	Well Use
☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Other, specify _____	☐ Diamond ☐ Jetting ☐ Driving ☐ Digging ☐ Public ☐ Domestic ☐ Livestock ☐ Irrigation ☐ Industrial ☐ Other, specify _____
	☐ Commercial ☐ Municipal ☐ Test Hole ☐ Cooling & Air Conditioning ☐ Not used ☐ Dewatering ☐ Monitoring

Construction Record - Casing				Status of Well
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To	☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☒ Abandoned, other, specify TOWN WATER ☐ Other, specify _____

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Hole Diameter	
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested	Depth (m/ft) From To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		
Water found at Depth (m/ft) ☐ Gas ☐ Other, specify _____	Kind of Water: ☐ Fresh ☐ Untested		

Well Contractor and Well Technician Information	
Business Name of Well Contractor THE MEADOWBANK DRILLING COMPANY	Well Contractor's Licence No. 6865
Business Address (Street Number/Name) RR 5	Municipality MT FOREST
Province ON	Postal Code N0G2L0
Business E-mail Address	

Bus. Telephone No. (inc. area code) 519 323 3548	Name of Well Technician (Last Name, First Name) HUGH BROADFOOT
Well Technician's Licence No. 1897	Signature of Technician and/or Contractor <i>[Signature]</i>
	Date Submitted 20200731

Results of Well Field Testing				
After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
	2		2	
	3		3	
Pump intake set at (m/ft)	4		4	
Pumping rate (l/min / GPM)	5		5	
Duration of pumping hrs + min	10		10	
Final water level end of pumping (m/ft)	15		15	
If flowing give rate (l/min / GPM)	20		20	
Recommended pump depth (m/ft)	25		25	
Recommended pump rate (l/min / GPM)	30		30	
Well production (l/min / GPM)	40		40	
Disinfected? ☐ Yes ☐ No	50		50	
	60		60	

Map of Well Location	
Please provide a map below following instructions on the back.	

Comments:	Well owner's information package delivered ☐ Yes ☒ No	Date Package Delivered 20200730	Date Work Completed 20200729
Ministry Use Only Audit No. 2298696 Received SEP 22 2020 SEP 22 2020			

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 (<https://data.ontario.ca/dataset/well-records>) .

Go Back to Map

Well ID

Well ID Number: 7368438
Well Audit Number: Z298689
Well Tag Number: A214517

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

Well Location

Address of Well Location	66 SR 18
Township	NICHOL TOWNSHIP
Lot	018
Concession	CON 15
County/District/Municipality	WELLINGTON
City/Town/Village	FERGUS
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 548419.00 Northing: 4840393.00
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	SAND		0 m	13.1 m
GREY	CLAY	FGVL		13.1 m	17.2 m
GREY	CLAY	GRVL	STNS	17.2 m	27.1 m
GREY	LMSN	FCRD		27.1 m	28.5 m
GREY	LMSN			28.5 m	49.4 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	7 m	BENTONITE	

Method of Construction & Well Use

Method of Construction	Well Use
Rotary (Convent.)	
	Domestic

--	--

Status of Well

Water Supply

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
15.9 cm	STEEL	-.7 m	29.9 m
15.6 cm	OPEN HOLE	29.9 m	49.4 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 6865

Results of Well Yield Testing

After test of well yield, water was	CLEAR
If pumping discontinued, give reason	
Pump intake set at	33.5 m
Pumping Rate	45 LPM
Duration of Pumping	1 h:0 m
Final water level	30.78 m
If flowing give rate	
Recommended pump depth	36.5 m
Recommended pump rate	
Well Production	
Disinfected?	Y

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL	39.3 m		
1	13.85 m	1	28.5 m
2	15.5 m	2	26.52 m
3	16.89 m	3	24.72 m
4	18.09 m	4	23.13 m
5	19.16 m	5	21.7 m
10	23.1 m	10	16.76 m
15	25.56 m	15	14.65 m
20	27.2 m	20	13.94 m
25	28.32 m	25	13.64 m

30	28.97 m	30	13.44 m
40	29.86 m	40	13.17 m
45		45	
50	30.33 m	50	13.03 m
60	30.78 m	60	12.86 m

Water Details

Water Found at Depth	Kind
	Untested

Hole Diameter

Depth From	Depth To	Diameter
7 m	29.9 m	22.3 cm
29.9 m	49.4 m	15.6 cm
0 m	70 m	25.1 cm

Audit Number: Z298689

Date Well Completed: May 07, 2020

Date Well Record Received by MOE: September 22, 2020

Related

How to use a Ministry of the Environment map (<https://www.ontario.ca/page/how-use-ministry-environment-map#wells>)

Technical documentation: Metadata record (<https://data.ontario.ca/dataset/well-records/resource/3031344e-e3f2-48d5-888c-c1deadfd2f77>)

Measurements recorded in: ☒ Metric ☐ Imperial

A005625

Address of Well Location (Street Number/Name) 2 Burnett Court		Township Centre Wellington	Lot	Concession
County/District/Municipality Wellington		City/Town/Village Fergus	Province Ontario	Postal Code N1M2W3
UTM Coordinates Zone	Easting	Northing	Municipal Plan and Sublot Number	
NAD 8 3	17548566	4839879	Other	

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m)
				From To
			Abandonment of 15-8 cm drilled well	
			Native Soil	0 2.1
			Bentonite Chips	2.1 57.9
			See Audit # 05717 for original construction details	

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0	2.1	Native Soil	
2.1	51.9	Bentonite Chips	0.986

Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
☐ Clear and sand free ☐ Other, specify _____		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level			
		1		1	
Pump intake set at (m/ft)		2		2	
Pumping rate (l/min / GPM)		3		3	
		4		4	
Duration of pumping _____ hrs + _____ min		5		5	
Final water level end of pumping (m/ft)		10		10	
If flowing give rate (l/min/GPM)		15		15	
		20		20	
Recommended pump depth (m/ft)		25		25	
Recommended pump rate (l/min/GPM)		30		30	
		40		40	
Well production (l/min/GPM)		50		50	
Disinfected? ☒ Yes ☐ No		60		60	

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
15.9	Steel		2.1		☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned,

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)	
			From	To

☐ Abandoned, Poor Water Quality
☒ Abandoned, other, specify Municipal
☐ Other, specify _____

Water Details

Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____	Depth (m/ft) From	To	Diameter (cm/in)
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			
Water found at Depth (m/ft) ☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, specify _____			

Hole Diameter

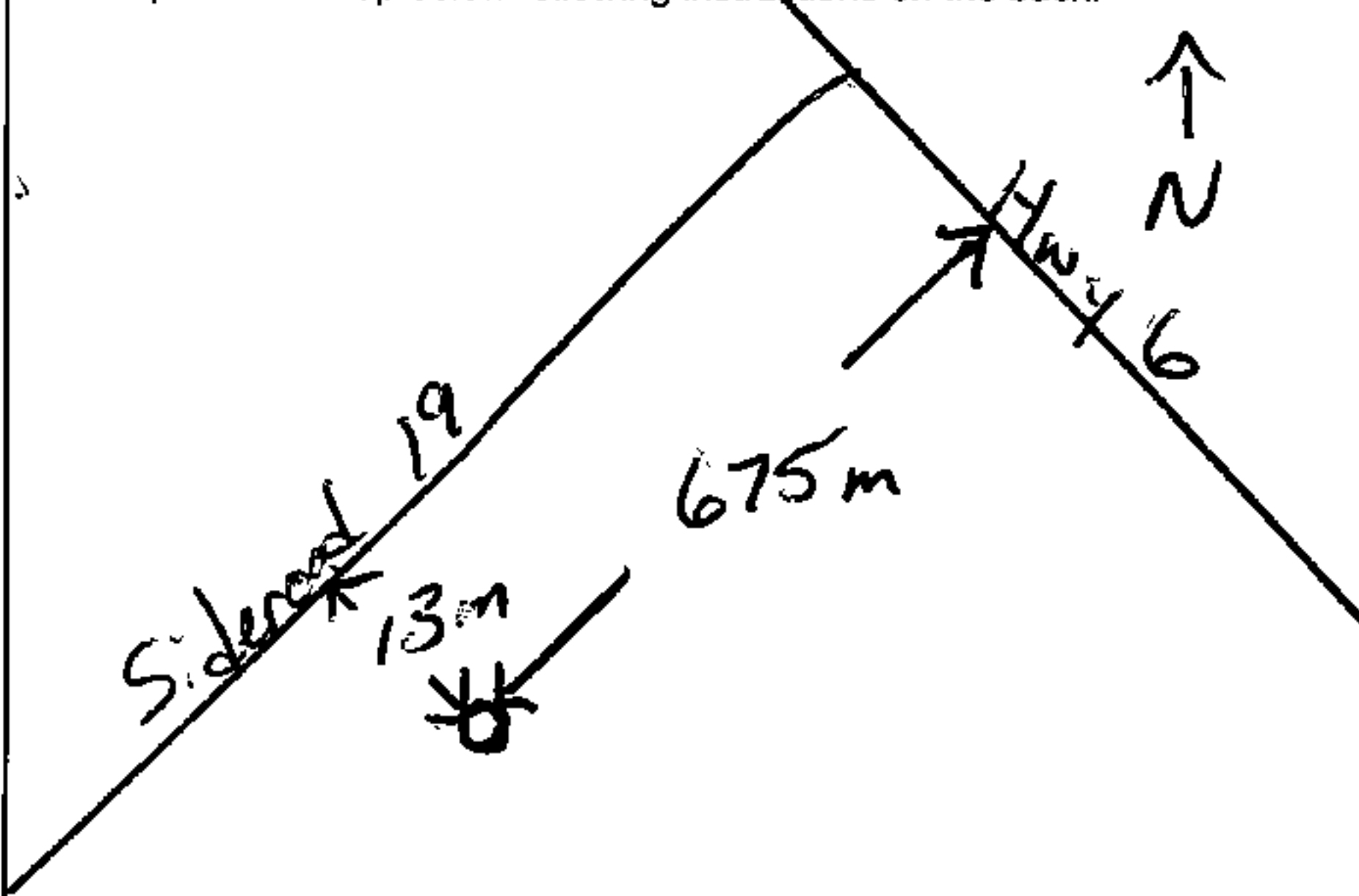
Depth (m/ft)		Diameter (cm/in)
From	To	

Well Contractor and Well Technician Information

Business Name of Well Contractor <i>Well Initiatives Limited</i>		Well Contractor's Licence No. <i>7 2 2 1</i>	
Business Address (Street Number/Name) <i>15 Townshoe Orangeville</i>		Municipality	
Province <i>ON</i>	Postal Code <i>L9W3R4</i>	Business E-mail Address <i>info@wellinitatives.com</i>	
Bus. Telephone No. (inc. area code) <i>5198468289</i>	Name of Well Technician (Last Name, First Name) <i>Weed, Patrick</i>		
Well Technician's Licence No. <i>3 8 0 0</i>	Signature of Technician and/or Contractor <i>Pat Weed</i>		Date Submitted <i>20200919</i>

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered	Date Package Delivered	Ministry Use Only							
	<table border="1"> <tr> <td>Y</td><td>Y</td><td>Y</td><td>Y</td><td>M</td><td>M</td><td>D</td><td>D</td> </tr> </table>	Y	Y	Y	Y	M	M	D	D
Y	Y	Y	Y	M	M	D	D		
☐ Yes ☐ No	Date Work Completed								
	20200915								

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *

A 294996

Type *

☒ Construction ☐ Abandonment

Measurement recorded in: *

☐ Metric ☒ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name | First Name

Organization | Email Address

JENNARK HOMES

Current Address

Unit Number | Street Number * | Street Name * | City/Town/Village

Country | Province | Postal Code | Telephone Number

CAN

ON

2. Well Location

Address of Well Location

Unit Number | Street Number * | Street Name * | Township

79

SIDE ROAD 19

Lot | Concession | County/District/Municipality

City/Town | Province | Postal Code

FERGUS

Ontario

UTM Coordinates | Zone * | Easting * | Northing * | Municipal Plan and Sublot Number

NAD 83

17

548746

4839873

Test UTM in Map

Other

3. Overburden and Bedrock Material *

Well Depth * 15.5 (ft)

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

				(ft)	(ft)
Brown	Sand			0	15.5

4. Annular Space *

Depth From (ft)	Depth To (ft)	Type of Sealant Used (Material and Type)	Volume Placed (cubic feet)
0	4	3/8 HOLEPLUG	0.13
4	15.5	#2 SAND	0.39

5. Method of Construction *

- ☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☒ Direct Push
☐ Other (specify) _____

6. Well Use *

- ☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☒ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify) _____

7. Status of Well *

- ☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☐ Abandoned, other (specify) _____
☐ Other (specify) _____

8. Construction Record - Casing * (use negative number(s) to indicate depth above ground surface)

Inside Diameter (in)	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (ft)	Depth To (ft)
1	Plastic	0.06	-3	5.5

9. Construction Record - Screen

Outside Diameter (in)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (ft)	Depth To (ft)
1.06	Plastic	10	5.5	15.5

10. Water Details

Water found at Depth (ft)	☐ Gas	Kind of water	☐ Fresh	☐ Untested	☐ Other
---------------------------	------------------------------	---------------	--------------------------------	-----------------------------------	--------------------------------

11. Hole Diameter

Depth From (ft)	Depth To (ft)	Diameter (in)
0	15.5	3.5

12. Results of Well Yield Testing

☐ Pumping Discontinued
Explain _____

If flowing give rate
☐ Flowing _____ (GPM)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)													

After test of well yield, water was
☐ Clear and sand free ☐ Other (specify) _____

Pump intake set at (ft)	Pumping rate (GPM)	Duration of pumping hrs + min	Final water level end of pumping (ft)	Disinfected? * ☐ Yes ☒ No
-------------------------	--------------------	-------------------------------	---------------------------------------	---

Recommended pump depth (ft)	Recommended pump rate (GPM)	Well production (GPM)
-----------------------------	-----------------------------	-----------------------

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
		2020/09/24
Comments		

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *		Well Contractor's License Number *	
CMT DRILLING INC		7366	
Business Address			
Unit Number	Street Number	Street Name *	
1	1011	INDUSTRIAL CRES	
City/Town/Village *		Province	Postal Code *
ST CLEMENTS		ON	N0B 2M0
Business Telephone Number	Business Email Address		
519-699-5775	info@cmtinc.net		
Last Name of Well Technician *		First Name of Well Technician *	Well Technician's License Number *
BLACK		CHRIS	3711

16. Declaration *

☒ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
BLACK	CHRIS	cblack@cmtinc.net
Signature		Date Submitted (yyyy/mm/dd)
Chris Black		2020/10/13
Digitally signed by Chris Black Date: 2020.10.13 11:05:03 -04'00'		

17. Ministry Use Only

Audit Number
LUXE DE4A

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *

A 294997

Type *

☒ Construction ☐ Abandonment

Measurement recorded in: *

☐ Metric ☒ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name | First Name

Organization | Email Address

JENNARK HOMES

Current Address

Unit Number | Street Number * | Street Name * | City/Town/Village

Country | Province | Postal Code | Telephone Number

CAN

ON

2. Well Location

Address of Well Location

Unit Number | Street Number * | Street Name * | Township

79

SIDE ROAD 19

Lot | Concession | County/District/Municipality

City/Town | Province | Postal Code

FERGUS

Ontario

UTM Coordinates | Zone * | Easting * | Northing * | Municipal Plan and Sublot Number

NAD 83

17

548787

4839946

Test UTM in Map

Other

3. Overburden and Bedrock Material *

Well Depth * | 16 | (ft)

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

				(ft)	(ft)
Brown	Fill			0	4
Brown	Sand			4	12
Grey	Silt			12	16

4. Annular Space *

Depth From (ft)	Depth To (ft)	Type of Sealant Used (Material and Type)	Volume Placed (cubic feet)
0	4	3/8 HOLEPLUG	0.13
4	16	#2 SAND	0.4

5. Method of Construction *

- ☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☐ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☒ Direct Push
☐ Other (specify) _____

6. Well Use *

- ☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☒ Monitoring
☐ Irrigation ☐ Test Hole ☐ Dewatering
☐ Other (specify) _____

7. Status of Well *

- ☐ Water Supply ☐ Replacement Well ☐ Test Hole
☐ Recharge Well ☐ Dewatering Well ☒ Observation and/or Monitoring Hole
☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality
☐ Abandoned, other (specify) _____
☐ Other (specify) _____

8. Construction Record - Casing * (use negative number(s) to indicate depth above ground surface)

Inside Diameter (in)	Open Hole or Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (ft)	Depth To (ft)
1	Plastic	0.06	-3	6

9. Construction Record - Screen

Outside Diameter (in)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (ft)	Depth To (ft)
1.06	Plastic	10	6	16

10. Water Details

Water found at Depth (ft) ☐ Gas Kind of water ☐ Fresh ☐ Untested ☐ Other

11. Hole Diameter

Depth From (ft)	Depth To (ft)	Diameter (in)
0	16	3.5

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain _____

If flowing give rate

☐ Flowing _____ (GPM)

Draw down

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)														

Recovery

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (ft)													

After test of well yield, water was

☐ Clear and sand free ☐ Other (specify)

Pump intake set at (ft)	Pumping rate (GPM)	Duration of pumping hrs + min	Final water level end of pumping (ft)	Disinfected? *
				☐ Yes ☒ No

Recommended pump depth (ft)	Recommended pump rate (GPM)	Well production (GPM)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered ☐ Yes ☐ No	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
		2020/09/24
Comments		

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *		Well Contractor's License Number *	
CMT DRILLING INC		7366	
Business Address			
Unit Number	Street Number	Street Name *	
1	1011	INDUSTRIAL CRES	
City/Town/Village *		Province	Postal Code *
ST CLEMENTS		ON	N0B 2M0
Business Telephone Number	Business Email Address		
519-699-5775	info@cmtinc.net		
Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *	
BLACK	CHRIS	3711	

16. Declaration *

☒ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
BLACK	CHRIS	cblack@cmtinc.net
Signature		Date Submitted (yyyy/mm/dd)
Chris Black		2020/10/13
Digitally signed by Chris Black Date: 2020.10.13 11:13:14 -04'00'		

17. Ministry Use Only

Audit Number
87WU 2MF2

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 (<https://data.ontario.ca/dataset/well-records>) .

Go Back to Map

Well ID

Well ID Number: 7372104
Well Audit Number: C50245
Well Tag Number: A307880

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

Well Location

Address of Well Location	
Township	FERGUS TOWN
Lot	
Concession	
County/District/Municipality	WELLINGTON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 17 Easting: 549252.00 Northing: 4840167.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

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

Annular Space/Abandonment Sealing Record

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

Method of Construction & Well Use

Method of Construction	Well Use

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7324

Results of Well Yield Testing

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

Draw Down & Recovery

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

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter

Audit Number: C50245

Date Well Completed: October 09, 2020

Date Well Record Received by MOE: November 03, 2020

Related

How to use a Ministry of the Environment map (<https://www.ontario.ca/page/how-use-ministry-environment-map#wells>)

Technical documentation: Metadata record (<https://data.ontario.ca/dataset/well-records/resource/3031344e-e3f2-48d5-888c-c1deadfd2f77>)

Tag#:A294174

Well Location

Address of Well Location (Street Number/Name) 19 Burnett Crt

County/District/Municipality Wellington

UTM Coordinates Zone Easting Northing NAD 8 3 17 54 86 84 48 39 88 2

Township

City/Town/Village Fergus

Municipal Plan and Sublot Number

Province Ontario

Postal Code N1M2W3

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
Well Tagged & Record Generated Following Completion Of Casing Extension On Previously Untagged 12.7cm (5") dia. Well Drilled By Others With 15.2cm (6") dia. Steel Casing				

Annular Space

Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
-----------------------------	--	------------------------

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☐ Other, specify

Well Use

☒ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☐ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From To
15.2	steel	0.48	0.20 +0.56
12.7	steel	-	- 0.20

Status of Well

☒ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To
--------------------------	---------------------------------------	----------	----------------------

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From To	Diameter (cm/in)
----------------------	------------------

Well Contractor and Well Technician Information

Business Name of Well Contractor Well Initiatives Ltd

Business Address (Street Number/Name) 15 Tewline Rd.

Province Ont

Postal Code L9W3R4

Business E-mail Address info@wellinitatives.com

Business Telephone No. (inc. area code) 519 846 8289

Name of Well Technician (Last Name, First Name) Rie, Darryl

Well Technician's Licence No. 3923

Signature of Technician and/or Contractor

Date Submitted 2020/10/28

Well Contractor's Licence No. 7221

Municipality Orangerville

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping hrs + min

Final water level end of pumping (m/ft)

If flowing give rate (l/min/GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min/GPM)

Well production (l/min/GPM)

Disinfected? ☐ Yes ☐ No

Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
Static Level			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Map of Well Location

Please provide a map below following instructions on the back.

Side Road #19

Burnett Crt

100m

50m

Comments:

Well owner's information package delivered ☐ Yes ☐ No

Date Package Delivered

Date Work Completed

Ministry Use Only

Audit No. Z346376

Received NOV 18 2020

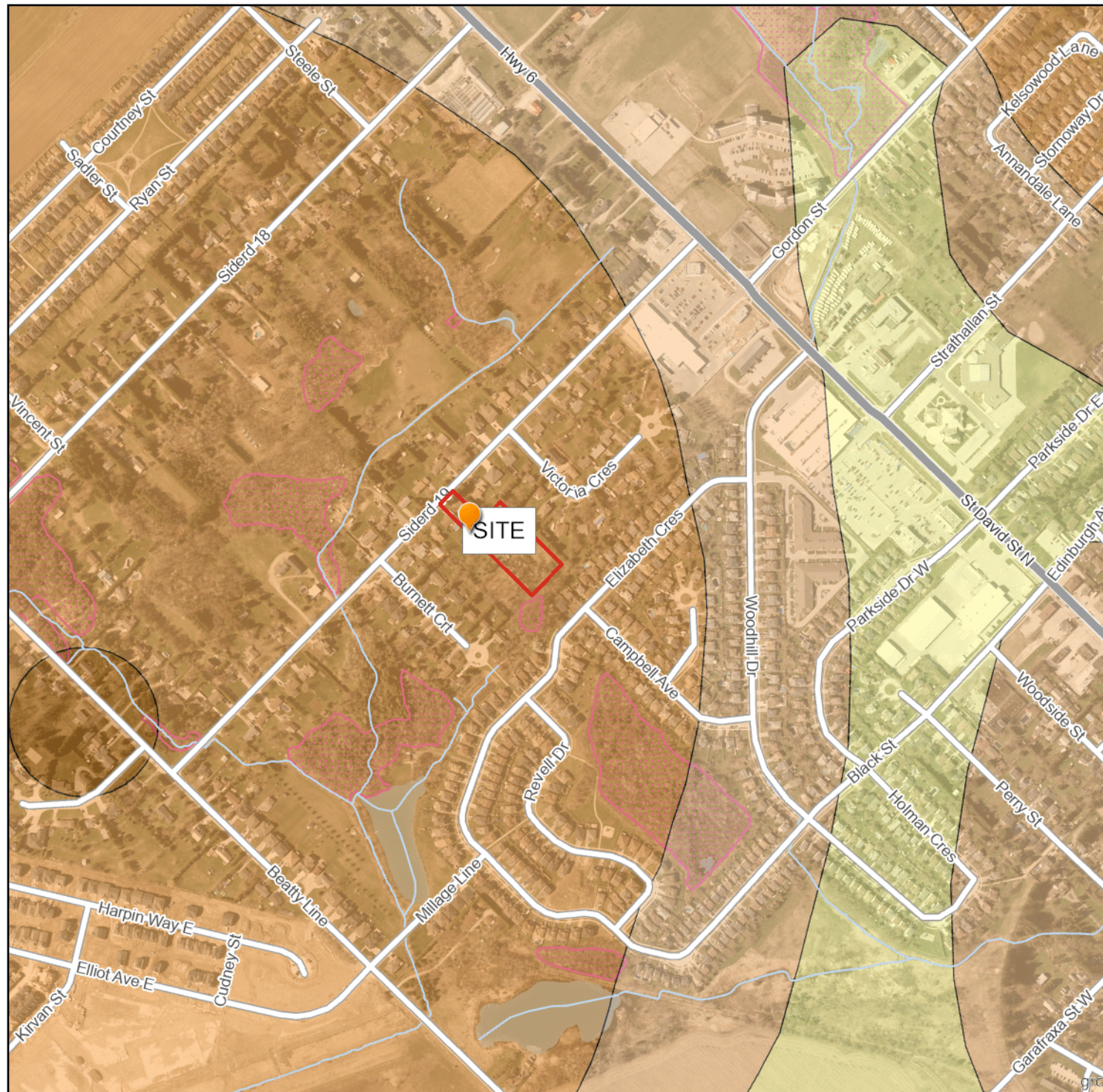
Appendix D Source Protection Vulnerable Area Mapping



Wellhead Protection Areas

Legend

- Municipal Boundary (GRCA)
- Wetland (GRCA)
- WHPA-Wellhead Protection Area (GRCA)
 - WHPA-A
 - WHPA-B
 - WHPA-C
 - WHPA-D
- Watercourse (GRCA)
- Waterbody (GRCA)
- Conservation Area Boundary (GRCA)



Copyright Grand River Conservation Authority, 2024.

Disclaimer: This map is for illustrative purposes only. Information contained herein is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user. The source for each data layer is shown in parentheses in the map legend. See [Sources and Citations](#) for details.

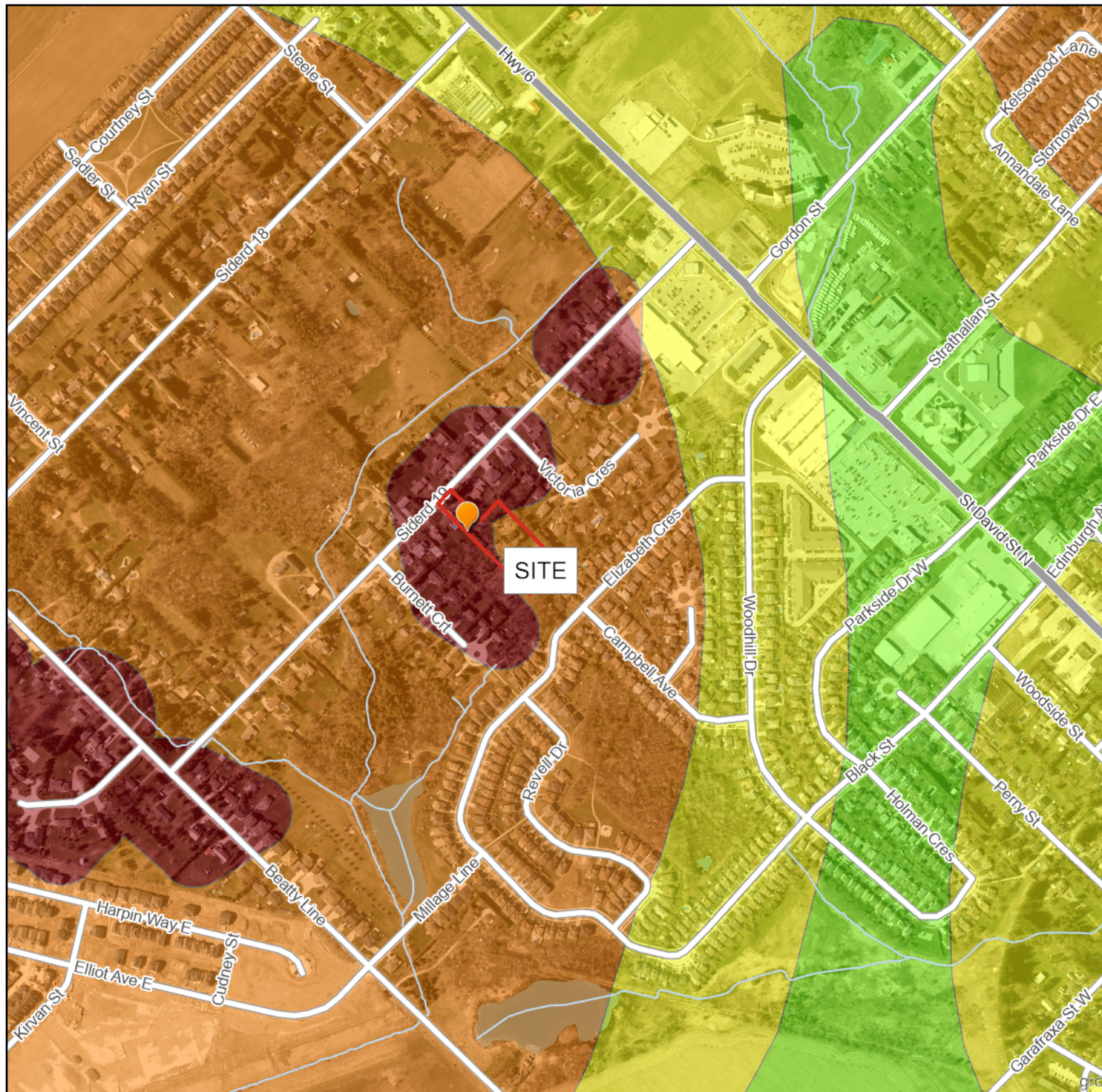




Wellhead Protection Areas - Vulnerability

Legend

- Municipal Boundary (GRCA)
- WHPA Vulnerability (GRCA)
 - 10
 - 8
 - 6
 - 4
 - 2
- Watercourse (GRCA)
- Waterbody (GRCA)
- Conservation Area Boundary (GRCA)



Copyright Grand River Conservation Authority, 2024.

Disclaimer: This map is for illustrative purposes only. Information contained herein is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user. The source for each data layer is shown in parentheses in the map legend. See [Sources and Citations](#) for details.

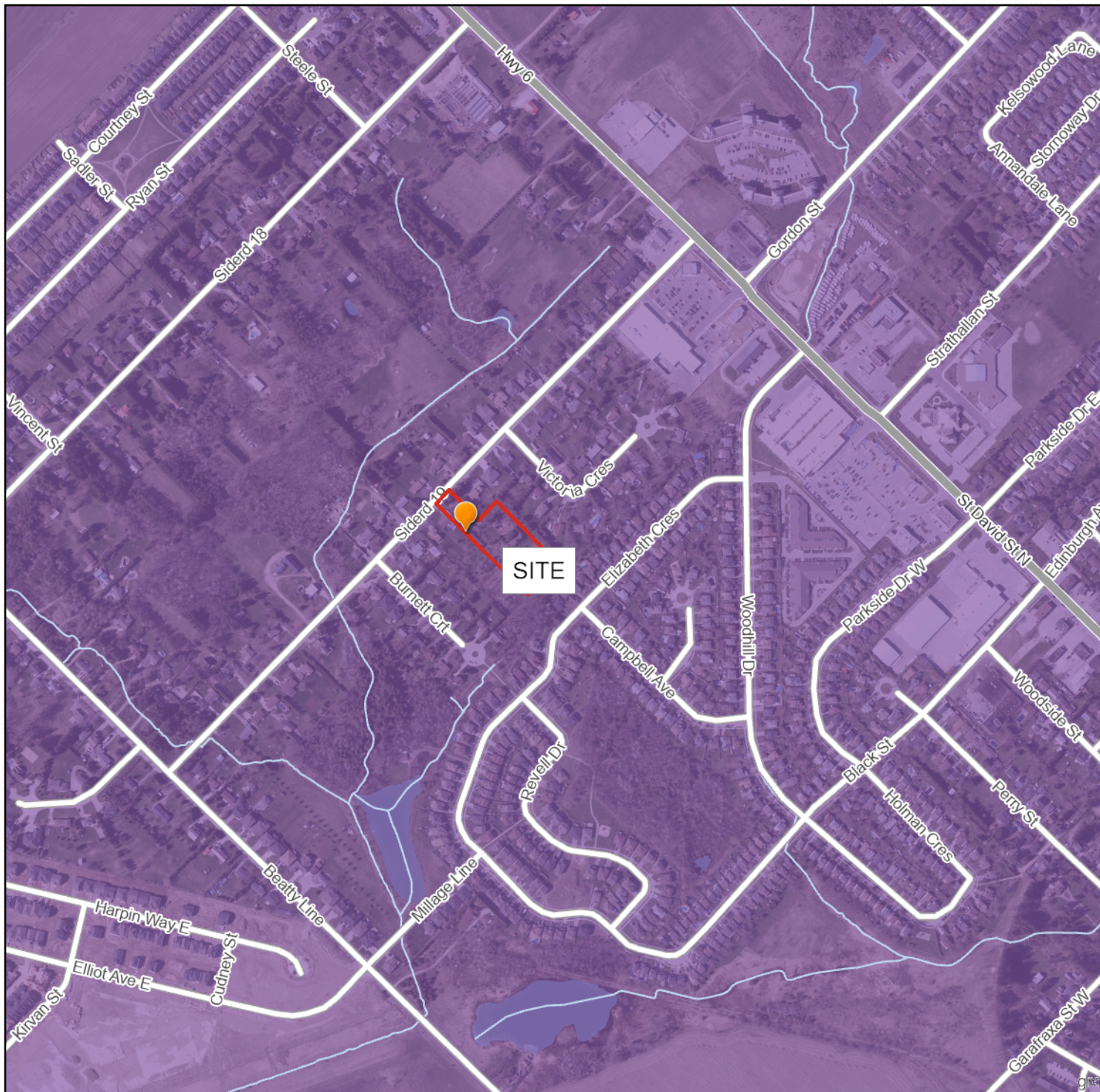




Wellhead Water Quantity Zone

Legend

- Municipal Boundary (GRCA)
- Wellhead Water Quantity Zone (GRCA)
 - Significant Risk (Approved)
 - Significant Risk (Draft)
 - Moderate Risk (Approved)
 - Moderate Risk (Draft)
 - Low Risk (Approved)
 - Low Risk (Draft)
- Watercourse (GRCA)
- Waterbody (GRCA)
- Conservation Area Boundary (GRCA)



Copyright Grand River Conservation Authority, 2024.

Disclaimer: This map is for illustrative purposes only. Information contained herein is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user. The source for each data layer is shown in parentheses in the map legend. See [Sources and Citations](#) for details.

Scale 1:7,556

NAD83 UTM zone 17 (EPSG:26917)

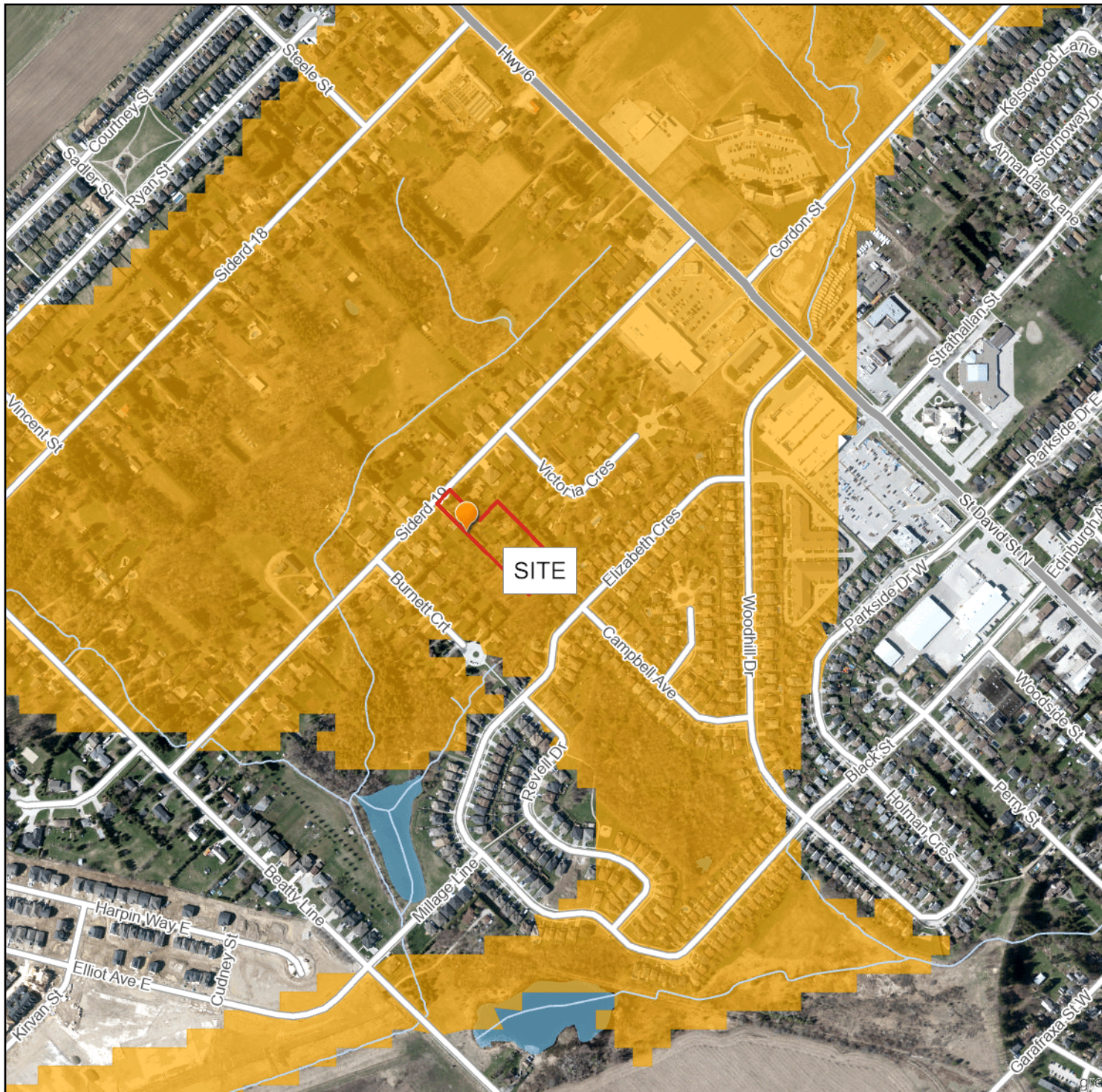




Significant Groundwater Recharge Areas

Legend

- Municipal Boundary (GRCA)
- Signif. GW Recharge - Tier 2 (GRCA)
- Watercourse (GRCA)
- Waterbody (GRCA)
- Conservation Area Boundary (GRCA)



Copyright Grand River Conservation Authority, 2024.

Disclaimer: This map is for illustrative purposes only. Information contained herein is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.
The source for each data layer is shown in parentheses in the map legend. See [Sources and Citations](#) for details.



Appendix E Borehole Logs and Grain-Size Analyses



Legend

Monitoring Well (JLP, 2023)



Notes:
1. The soil types and boundaries are applicable only at the location of the boreholes. Between boreholes, they are assumed and may change substantially. The topsoil thicknesses quoted in the report are used for discussion purposes only and should not be used for estimating purposes.
2. The Ground Surface elevations at the borehole locations were derived from the Temporary Benchmark (TBM) as shown.
3. The soil samples will be retained for three months from the date of issue of the final report and then discarded, unless the client has requested to extend the storage period with fees.



Geotechnical Investigation
WrightHaven Homes Limited
73-79 Side Road 19,
Township of Centre Wellington (Fergus), On

Date: March 29, 2023	Ref. No. G4670-23-01	
Prepared By: PB	Checked By: JB	DWG. No. 1
Source: Google Earth	Scale: N.T.S.	

CLIENT Wrighthaven Homes Limited

 PROJECT NAME Residential Subdivision

 PROJECT NUMBER G4670-22-12

 PROJECT LOCATION 79 Sideroad 19, Fergus, Ontario

 DATE STARTED 23-1-30 COMPLETED 23-1-30

 GROUND ELEVATION 419.211 m HOLE SIZE 200mm

 DRILLING CONTRACTOR Pontil Drilling

GROUND WATER LEVELS:

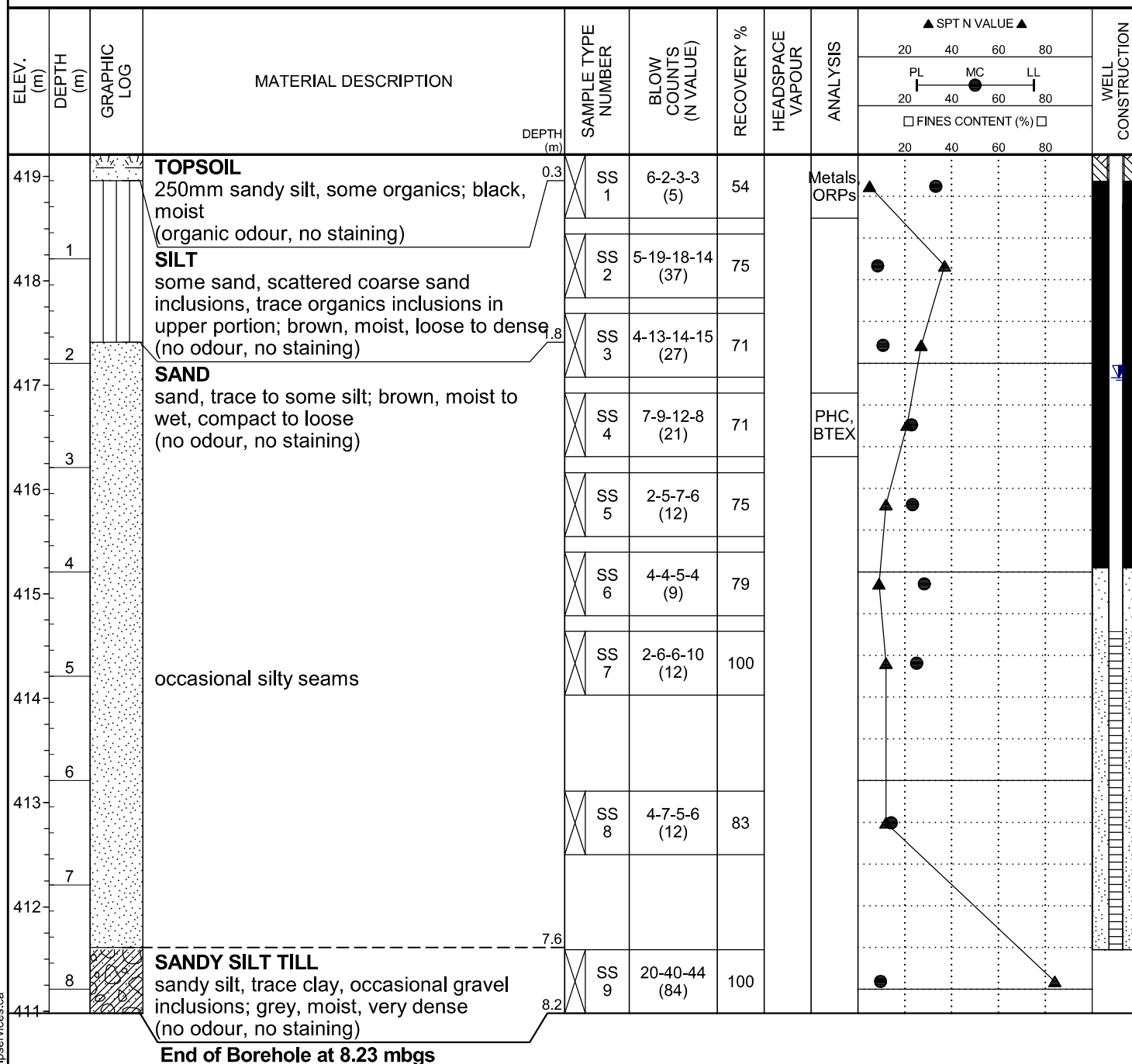
 DRILLING METHOD Hollow Stem

 AT TIME OF DRILLING ---

 LOGGED BY AK/PB CHECKED BY AL

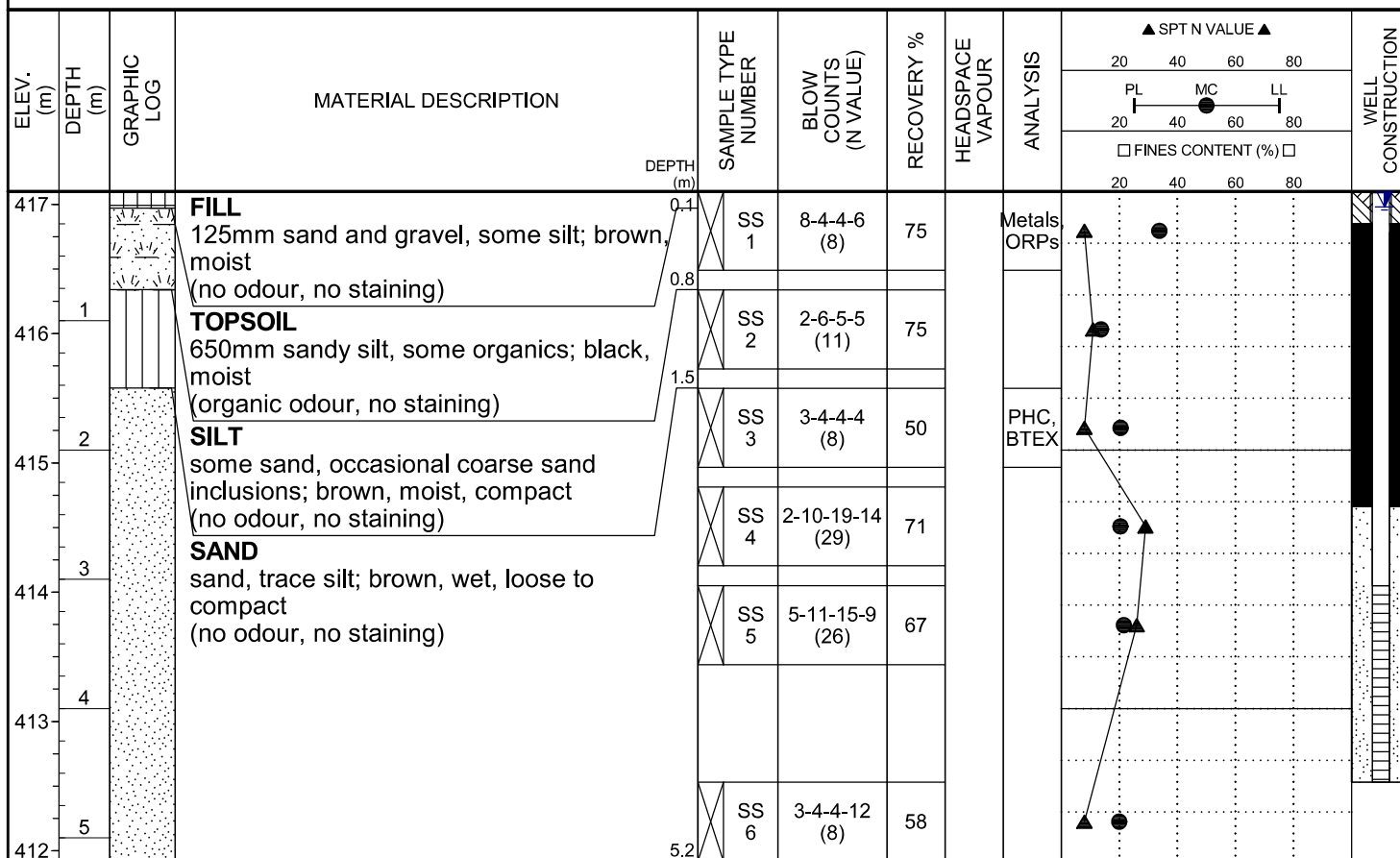
 AT END OF DRILLING ---

NOTES

 AFTER DRILLING 2.14 m / Elev 417.07 m

Water Level Readings:

Date	Depth (m)	Elevation (m)
Mar 14, 2023	N/R	N/R
Apr 05, 2023	2.14	417.07

CLIENT <u>Wrighthaven Homes Limited</u> PROJECT NUMBER <u>G4670-22-12</u> DATE STARTED <u>23-1-30</u> COMPLETED <u>23-1-30</u> DRILLING CONTRACTOR <u>Pontil Drilling</u> DRILLING METHOD <u>Hollow Stem</u> LOGGED BY <u>AK/PB</u> CHECKED BY <u>AL</u> NOTES _____	PROJECT NAME <u>Residential Subdivision</u> PROJECT LOCATION <u>79 Sideroad 19, Fergus, Ontario</u> GROUND ELEVATION <u>417.1 m</u> HOLE SIZE <u>200mm</u> GROUND WATER LEVELS: AT TIME OF DRILLING <u>---</u> AT END OF DRILLING <u>---</u> ▼ AFTER DRILLING <u>0.12 m / Elev 416.98 m</u>
---	---

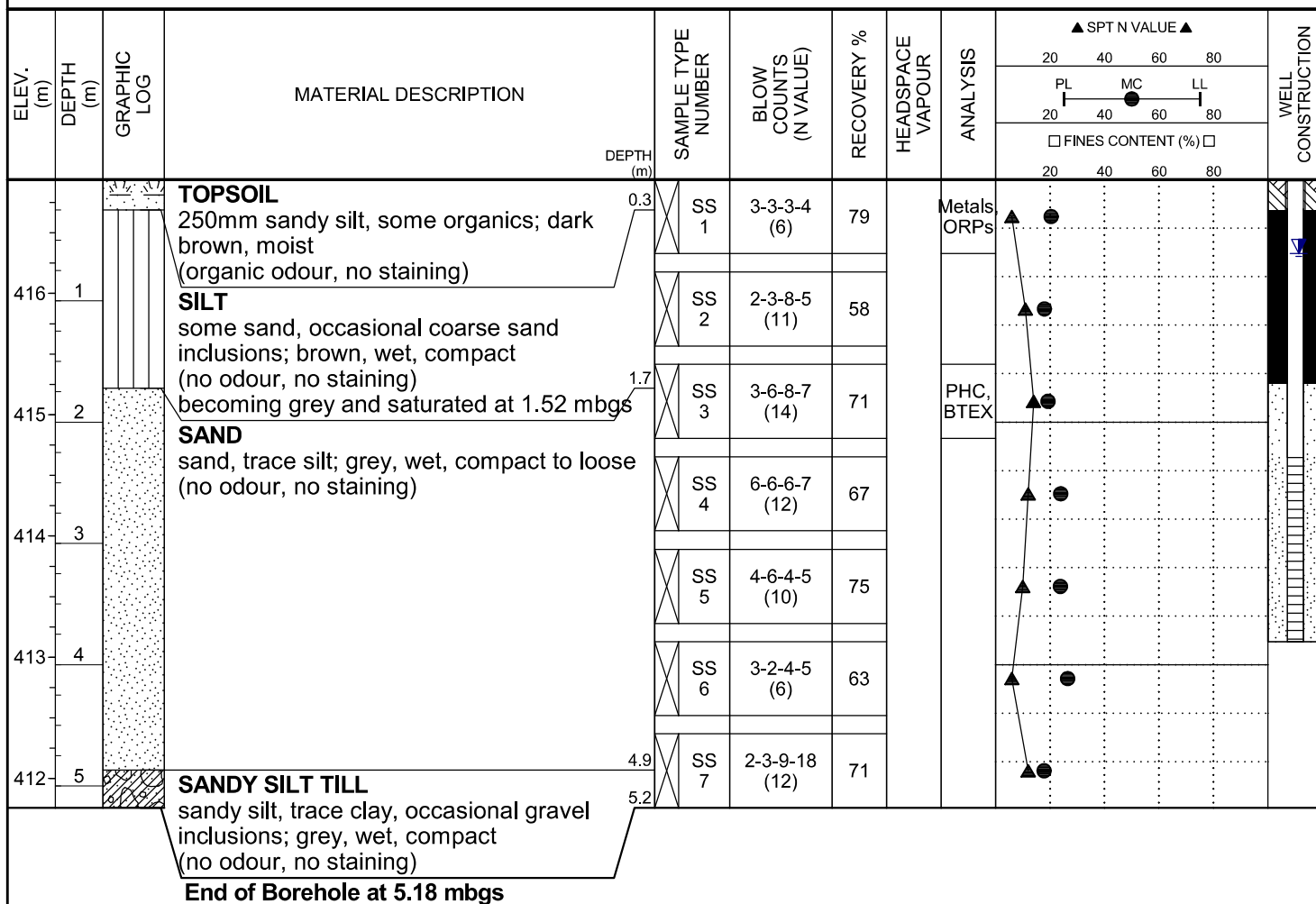


End of Borehole at 5.18 mbgs

Water Level Readings:

Date	Depth (m)	Elevation (m)
Mar 14, 2023	N/R	N/R
Apr 05, 2023	0.12	416.98

CLIENT <u>Wrightshaven Homes Limited</u> PROJECT NUMBER <u>G4670-22-12</u> DATE STARTED <u>23-1-31</u> COMPLETED <u>23-1-31</u> DRILLING CONTRACTOR <u>Pontil Drilling</u> DRILLING METHOD <u>Hollow Stem</u> LOGGED BY <u>AK/PB</u> CHECKED BY <u>AL</u> NOTES _____	PROJECT NAME <u>Residential Subdivision</u> PROJECT LOCATION <u>79 Sideroad 19, Fergus, Ontario</u> GROUND ELEVATION <u>416.939 m</u> HOLE SIZE <u>200mm</u> GROUND WATER LEVELS: AT TIME OF DRILLING <u>---</u> AT END OF DRILLING <u>---</u> ▼ AFTER DRILLING <u>0.61 m / Elev 416.33 m</u>
--	---


Water Level Readings:

Date	Depth (m)	Elevation (m)
Mar 14, 2023	1.21	415.73
Apr 05, 2023	0.61	416.33

CLIENT Wrighthaven Homes Limited

 PROJECT NAME Residential Subdivision

 PROJECT NUMBER G4670-22-12

 PROJECT LOCATION 79 Sideroad 19, Fergus, Ontario

 DATE STARTED 23-1-30 COMPLETED 23-1-30

 GROUND ELEVATION 416.302 m HOLE SIZE 200mm

 DRILLING CONTRACTOR Pontil Drilling

GROUND WATER LEVELS:

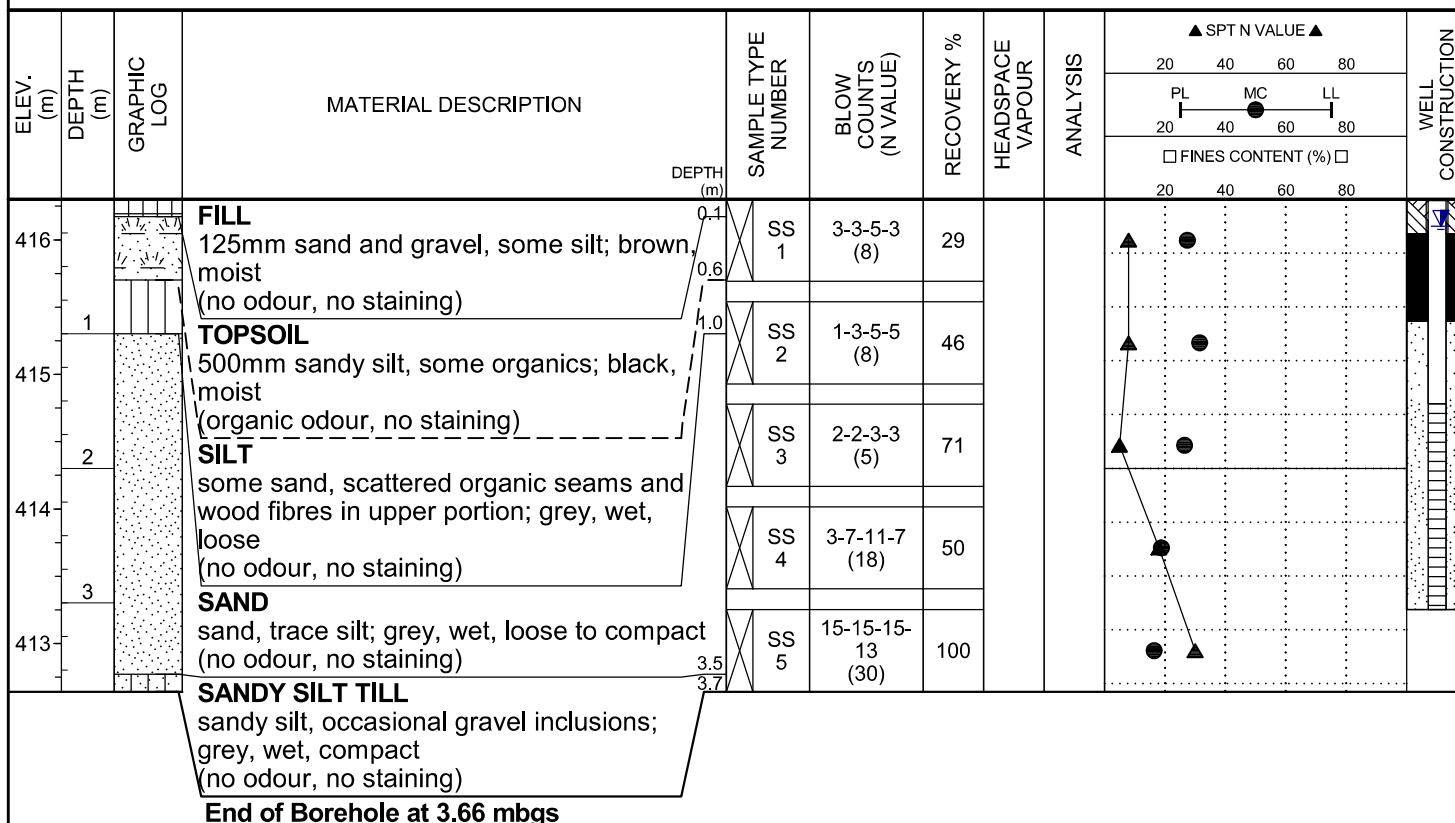
 DRILLING METHOD Hollow Stem

 AT TIME OF DRILLING ---

 LOGGED BY AK/PB CHECKED BY AL

 AT END OF DRILLING ---

NOTES

 AFTER DRILLING 0.20 m / Elev 416.10 m

Water Level Readings:

Date	Depth (m)	Elevation (m)
Mar 14, 2023	0.68	415.62
Apr 05, 2023	0.20	416.10

CLIENT Wrightshaven Homes Limited

 PROJECT NAME Residential Subdivision

 PROJECT NUMBER G4670-22-12

 PROJECT LOCATION 79 Sideroad 19, Fergus, Ontario

 DATE STARTED 23-1-31 COMPLETED 23-1-31

 GROUND ELEVATION 415.859 m HOLE SIZE 200mm

 DRILLING CONTRACTOR Pontil Drilling

GROUND WATER LEVELS:

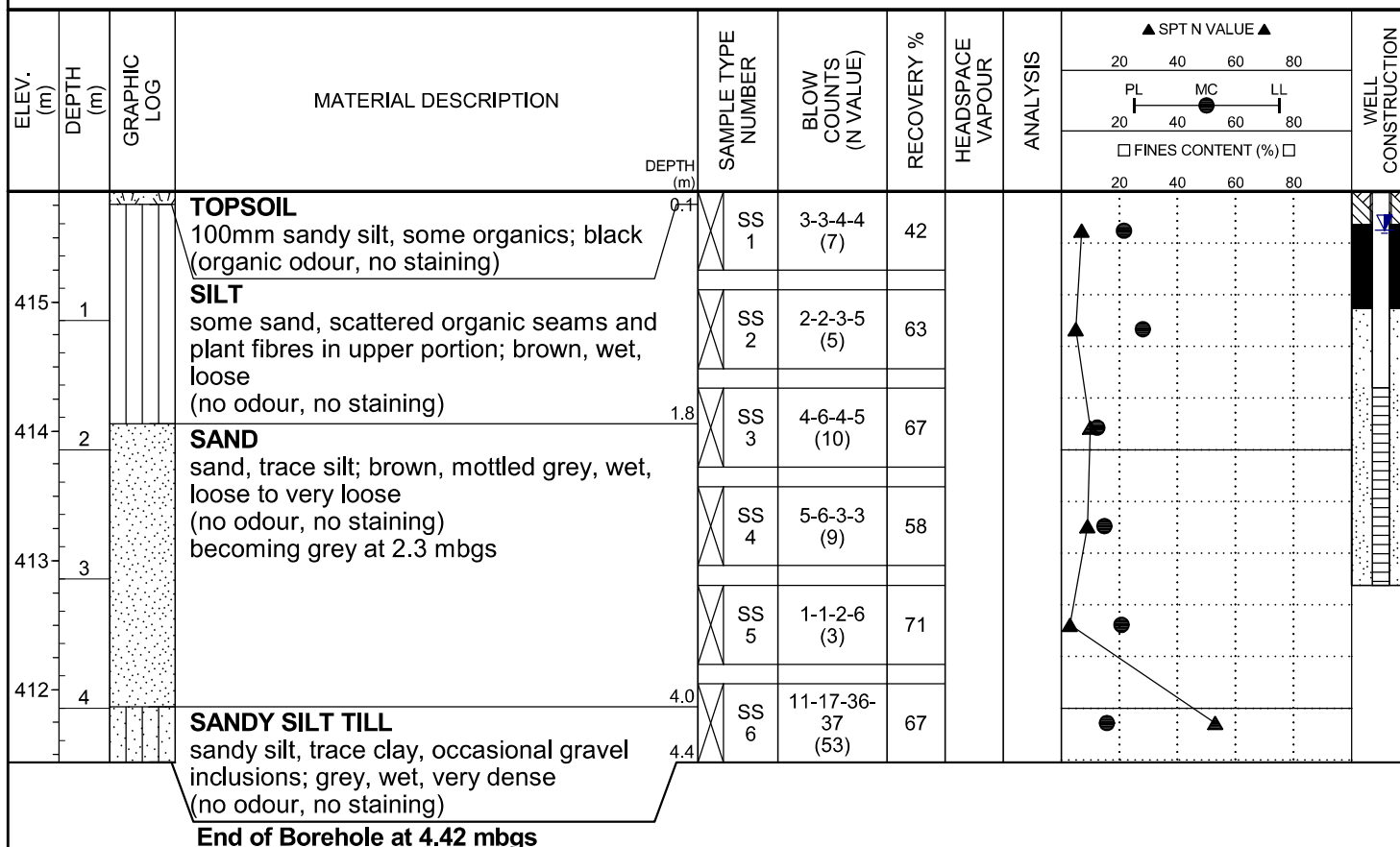
 DRILLING METHOD Hollow Stem

 AT TIME OF DRILLING ---

 LOGGED BY AK/PB CHECKED BY AL

 AT END OF DRILLING ---

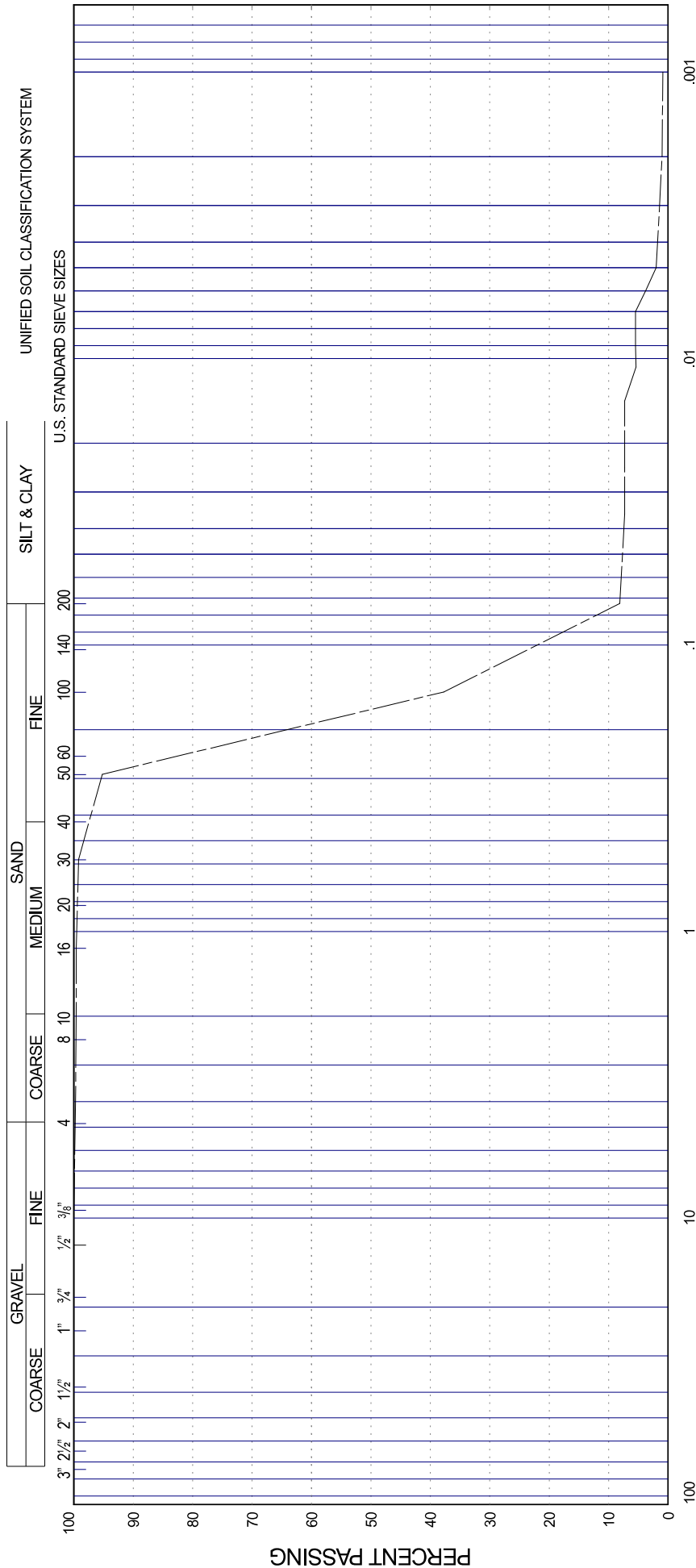
NOTES

 AFTER DRILLING 0.30 m / Elev 415.56 m

Water Level Readings:

Date	Depth (m)	Elevation (m)
Mar 14, 2023	0.67	415.19
Apr 05, 2023	0.29	415.56

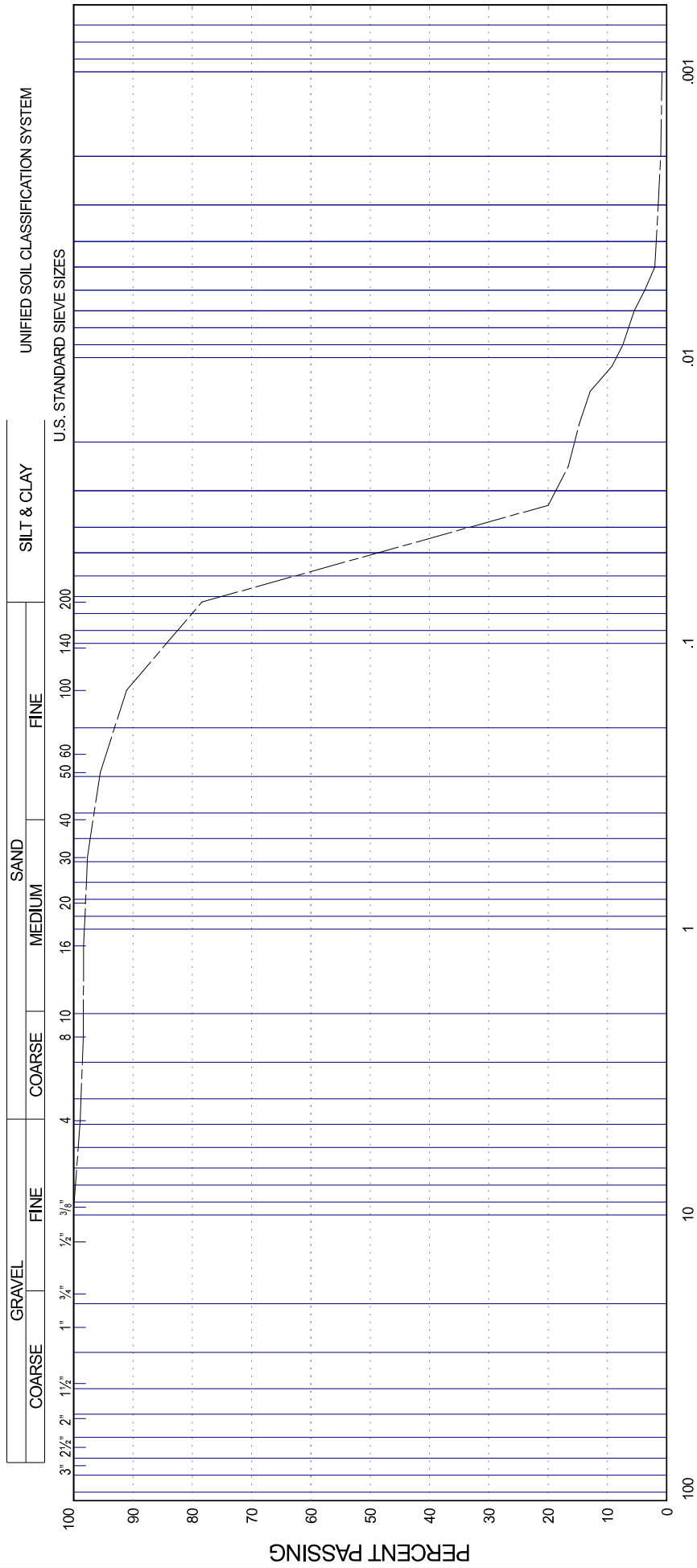
GRAIN SIZE DISTRIBUTION

OUR REFERENCE N° G4670-22-12



GRAIN SIZE DISTRIBUTION

OUR REFERENCE N° G4670-22-12



ENCLOSURE N° 8

PROJECT: Residential Subdivision
LOCATION: 79 - 87 Sideroad , (Fergus), ON
BOREHOLE N°: 3
SAMPLE N°: 2
DEPTH: 0.8 - 1.4 m±
ELEVATION: 416.4 - 415.8 m±

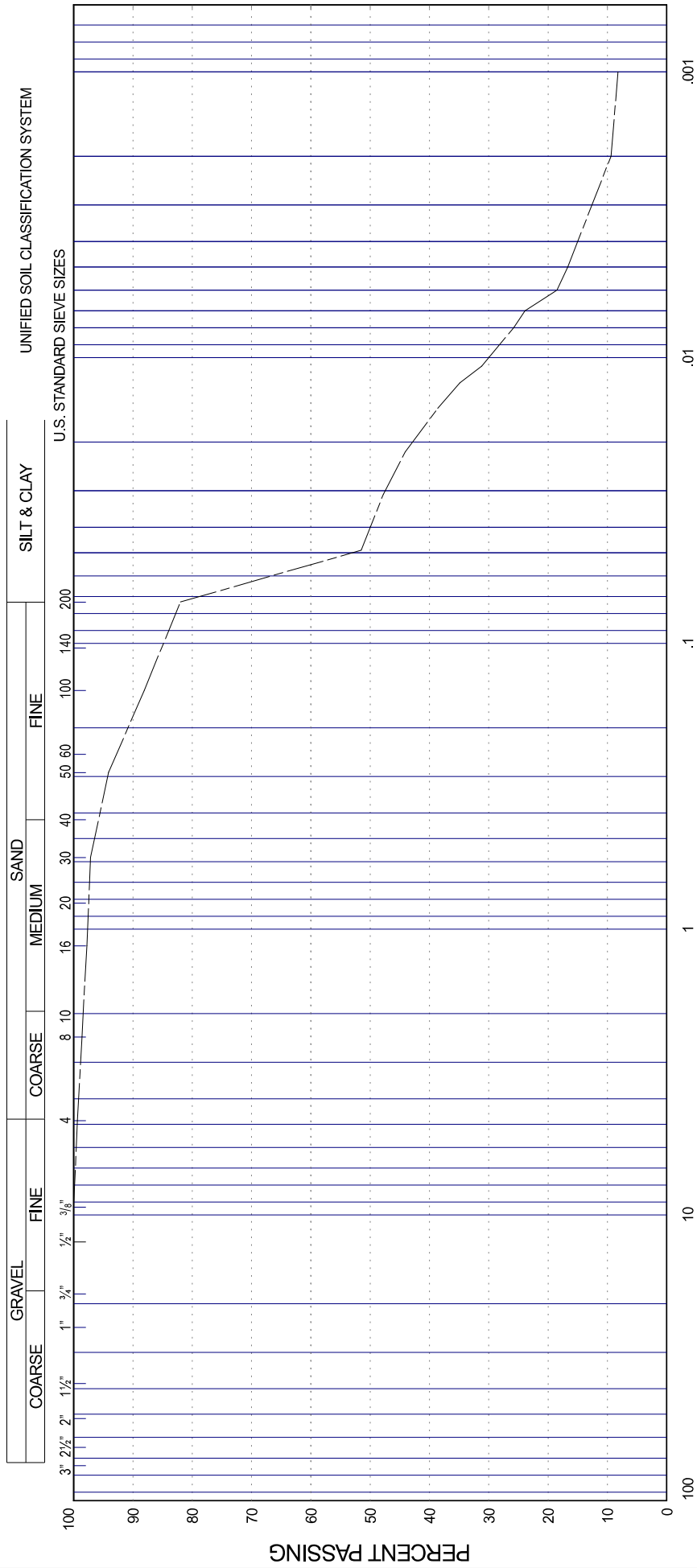
COEFFICIENT OF UNIFORMITY:
COEFFICIENT OF CURVATURE:

PLASTIC PROPERTIES
LIQUID LIMIT % = 17.2
PLASTIC LIMIT % = 13.7
PLASTICITY INDEX % = 3.5
MOISTURE CONTENT % = 17.5

Classification of Sample and Group Symbol:
SANDY SILT (ML)

GRAIN SIZE DISTRIBUTION

OUR REFERENCE N° G4670-22-12



ENCLOSURE N° 9

PROJECT: Residential Subdivision
LOCATION: 79 - 87 Sideroad, Fergus, ON
BOREHOLE N°: 5
SAMPLE N°: 3
DEPTH: 1.5 - 2.1 m±
ELEVATION: 414.3 - 413.7 m±

COEFFICIENT OF UNIFORMITY:
COEFFICIENT OF CURVATURE:

PLASTIC PROPERTIES
LIQUID LIMIT % = 21.4
PLASTIC LIMIT % = 17.7
PLASTICITY INDEX % = 3.8
MOISTURE CONTENT % = 16.40

Classification of Sample and Group Symbol:
SILT, some sand, trace clay (ML)

Appendix F Groundwater Hydrographs

Chart 1: Hydrograph of MW1

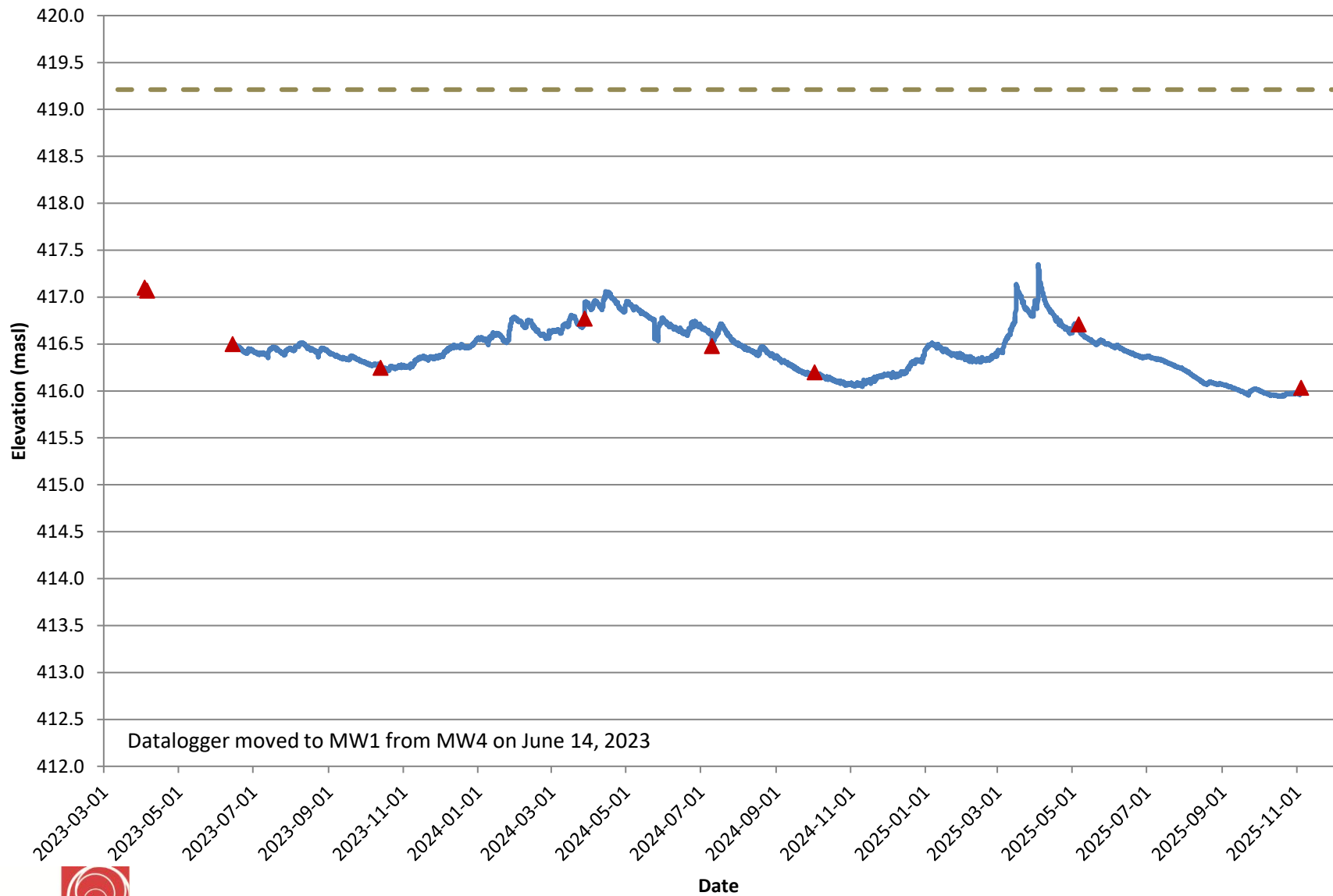


Chart 2: Hydrograph of MW2

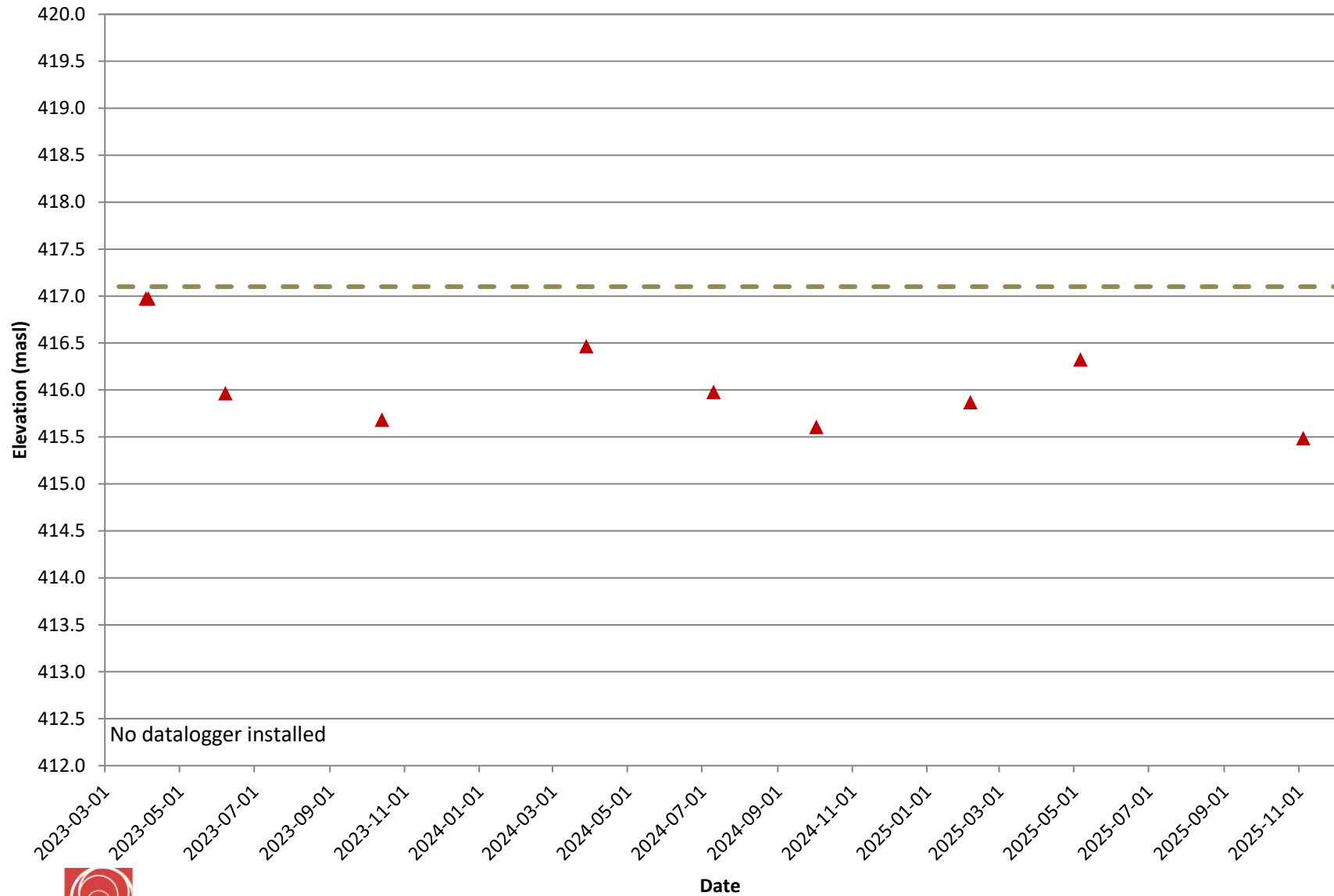


Chart 3: Hydrograph of MW3

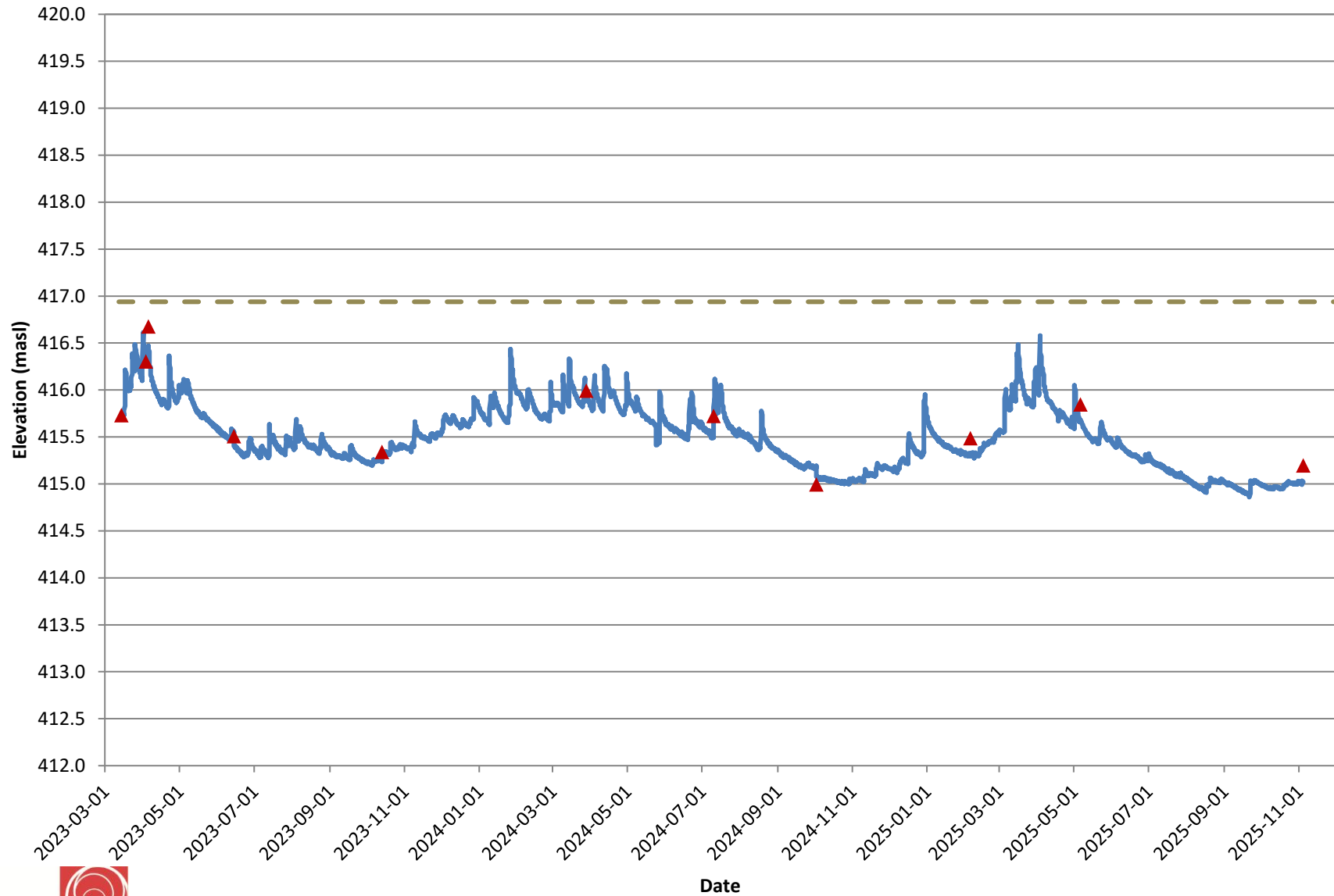


Chart 4: Hydrograph of MW4

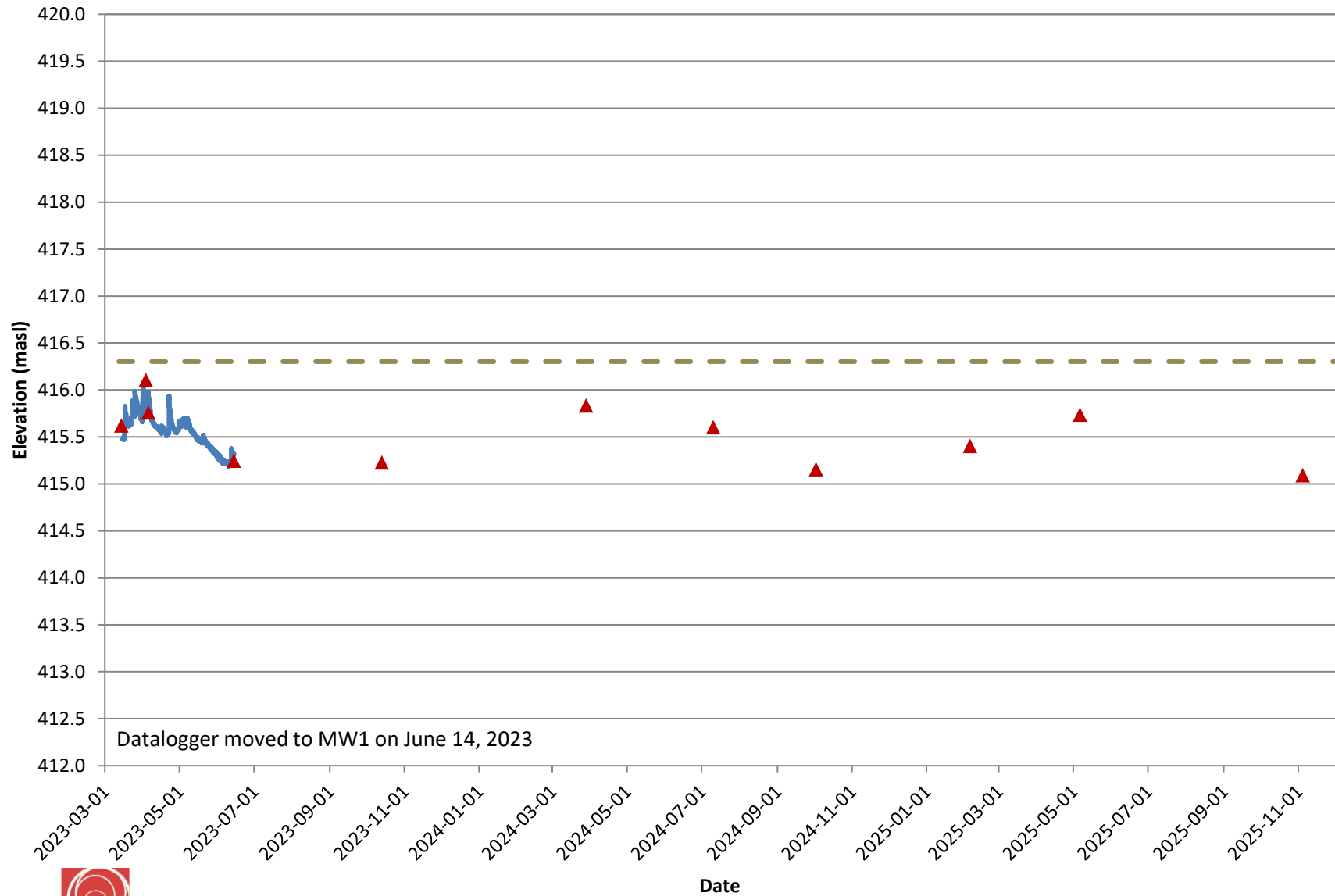
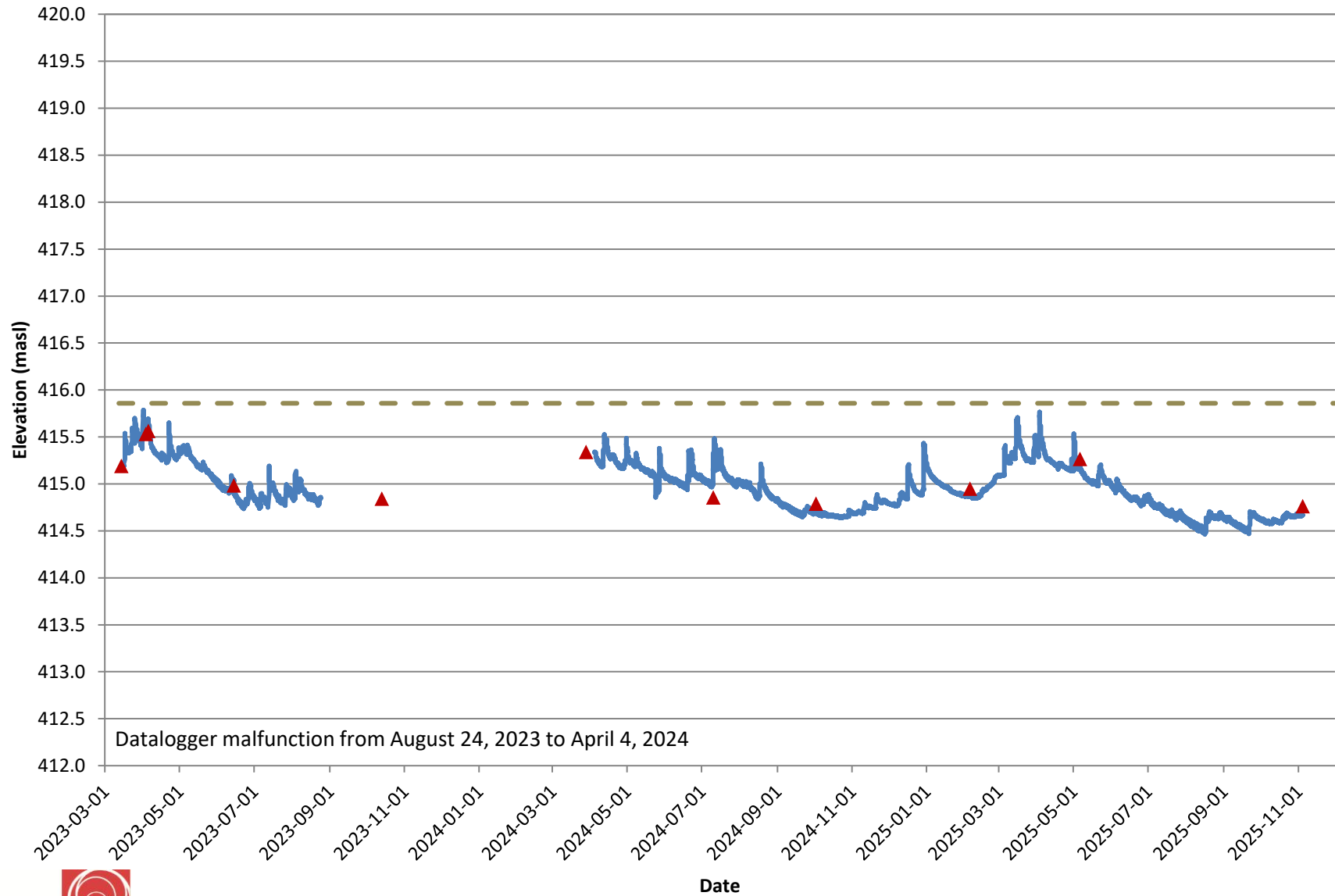


Chart 5: Hydrograph of MW5



Appendix G Certificates of Analysis for Groundwater and Surface Water Quality Testing



Your Project #: 122025-01
 Site Location: 79 SIDEROAD 19, FERGUS
 Your C.O.C. #: n/a

Attention: Mark Ongarato

GM BluePlan Engineering Limited
 650 Woodlawn Rd W
 Block C, Unit 2
 Guelph, ON
 CANADA N1K 1B8

Report Date: 2023/04/12
 Report #: R7584726
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C394527

Received: 2023/04/04, 16:24

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	1	N/A	2023/04/06	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/04/10	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/04/10	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	1	N/A	2023/04/06	CAM SOP-00414	SM 23 2510 m
Hardness (calculated as CaCO3)	1	N/A	2023/04/12	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals Analysis by ICP	1	2023/04/05	2023/04/12	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICPMS	1	2023/04/06	2023/04/06	CAM SOP-00447	EPA 6020B m
Total Ammonia-N	1	N/A	2023/04/10	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (1)	1	N/A	2023/04/06	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	1	2023/04/05	2023/04/06	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	1	N/A	2023/04/06	CAM SOP-00461	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C)	1	N/A	2023/04/12		Auto Calc
Sat. pH and Langelier Index (@ 4C)	1	N/A	2023/04/12		Auto Calc
Sulphate by Automated Turbidimetry	1	N/A	2023/04/06	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids (TDS calc)	1	N/A	2023/04/12		Auto Calc
Total Organic Carbon (TOC) (2)	1	N/A	2023/04/05	CAM SOP-00446	SM 23 5310B m
Total Phosphorus (Colourimetric)	1	2023/04/05	2023/04/06	CAM SOP-00407	SM 23 4500-P I
Turbidity	1	N/A	2023/04/05	CAM SOP-00417	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or



Your Project #: 122025-01
Site Location: 79 SIDEROAD 19, FERGUS
Your C.O.C. #: n/a

Attention: Mark Ongarato

GM BluePlan Engineering Limited
650 Woodlawn Rd W
Block C, Unit 2
Guelph, ON
CANADA N1K 1B8

Report Date: 2023/04/12
Report #: R7584726
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C394527

Received: 2023/04/04, 16:24

implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(2) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Ashton Gibson, Project Manager

Email: Ashton.Gibson@bureauveritas.com

Phone# (905)817-5765

=====

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - SURFACE WATER (WATER)

Bureau Veritas ID			VLU823			VLU823		
Sampling Date			2023/04/03 14:00			2023/04/03 14:00		
COC Number			n/a			n/a		
	UNITS	Criteria	MW1	RDL	QC Batch	MW1 Lab-Dup	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	-	310	1.0	8591908			
Calculated TDS	mg/L	-	720	1.0	8591913			
Carb. Alkalinity (calc. as CaCO3)	mg/L	-	2.2	1.0	8591908			
Hardness (CaCO3)	mg/L	-	420	1.0	8591910			
Langelier Index (@ 20C)	N/A	-	0.978		8591911			
Langelier Index (@ 4C)	N/A	-	0.731		8591912			
Saturation pH (@ 20C)	N/A	-	6.90		8591911			
Saturation pH (@ 4C)	N/A	-	7.15		8591912			
Inorganics								
Total Ammonia-N	mg/L	-	0.074	0.050	8593787			
Conductivity	umho/cm	-	1300	1.0	8593085	1300	1.0	8593085
Total Organic Carbon (TOC)	mg/L	-	2.6	0.40	8593415			
Orthophosphate (P)	mg/L	-	<0.010	0.010	8593028			
pH	pH	6.5:8.5	7.88		8593090	7.90		8593090
Total Phosphorus	mg/L	0.01	1.4	0.004	8592119			
Dissolved Sulphate (SO4)	mg/L	-	58	1.0	8593046			
Turbidity	NTU	-	28	0.1	8591998			
Alkalinity (Total as CaCO3)	mg/L	-	310	1.0	8593077	320	1.0	8593077
Dissolved Chloride (Cl-)	mg/L	-	190	1.0	8593055			
Nitrite (N)	mg/L	-	<0.010	0.010	8593108			
Nitrate (N)	mg/L	-	1.47	0.10	8593108			
Metals								
Dissolved Calcium (Ca)	mg/L	-	130	0.05	8593616	130	0.05	8593616
Dissolved Magnesium (Mg)	mg/L	-	25	0.05	8593616	24	0.05	8593616
Dissolved Potassium (K)	mg/L	-	1	1	8593616	1	1	8593616
Dissolved Sodium (Na)	mg/L	-	110	0.5	8593616	110	0.5	8593616
Total Aluminum (Al)	ug/L	-	5.4	4.9	8594595			
Total Antimony (Sb)	ug/L	20	<0.50	0.50	8594595			
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Lab-Dup = Laboratory Initiated Duplicate								
Criteria: Ontario Provincial Water Quality Objectives								
Ref. to MOEE Water Management document dated Feb.1999								



BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - SURFACE WATER (WATER)

Bureau Veritas ID			VLU823			VLU823		
Sampling Date			2023/04/03 14:00			2023/04/03 14:00		
COC Number			n/a			n/a		
	UNITS	Criteria	MW1	RDL	QC Batch	MW1 Lab-Dup	RDL	QC Batch
Total Arsenic (As)	ug/L	100	<1.0	1.0	8594595			
Total Barium (Ba)	ug/L	-	70	2.0	8594595			
Total Beryllium (Be)	ug/L	11	<0.40	0.40	8594595			
Total Boron (B)	ug/L	200	21	10	8594595			
Total Cadmium (Cd)	ug/L	0.2	<0.090	0.090	8594595			
Total Calcium (Ca)	ug/L	-	130000	200	8594595			
Total Chromium (Cr)	ug/L	-	<5.0	5.0	8594595			
Total Cobalt (Co)	ug/L	0.9	<0.50	0.50	8594595			
Total Copper (Cu)	ug/L	5	1.5	0.90	8594595			
Total Iron (Fe)	ug/L	300	<100	100	8594595			
Total Lead (Pb)	ug/L	5	<0.50	0.50	8594595			
Total Magnesium (Mg)	ug/L	-	25000	50	8594595			
Total Manganese (Mn)	ug/L	-	42	2.0	8594595			
Total Molybdenum (Mo)	ug/L	40	<0.50	0.50	8594595			
Total Nickel (Ni)	ug/L	25	<1.0	1.0	8594595			
Total Potassium (K)	ug/L	-	1200	200	8594595			
Total Selenium (Se)	ug/L	100	<2.0	2.0	8594595			
Total Silicon (Si)	ug/L	-	4900	50	8594595			
Total Silver (Ag)	ug/L	0.1	<0.090	0.090	8594595			
Total Sodium (Na)	ug/L	-	110000	100	8594595			
Total Strontium (Sr)	ug/L	-	230	1.0	8594595			
Total Thallium (Tl)	ug/L	0.3	<0.050	0.050	8594595			
Total Titanium (Ti)	ug/L	-	<5.0	5.0	8594595			
Total Uranium (U)	ug/L	5	1.1	0.10	8594595			
Total Vanadium (V)	ug/L	6	<0.50	0.50	8594595			
Total Zinc (Zn)	ug/L	30	<5.0	5.0	8594595			
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Lab-Dup = Laboratory Initiated Duplicate								
Criteria: Ontario Provincial Water Quality Objectives								
Ref. to MOEE Water Management document dated Feb.1999								



**BUREAU
VERITAS**

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: VLU823

Sample ID: MW1

Matrix: Water

Collected: 2023/04/03

Shipped:

Received: 2023/04/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8593077	N/A	2023/04/06	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8591908	N/A	2023/04/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8593055	N/A	2023/04/10	Alina Dobreanu
Conductivity	AT	8593085	N/A	2023/04/06	Kien Tran
Hardness (calculated as CaCO ₃)		8591910	N/A	2023/04/12	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	8593616	2023/04/05	2023/04/12	Suban Kanapathippilai
Total Metals Analysis by ICPMS	ICP/MS	8594595	2023/04/06	2023/04/06	Arefa Dabhad
Total Ammonia-N	LACH/NH ₄	8593787	N/A	2023/04/10	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	8593108	N/A	2023/04/06	Viorica Rotaru
pH	AT	8593090	2023/04/05	2023/04/06	Kien Tran
Orthophosphate	KONE	8593028	N/A	2023/04/06	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	8591911	N/A	2023/04/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	8591912	N/A	2023/04/12	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	8593046	N/A	2023/04/06	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	8591913	N/A	2023/04/12	Automated Statchk
Total Organic Carbon (TOC)	TOCV/NDIR	8593415	N/A	2023/04/05	Gyulshen Idriz
Total Phosphorus (Colourimetric)	SKAL/P	8592119	2023/04/05	2023/04/06	Prgya Panchal
Turbidity	AT	8591998	N/A	2023/04/05	Kien Tran

Bureau Veritas ID: VLU823 Dup

Sample ID: MW1

Matrix: Water

Collected: 2023/04/03

Shipped:

Received: 2023/04/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8593077	N/A	2023/04/06	Kien Tran
Conductivity	AT	8593085	N/A	2023/04/06	Kien Tran
Lab Filtered Metals Analysis by ICP	ICP	8593616	2023/04/05	2023/04/12	Suban Kanapathippilai
pH	AT	8593090	2023/04/05	2023/04/06	Kien Tran



BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

GENERAL COMMENTS

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

QUALITY ASSURANCE REPORT

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8591998	Turbidity	2023/04/05			101	80 - 120	<0.1	NTU	1.5	20		
8592119	Total Phosphorus	2023/04/06	99	80 - 120	106	80 - 120	<0.004	mg/L	9.7	20	106	80 - 120
8593028	Orthophosphate (P)	2023/04/06	98	75 - 125	95	80 - 120	<0.010	mg/L	NC	20		
8593046	Dissolved Sulphate (SO4)	2023/04/06	NC	75 - 125	96	80 - 120	<1.0	mg/L	0.11	20		
8593055	Dissolved Chloride (Cl-)	2023/04/10	NC	80 - 120	100	80 - 120	<1.0	mg/L	2.6	20		
8593077	Alkalinity (Total as CaCO3)	2023/04/06			99	85 - 115	<1.0	mg/L	0.15	20		
8593085	Conductivity	2023/04/06			101	85 - 115	<1.0	umho/cm	0.15	25		
8593090	pH	2023/04/06			102	98 - 103			0.23	N/A		
8593108	Nitrate (N)	2023/04/06	94	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
8593108	Nitrite (N)	2023/04/06	103	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
8593415	Total Organic Carbon (TOC)	2023/04/05	94	80 - 120	97	80 - 120	<0.40	mg/L	0.17	20		
8593616	Dissolved Calcium (Ca)	2023/04/12	NC	80 - 120	97	80 - 120	<0.05	mg/L	1.2	25		
8593616	Dissolved Magnesium (Mg)	2023/04/12	NC	80 - 120	99	80 - 120	<0.05	mg/L	2.1	25		
8593616	Dissolved Potassium (K)	2023/04/12	100	80 - 120	100	80 - 120	<1	mg/L	0.78	25		
8593616	Dissolved Sodium (Na)	2023/04/12	NC	80 - 120	101	80 - 120	<0.5	mg/L	1.1	25		
8593787	Total Ammonia-N	2023/04/10	102	75 - 125	103	80 - 120	<0.050	mg/L	NC	20		
8594595	Total Aluminum (Al)	2023/04/06	107	80 - 120	103	80 - 120	<4.9	ug/L	2.5	20		
8594595	Total Antimony (Sb)	2023/04/06	107	80 - 120	105	80 - 120	<0.50	ug/L				
8594595	Total Arsenic (As)	2023/04/06	103	80 - 120	102	80 - 120	<1.0	ug/L				
8594595	Total Barium (Ba)	2023/04/06	100	80 - 120	101	80 - 120	<2.0	ug/L				
8594595	Total Beryllium (Be)	2023/04/06	108	80 - 120	102	80 - 120	<0.40	ug/L				
8594595	Total Boron (B)	2023/04/06	102	80 - 120	99	80 - 120	<10	ug/L				
8594595	Total Cadmium (Cd)	2023/04/06	100	80 - 120	101	80 - 120	<0.090	ug/L	NC	20		
8594595	Total Calcium (Ca)	2023/04/06	NC	80 - 120	104	80 - 120	<200	ug/L				
8594595	Total Chromium (Cr)	2023/04/06	96	80 - 120	95	80 - 120	<5.0	ug/L	NC	20		
8594595	Total Cobalt (Co)	2023/04/06	101	80 - 120	99	80 - 120	<0.50	ug/L				
8594595	Total Copper (Cu)	2023/04/06	104	80 - 120	101	80 - 120	<0.90	ug/L	3.3	20		
8594595	Total Iron (Fe)	2023/04/06	100	80 - 120	100	80 - 120	<100	ug/L	2.8	20		
8594595	Total Lead (Pb)	2023/04/06	97	80 - 120	98	80 - 120	<0.50	ug/L	0.53	20		
8594595	Total Magnesium (Mg)	2023/04/06	94	80 - 120	99	80 - 120	<50	ug/L				

BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

QUALITY ASSURANCE REPORT(CONT'D)

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8594595	Total Manganese (Mn)	2023/04/06	99	80 - 120	98	80 - 120	<2.0	ug/L				
8594595	Total Molybdenum (Mo)	2023/04/06	107	80 - 120	104	80 - 120	<0.50	ug/L				
8594595	Total Nickel (Ni)	2023/04/06	97	80 - 120	97	80 - 120	<1.0	ug/L	5.6	20		
8594595	Total Potassium (K)	2023/04/06	102	80 - 120	100	80 - 120	<200	ug/L				
8594595	Total Selenium (Se)	2023/04/06	104	80 - 120	104	80 - 120	<2.0	ug/L				
8594595	Total Silicon (Si)	2023/04/06	100	80 - 120	101	80 - 120	<50	ug/L				
8594595	Total Silver (Ag)	2023/04/06	100	80 - 120	101	80 - 120	<0.090	ug/L				
8594595	Total Sodium (Na)	2023/04/06	NC	80 - 120	99	80 - 120	<100	ug/L				
8594595	Total Strontium (Sr)	2023/04/06	NC	80 - 120	95	80 - 120	<1.0	ug/L				
8594595	Total Thallium (Tl)	2023/04/06	100	80 - 120	100	80 - 120	<0.050	ug/L				
8594595	Total Titanium (Ti)	2023/04/06	99	80 - 120	101	80 - 120	<5.0	ug/L				
8594595	Total Uranium (U)	2023/04/06	100	80 - 120	96	80 - 120	<0.10	ug/L				
8594595	Total Vanadium (V)	2023/04/06	99	80 - 120	97	80 - 120	<0.50	ug/L				
8594595	Total Zinc (Zn)	2023/04/06	101	80 - 120	102	80 - 120	<5.0	ug/L	2.4	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Invoice Information				Invoice to (requires report)				Report Information (if differs from invoice)				Project Information			
Company:				GM Blueplan Engineering				Company:				Quotation #:			
Contact Name:				Kim Wilkinson				Contact Name:				P.O. #/AFER:			
Street Address:				650 Woodlawn Rd W, Blk C, Unit 2				Street Address:				Project #:			
City:				Guelph				City:				122025-1			
Prov:				ON				Prov:				Site #:			
Postal Code:				N1K1B8				Postal Code:				Site Location:			
Phone:				519-824-8150				Phone:				79 Sideroad 19, Fergus			
Email:				info@gmblueplan.ca				Email:				Ontario			
Copies:								Copies:				MO			
Regulatory Criteria															
☐ Table 1				☐ Res/Park				☐ CCME				☐ Reg 406, Table:			
☐ Table 2				☐ Ind/Comm				☐ Reg 558*				☐ Sanitary Sewer Bylaw			
☐ Table 3				☐ Course				☐ *min 3 day TAT				☐ Storm Sewer Bylaw			
☐ Table				☐ Agri/Other				☐ MISA				☐ Municipality			
☐ Table				☐ For RSC				☐ PWQO				☐ Other:			
Include Criteria on Certificate of Analysis (check if yes):				☐											
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS															
Sample Identification				Date Sampled				Time (24hr)				Matrix			
				YY MM DD				HH MM							
1				23 04 03				14 00				Water - Ground			
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
Regular Turnaround Time (TAT)															
☒ 5 to 7 Day				☐ 10 Day											
Rush Turnaround Time (TAT)															
Surcharge apply															
☐ Same Day				☐ 1 Day											
☐ 2 Day				☐ 3 Day											
☐ 4 Day															
Date Required:				YY MM DD											
Comments															
*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY															
LAB USE ONLY															
Seal present				☒				Seal present				☒			
Seal intact				☒				Seal intact				☒			
Cooling media present				☒				Cooling media present				☒			
Date				YY MM DD				Time				HH MM			
23 04 04				08 00											
Received by: (Signature/ Print)															
2023 04 04				16 24											
Special Instructions															

BV-672691



BUREAU
VERITAS

Bureau Veritas Job #: C394527

Report Date: 2023/04/12

GM BluePlan Engineering Limited

Client Project #: 122025-01

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

Exceedance Summary Table – Prov. Water Quality Obj.

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
MW1	VLU823-04	Total Phosphorus	0.01	1.4	0.004	mg/L
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.						



Your Project #: 122025-1
Your C.O.C. #: 724369-25-01

Attention: Joanna Olesiuk

GM BluePlan Engineering Limited
650 Woodlawn Rd W
Block C, Unit 2
Guelph, ON
CANADA N1K 1B8

Report Date: 2023/06/16
Report #: R7674874
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3G6157

Received: 2023/06/08, 15:24

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	1	N/A	2023/06/14	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/06/14	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/06/13	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	1	N/A	2023/06/14	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (1)	1	N/A	2023/06/13	CAM SOP-00446	SM 23 5310 B m
Hardness (calculated as CaCO3)	1	N/A	2023/06/15	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Metals by ICPMS	1	N/A	2023/06/13	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	1	N/A	2023/06/15		
Anion and Cation Sum	1	N/A	2023/06/15		
Total Ammonia-N	1	N/A	2023/06/13	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	1	N/A	2023/06/12	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	1	2023/06/12	2023/06/14	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	1	N/A	2023/06/12	CAM SOP-00461	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C)	1	N/A	2023/06/15		Auto Calc
Sat. pH and Langelier Index (@ 4C)	1	N/A	2023/06/15		Auto Calc
Sulphate by Automated Turbidimetry	1	N/A	2023/06/13	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids (TDS calc)	1	N/A	2023/06/15		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.



Your Project #: 122025-1
Your C.O.C. #: 724369-25-01

Attention: Joanna Olesiuk

GM BluePlan Engineering Limited
650 Woodlawn Rd W
Block C, Unit 2
Guelph, ON
CANADA N1K 1B8

Report Date: 2023/06/16
Report #: R7674874
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3G6157

Received: 2023/06/08, 15:24

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Ashton Gibson, Project Manager

Email: Ashton.Gibson@bureauveritas.com

Phone# (905)817-5765

=====

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

BUREAU
VERITAS

Bureau Veritas Job #: C3G6157

Report Date: 2023/06/16

GM BluePlan Engineering Limited

Client Project #: 122025-1

Sampler Initials: MO

RCAP - COMPREHENSIVE (WATER)

Bureau Veritas ID			WAW458		
Sampling Date			2023/06/07 17:20		
COC Number			724369-25-01		
	UNITS	Criteria	MW2	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	-	9.69	N/A	8715803
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	-	350	1.0	8717483
Calculated TDS	mg/L	-	530	1.0	8715799
Carb. Alkalinity (calc. as CaCO3)	mg/L	-	2.9	1.0	8717483
Cation Sum	me/L	-	10.2	N/A	8715803
Hardness (CaCO3)	mg/L	-	400	1.0	8716062
Ion Balance (% Difference)	%	-	2.75	N/A	8715802
Langelier Index (@ 20C)	N/A	-	1.09		8715800
Langelier Index (@ 4C)	N/A	-	0.841		8715801
Saturation pH (@ 20C)	N/A	-	6.86		8715800
Saturation pH (@ 4C)	N/A	-	7.10		8715801
Inorganics					
Total Ammonia-N	mg/L	-	0.095	0.050	8720542
Conductivity	umho/cm	-	950	1.0	8719642
Dissolved Organic Carbon	mg/L	-	1.6	0.40	8719925
Orthophosphate (P)	mg/L	-	<0.010	0.010	8720065
pH	pH	6.5:8.5	7.94		8719640
Dissolved Sulphate (SO4)	mg/L	-	23	1.0	8719931
Alkalinity (Total as CaCO3)	mg/L	-	350	1.0	8719643
Dissolved Chloride (Cl-)	mg/L	-	57	1.0	8719927
Nitrite (N)	mg/L	-	<0.010	0.010	8719608
Nitrate (N)	mg/L	-	7.56	0.10	8719608
Metals					
Dissolved Aluminum (Al)	ug/L	-	<4.9	4.9	8720437
Dissolved Antimony (Sb)	ug/L	20	<0.50	0.50	8720437
Dissolved Arsenic (As)	ug/L	100	<1.0	1.0	8720437
Dissolved Barium (Ba)	ug/L	-	37	2.0	8720437
Dissolved Beryllium (Be)	ug/L	11	<0.40	0.40	8720437
Dissolved Bismuth (Bi)	ug/L	-	<1.0	1.0	8720437
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Criteria: Ontario Provincial Water Quality Objectives					
Ref. to MOEE Water Management document dated Feb.1999					
N/A = Not Applicable					

**RCAP - COMPREHENSIVE (WATER)**

Bureau Veritas ID				WAW458		
Sampling Date				2023/06/07 17:20		
COC Number				724369-25-01		
		UNITS	Criteria	MW2	RDL	QC Batch
Dissolved Boron (B)		ug/L	200	34	10	8720437
Dissolved Cadmium (Cd)		ug/L	0.2	<0.090	0.090	8720437
Dissolved Calcium (Ca)		ug/L	-	120000	200	8720437
Dissolved Chromium (Cr)		ug/L	-	<5.0	5.0	8720437
Dissolved Cobalt (Co)		ug/L	0.9	<0.50	0.50	8720437
Dissolved Copper (Cu)		ug/L	5	1.4	0.90	8720437
Dissolved Iron (Fe)		ug/L	300	<100	100	8720437
Dissolved Lead (Pb)		ug/L	5	0.58	0.50	8720437
Dissolved Lithium (Li)		ug/L	-	<5.0	5.0	8720437
Dissolved Magnesium (Mg)		ug/L	-	26000	50	8720437
Dissolved Manganese (Mn)		ug/L	-	<2.0	2.0	8720437
Dissolved Molybdenum (Mo)		ug/L	40	<0.50	0.50	8720437
Dissolved Nickel (Ni)		ug/L	25	<1.0	1.0	8720437
Dissolved Phosphorus (P)		ug/L	-	<100	100	8720437
Dissolved Potassium (K)		ug/L	-	1200	200	8720437
Dissolved Selenium (Se)		ug/L	100	<2.0	2.0	8720437
Dissolved Silicon (Si)		ug/L	-	5200	50	8720437
Dissolved Silver (Ag)		ug/L	0.1	<0.090	0.090	8720437
Dissolved Sodium (Na)		ug/L	-	51000	100	8720437
Dissolved Strontium (Sr)		ug/L	-	210	1.0	8720437
Dissolved Tellurium (Te)		ug/L	-	<1.0	1.0	8720437
Dissolved Thallium (Tl)		ug/L	0.3	<0.050	0.050	8720437
Dissolved Tin (Sn)		ug/L	-	<1.0	1.0	8720437
Dissolved Titanium (Ti)		ug/L	-	<5.0	5.0	8720437
Dissolved Tungsten (W)		ug/L	30	<1.0	1.0	8720437
Dissolved Uranium (U)		ug/L	5	0.44	0.10	8720437
Dissolved Vanadium (V)		ug/L	6	<0.50	0.50	8720437
Dissolved Zinc (Zn)		ug/L	30	<5.0	5.0	8720437
Dissolved Zirconium (Zr)		ug/L	4	<1.0	1.0	8720437
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Provincial Water Quality Objectives						
Ref. to MOEE Water Management document dated Feb.1999						



BUREAU
VERITAS

Bureau Veritas Job #: C3G6157

Report Date: 2023/06/16

GM BluePlan Engineering Limited

Client Project #: 122025-1

Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: WAW458

Sample ID: MW2

Matrix: Water

Collected: 2023/06/07

Shipped:

Received: 2023/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8719643	N/A	2023/06/14	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8717483	N/A	2023/06/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8719927	N/A	2023/06/13	Massarat Jan
Conductivity	AT	8719642	N/A	2023/06/14	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8719925	N/A	2023/06/13	Gyulshen Idriz
Hardness (calculated as CaCO ₃)		8716062	N/A	2023/06/15	Automated Statchk
Dissolved Metals by ICPMS	ICP/MS	8720437	N/A	2023/06/13	Nan Raykha
Ion Balance (% Difference)	CALC	8715802	N/A	2023/06/15	Automated Statchk
Anion and Cation Sum	CALC	8715803	N/A	2023/06/15	Automated Statchk
Total Ammonia-N	LACH/NH ₄	8720542	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8719608	N/A	2023/06/12	Chandra Nandlal
pH	AT	8719640	2023/06/12	2023/06/14	Kien Tran
Orthophosphate	KONE	8720065	N/A	2023/06/12	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	8715800	N/A	2023/06/15	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	8715801	N/A	2023/06/15	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	8719931	N/A	2023/06/13	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	8715799	N/A	2023/06/15	Automated Statchk



BUREAU
VERITAS

Bureau Veritas Job #: C3G6157

Report Date: 2023/06/16

GM BluePlan Engineering Limited

Client Project #: 122025-1

Sampler Initials: MO

GENERAL COMMENTS

2023/06/12 - Existing Metals analysis replaced with Dissolved Metals analysis per client Joanna Olesiuk's request.

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C3G6157

Report Date: 2023/06/16

QUALITY ASSURANCE REPORT

GM BluePlan Engineering Limited

Client Project #: 122025-1

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8719608	Nitrate (N)	2023/06/12	96	80 - 120	96	80 - 120	<0.10	mg/L	NC	20
8719608	Nitrite (N)	2023/06/12	103	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
8719640	pH	2023/06/13			102	98 - 103			0.053	N/A
8719642	Conductivity	2023/06/13			101	85 - 115	<1.0	umho/cm	0.63	10
8719643	Alkalinity (Total as CaCO ₃)	2023/06/13			96	85 - 115	<1.0	mg/L	1.3	20
8719925	Dissolved Organic Carbon	2023/06/13	93	80 - 120	96	80 - 120	<0.40	mg/L	6.1	20
8719927	Dissolved Chloride (Cl ⁻)	2023/06/13	94	80 - 120	95	80 - 120	<1.0	mg/L	0.93	20
8719931	Dissolved Sulphate (SO ₄)	2023/06/13	91	75 - 125	95	80 - 120	<1.0	mg/L	5.1	20
8720065	Orthophosphate (P)	2023/06/12	92	75 - 125	93	80 - 120	<0.010	mg/L	NC	20
8720437	Dissolved Aluminum (Al)	2023/06/13	103	80 - 120	101	80 - 120	<4.9	ug/L	NC	20
8720437	Dissolved Antimony (Sb)	2023/06/13	103	80 - 120	100	80 - 120	<0.50	ug/L	NC	20
8720437	Dissolved Arsenic (As)	2023/06/13	103	80 - 120	100	80 - 120	<1.0	ug/L	1.3	20
8720437	Dissolved Barium (Ba)	2023/06/13	103	80 - 120	97	80 - 120	<2.0	ug/L	0.31	20
8720437	Dissolved Beryllium (Be)	2023/06/13	96	80 - 120	96	80 - 120	<0.40	ug/L	NC	20
8720437	Dissolved Bismuth (Bi)	2023/06/13	96	80 - 120	97	80 - 120	<1.0	ug/L	NC	20
8720437	Dissolved Boron (B)	2023/06/13	92	80 - 120	95	80 - 120	<10	ug/L	1.0	20
8720437	Dissolved Cadmium (Cd)	2023/06/13	99	80 - 120	97	80 - 120	<0.090	ug/L	NC	20
8720437	Dissolved Calcium (Ca)	2023/06/13	NC	80 - 120	95	80 - 120	<200	ug/L	2.8	20
8720437	Dissolved Chromium (Cr)	2023/06/13	101	80 - 120	101	80 - 120	<5.0	ug/L	NC	20
8720437	Dissolved Cobalt (Co)	2023/06/13	99	80 - 120	99	80 - 120	<0.50	ug/L	2.0	20
8720437	Dissolved Copper (Cu)	2023/06/13	99	80 - 120	98	80 - 120	<0.90	ug/L	1.8	20
8720437	Dissolved Iron (Fe)	2023/06/13	104	80 - 120	103	80 - 120	<100	ug/L	0.68	20
8720437	Dissolved Lead (Pb)	2023/06/13	97	80 - 120	97	80 - 120	<0.50	ug/L	NC	20
8720437	Dissolved Lithium (Li)	2023/06/13	100	80 - 120	102	80 - 120	<5.0	ug/L	NC	20
8720437	Dissolved Magnesium (Mg)	2023/06/13	NC	80 - 120	97	80 - 120	<50	ug/L	0.89	20
8720437	Dissolved Manganese (Mn)	2023/06/13	104	80 - 120	95	80 - 120	<2.0	ug/L	0.72	20
8720437	Dissolved Molybdenum (Mo)	2023/06/13	107	80 - 120	104	80 - 120	<0.50	ug/L	0.26	20
8720437	Dissolved Nickel (Ni)	2023/06/13	99	80 - 120	99	80 - 120	<1.0	ug/L	1.8	20
8720437	Dissolved Phosphorus (P)	2023/06/13	105	80 - 120	111	80 - 120	<100	ug/L	NC	20
8720437	Dissolved Potassium (K)	2023/06/13	101	80 - 120	98	80 - 120	<200	ug/L	0.89	20
8720437	Dissolved Selenium (Se)	2023/06/13	100	80 - 120	99	80 - 120	<2.0	ug/L	NC	20



**BUREAU
VERITAS**

Bureau Veritas Job #: C3G6157

Report Date: 2023/06/16

QUALITY ASSURANCE REPORT(CONT'D)

GM BluePlan Engineering Limited

Client Project #: 122025-1

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8720437	Dissolved Silicon (Si)	2023/06/13	104	80 - 120	104	80 - 120	<50	ug/L	1.3	20
8720437	Dissolved Silver (Ag)	2023/06/13	86	80 - 120	101	80 - 120	<0.090	ug/L	NC	20
8720437	Dissolved Sodium (Na)	2023/06/13	NC	80 - 120	97	80 - 120	<100	ug/L	0.75	20
8720437	Dissolved Strontium (Sr)	2023/06/13	108	80 - 120	97	80 - 120	<1.0	ug/L	0.80	20
8720437	Dissolved Tellurium (Te)	2023/06/13	102	80 - 120	103	80 - 120	<1.0	ug/L	NC	20
8720437	Dissolved Thallium (Tl)	2023/06/13	100	80 - 120	97	80 - 120	<0.050	ug/L	NC	20
8720437	Dissolved Tin (Sn)	2023/06/13	103	80 - 120	99	80 - 120	<1.0	ug/L	NC	20
8720437	Dissolved Titanium (Ti)	2023/06/13	106	80 - 120	105	80 - 120	<5.0	ug/L	NC	20
8720437	Dissolved Tungsten (W)	2023/06/13	104	80 - 120	101	80 - 120	<1.0	ug/L	NC	20
8720437	Dissolved Uranium (U)	2023/06/13	102	80 - 120	98	80 - 120	<0.10	ug/L	2.8	20
8720437	Dissolved Vanadium (V)	2023/06/13	105	80 - 120	101	80 - 120	<0.50	ug/L	NC	20
8720437	Dissolved Zinc (Zn)	2023/06/13	100	80 - 120	100	80 - 120	<5.0	ug/L	2.0	20
8720437	Dissolved Zirconium (Zr)	2023/06/13	106	80 - 120	102	80 - 120	<1.0	ug/L	NC	20
8720542	Total Ammonia-N	2023/06/13	98	75 - 125	102	80 - 120	<0.050	mg/L	12	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



BUREAU
VERITAS

Bureau Veritas Job #: C3G6157

Report Date: 2023/06/16

GM BluePlan Engineering Limited

Client Project #: 122025-1

Sampler Initials: MO

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



Bureau Veritas Laboratories
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

CHA

08-Jun-23 15:24

Ashton Gibson

C3G6157

RUK ENV-1280

Page 1 of 1

Order #:

Manager:

Ashton Gibson

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name: #1067 GM BluePlan Engineering Limited		Company Name:		Quotation #: B47885	
Attention: Joe Rotondi GM BluePlan		Attention: Joanna Olesiuk / Mark Ongarato		P.O. #:	
Address: 650 Woodlawn Rd W Block C, Unit 2		Address:		Project: 122025-1	
Guelph ON N1K 1B8				Project Name:	
Tel: (519) 824-8150 Fax: (519) 824-8089		Tel: (519) 824-8150 Ext: 253 Fax:		Site #:	
Email: jrotondi@gambsy.com info@GMBluePlan.ca		Email: joanna.olesiuk@gmblueplan.ca, cory.young@gmbluepl		Sampled By: Mo	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)			Other Regulations			Special Instructions		
☐ Table 1	☐ Res/Park	☐ Medium/Fine	☐ CCME	☐ Sanitary Sewer Bylaw		Field Filtered (please circle): Metals / Hg / Cr VI RCAP (comp) Groundwater		
☐ Table 2	☐ Ind/Comm	☐ Coarse	☐ Reg 558	☐ Storm Sewer Bylaw				
☐ Table 3	☐ Agri/Other	☐ For RSC	☐ MISA	Municipality				
☐ Table			☒ PWQO					
☐ Other								
Include Criteria on Certificate of Analysis (Y/N)? <u>yes</u>								
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix				
1	MW2	23/06/07	17:20	Ground water	X	X	X	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Turnaround Time (TAT) Required:
Please provide advance notice for rush projects

Regular (Standard) TAT:
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required: ☐
Rush Confirmation Number: (call lab for #)

of Bottles: 5

Comments:

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only		
M. Ongarato / Mark Ongarato	23/06/08	8:30	RAJ MAZANI	2023/06/08	1524		Time Sensitive	Temperature (°C) on Receipt	Custody Seal
								8/11/10	Present
									Intact
									Yes/No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

White: BV Labs Yellow: Client

IN 217
PAGE 8

Bureau Veritas Canada (2019) Inc.



**BUREAU
VERITAS**

Bureau Veritas Job #: C3G6157
Report Date: 2023/06/16

GM BluePlan Engineering Limited
Client Project #: 122025-1
Sampler Initials: MO

Exceedance Summary Table – Prov. Water Quality Obj.
Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.						



Your Project #: 122025-1
Site Location: 79 SIDEROAD 19, FERGUS

Attention: Mark Ongarato

GM BluePlan Engineering Limited
650 Woodlawn Rd W
Block C, Unit 2
Guelph, ON
CANADA N1K 1B8

Report Date: 2023/03/22
Report #: R7556078
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C373807

Received: 2023/03/15, 16:08

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	4	N/A	2023/03/17	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	4	N/A	2023/03/20	CAM SOP-00102	APHA 4500-CO ₂ D
Chloride by Automated Colourimetry	4	N/A	2023/03/20	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	4	N/A	2023/03/17	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (1)	3	N/A	2023/03/18	CAM SOP-00446	SM 23 5310 B m
Hardness (calculated as CaCO ₃)	2	N/A	2023/03/20	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO ₃)	1	N/A	2023/03/21	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO ₃)	1	N/A	2023/03/22	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals Analysis by ICP	1	2023/03/17	2023/03/21	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS	3	N/A	2023/03/20	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICPMS	1	2023/03/17	2023/03/20	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	2	N/A	2023/03/20		
Ion Balance (% Difference)	1	N/A	2023/03/21		
Anion and Cation Sum	2	N/A	2023/03/20		
Anion and Cation Sum	1	N/A	2023/03/21		
Total Ammonia-N	4	N/A	2023/03/20	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	4	N/A	2023/03/20	CAM SOP-00440	SM 23 4500-NO ₃ /NO ₂ B
pH	4	2023/03/17	2023/03/17	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	4	N/A	2023/03/20	CAM SOP-00461	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C)	2	N/A	2023/03/20		Auto Calc
Sat. pH and Langelier Index (@ 20C)	1	N/A	2023/03/21		Auto Calc
Sat. pH and Langelier Index (@ 20C)	1	N/A	2023/03/22		Auto Calc
Sat. pH and Langelier Index (@ 4C)	2	N/A	2023/03/20		Auto Calc
Sat. pH and Langelier Index (@ 4C)	1	N/A	2023/03/21		Auto Calc
Sat. pH and Langelier Index (@ 4C)	1	N/A	2023/03/22		Auto Calc
Sulphate by Automated Turbidimetry	4	N/A	2023/03/20	CAM SOP-00464	SM 23 4500-SO ₄ 2- E m
Total Dissolved Solids (TDS calc)	2	N/A	2023/03/20		Auto Calc



Your Project #: 122025-1
Site Location: 79 SIDEROAD 19, FERGUS

Attention: Mark Ongarato

GM BluePlan Engineering Limited
650 Woodlawn Rd W
Block C, Unit 2
Guelph, ON
CANADA N1K 1B8

Report Date: 2023/03/22
Report #: R7556078
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C373807

Received: 2023/03/15, 16:08

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Total Dissolved Solids (TDS calc)	1	N/A	2023/03/21		Auto Calc
Total Dissolved Solids (TDS calc)	1	N/A	2023/03/22		Auto Calc
Total Organic Carbon (TOC) (3)	1	N/A	2023/03/20	CAM SOP-00446	SM 23 5310B m
Total Phosphorus (Colourimetric)	1	2023/03/20	2023/03/20	CAM SOP-00407	SM 23 4500-P I
Turbidity	1	N/A	2023/03/17	CAM SOP-00417	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(3) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.



Your Project #: 122025-1
Site Location: 79 SIDEROAD 19, FERGUS

Attention: Mark Ongarato

GM BluePlan Engineering Limited
650 Woodlawn Rd W
Block C, Unit 2
Guelph, ON
CANADA N1K 1B8

Report Date: 2023/03/22
Report #: R7556078
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C373807

Received: 2023/03/15, 16:08

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Ashton Gibson, Project Manager
Email: Ashton.Gibson@bureauveritas.com
Phone# (905)817-5765

=====

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - COMPREHENSIVE (WATER)

Bureau Veritas ID			VHK478			VHK478			VHK479		
Sampling Date			2023/03/14 12:30			2023/03/14 12:30			2023/03/14 13:25		
	UNITS	Criteria	MW3	RDL	QC Batch	MW3 Lab-Dup	RDL	QC Batch	MW4	RDL	QC Batch

Calculated Parameters											
Anion Sum	me/L	-	8.05	N/A	8556048				12.6	N/A	8556048
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	-	290	1.0	8555711				360	1.0	8555711
Calculated TDS	mg/L	-	490	1.0	8556049				700	1.0	8556049
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	-	2.0	1.0	8555711				2.2	1.0	8555711
Cation Sum	me/L	-	10.3	N/A	8556048				13.3	N/A	8556048
Hardness (CaCO ₃)	mg/L	-	410	1.0	8555710				460	1.0	8555710
Ion Balance (% Difference)	%	-	12.4	N/A	8556044				2.96	N/A	8556044
Langelier Index (@ 20C)	N/A	-	0.969		8557462				1.01		8557462
Langelier Index (@ 4C)	N/A	-	0.721		8557463				0.760		8557463
Saturation pH (@ 20C)	N/A	-	6.89		8557462				6.80		8557462
Saturation pH (@ 4C)	N/A	-	7.14		8557463				7.05		8557463

Inorganics											
Total Ammonia-N	mg/L	-	0.11	0.050	8559399				0.056	0.050	8559399
Conductivity	umho/cm	-	760	1.0	8559024				1300	1.0	8559024
Dissolved Organic Carbon	mg/L	-	1.8	0.40	8559712				1.8	0.40	8559712
Orthophosphate (P)	mg/L	-	<0.010	0.010	8559116	<0.010	0.010	8559116	<0.010	0.010	8559116
pH	pH	6.5:8.5	7.86		8559039				7.81		8559039
Dissolved Sulphate (SO ₄)	mg/L	-	49	1.0	8559126	49	1.0	8559126	50	1.0	8559126
Alkalinity (Total as CaCO ₃)	mg/L	-	290	1.0	8559028				370	1.0	8559028
Dissolved Chloride (Cl ⁻)	mg/L	-	26	1.0	8559107	26	1.0	8559107	140	1.0	8559107
Nitrite (N)	mg/L	-	0.043	0.010	8559042				<0.010	0.010	8559042
Nitrate (N)	mg/L	-	5.66	0.10	8559042				4.70	0.10	8559042
Nitrate + Nitrite (N)	mg/L	-	5.71	0.10	8559042				4.70	0.10	8559042

Metals											
Dissolved Aluminum (Al)	ug/L	-	<4.9	4.9	8560470				<4.9	4.9	8560468
Dissolved Antimony (Sb)	ug/L	20	<0.50	0.50	8560470				<0.50	0.50	8560468
Dissolved Arsenic (As)	ug/L	100	<1.0	1.0	8560470				<1.0	1.0	8560468
Dissolved Barium (Ba)	ug/L	-	47	2.0	8560470				63	2.0	8560468

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels
RDL = Reportable Detection Limit	
QC Batch = Quality Control Batch	
Lab-Dup = Laboratory Initiated Duplicate	
Criteria: Ontario Provincial Water Quality Objectives	
Ref. to MOEE Water Management document dated Feb.1999	
N/A = Not Applicable	



**BUREAU
VERITAS**

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - COMPREHENSIVE (WATER)

Bureau Veritas ID			VHK478			VHK478			VHK479		
Sampling Date			2023/03/14 12:30			2023/03/14 12:30			2023/03/14 13:25		
	UNITS	Criteria	MW3	RDL	QC Batch	MW3 Lab-Dup	RDL	QC Batch	MW4	RDL	QC Batch
Dissolved Beryllium (Be)	ug/L	11	<0.40	0.40	8560470				<0.40	0.40	8560468
Dissolved Boron (B)	ug/L	200	59	10	8560470				49	10	8560468
Dissolved Cadmium (Cd)	ug/L	0.2	<0.090	0.090	8560470				<0.090	0.090	8560468
Dissolved Calcium (Ca)	ug/L	-	130000	200	8560470				140000	200	8560468
Dissolved Chromium (Cr)	ug/L	-	<5.0	5.0	8560470				<5.0	5.0	8560468
Dissolved Cobalt (Co)	ug/L	0.9	<0.50	0.50	8560470				<0.50	0.50	8560468
Dissolved Copper (Cu)	ug/L	5	2.0	0.90	8560470				1.4	0.90	8560468
Dissolved Iron (Fe)	ug/L	300	<100	100	8560470				<100	100	8560468
Dissolved Lead (Pb)	ug/L	5	<0.50	0.50	8560470				<0.50	0.50	8560468
Dissolved Magnesium (Mg)	ug/L	-	22000	50	8560470				28000	50	8560468
Dissolved Manganese (Mn)	ug/L	-	33	2.0	8560470				17	2.0	8560468
Dissolved Molybdenum (Mo)	ug/L	40	1.3	0.50	8560470				<0.50	0.50	8560468
Dissolved Nickel (Ni)	ug/L	25	1.3	1.0	8560470				<1.0	1.0	8560468
Dissolved Phosphorus (P)	ug/L	-	<100	100	8560470				<100	100	8560468
Dissolved Potassium (K)	ug/L	-	2300	200	8560470				1700	200	8560468
Dissolved Selenium (Se)	ug/L	100	<2.0	2.0	8560470				<2.0	2.0	8560468
Dissolved Silicon (Si)	ug/L	-	5500	50	8560470				4900	50	8560468
Dissolved Silver (Ag)	ug/L	0.1	<0.090	0.090	8560470				<0.090	0.090	8560468
Dissolved Sodium (Na)	ug/L	-	49000	100	8560470				94000	100	8560468
Dissolved Strontium (Sr)	ug/L	-	220	1.0	8560470				260	1.0	8560468
Dissolved Thallium (Tl)	ug/L	0.3	<0.050	0.050	8560470				<0.050	0.050	8560468
Dissolved Titanium (Ti)	ug/L	-	<5.0	5.0	8560470				<5.0	5.0	8560468
Dissolved Uranium (U)	ug/L	5	1.4	0.10	8560470				0.89	0.10	8560468
Dissolved Vanadium (V)	ug/L	6	<0.50	0.50	8560470				<0.50	0.50	8560468
Dissolved Zinc (Zn)	ug/L	30	<5.0	5.0	8560470				<5.0	5.0	8560468

No Fill

No Exceedance

Grey

Exceeds 1 criteria policy/level

Black

Exceeds both criteria/levels

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Criteria: Ontario Provincial Water Quality Objectives

Ref. to MOEE Water Management document dated Feb.1999



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - COMPREHENSIVE (WATER)

Bureau Veritas ID			VHK480		
Sampling Date			2023/03/14 12:45		
	UNITS	Criteria	MW5	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	-	10.7	N/A	8556048
Bicarb. Alkalinity (calc. as CaCO3	mg/L	-	300	1.0	8555711
Calculated TDS	mg/L	-	610	1.0	8556049
Carb. Alkalinity (calc. as CaCO3)	mg/L	-	1.8	1.0	8555711
Cation Sum	me/L	-	11.7	N/A	8556048
Hardness (CaCO3)	mg/L	-	470	1.0	8555710
Ion Balance (% Difference)	%	-	4.54	N/A	8556044
Langelier Index (@ 20C)	N/A	-	0.963		8557462
Langelier Index (@ 4C)	N/A	-	0.716		8557463
Saturation pH (@ 20C)	N/A	-	6.85		8557462
Saturation pH (@ 4C)	N/A	-	7.10		8557463
Inorganics					
Total Ammonia-N	mg/L	-	0.085	0.050	8559399
Conductivity	umho/cm	-	1100	1.0	8559024
Dissolved Organic Carbon	mg/L	-	2.5	0.40	8559712
Orthophosphate (P)	mg/L	-	<0.010	0.010	8559116
pH	pH	6.5:8.5	7.81		8559039
Dissolved Sulphate (SO4)	mg/L	-	93	1.0	8559126
Alkalinity (Total as CaCO3)	mg/L	-	300	1.0	8559028
Dissolved Chloride (Cl-)	mg/L	-	87	1.0	8559107
Nitrite (N)	mg/L	-	<0.010	0.010	8559042
Nitrate (N)	mg/L	-	3.12	0.10	8559042
Nitrate + Nitrite (N)	mg/L	-	3.12	0.10	8559042
Metals					
Dissolved Aluminum (Al)	ug/L	-	<4.9	4.9	8560470
Dissolved Antimony (Sb)	ug/L	20	<0.50	0.50	8560470
Dissolved Arsenic (As)	ug/L	100	<1.0	1.0	8560470
Dissolved Barium (Ba)	ug/L	-	43	2.0	8560470
Dissolved Beryllium (Be)	ug/L	11	<0.40	0.40	8560470
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Criteria: Ontario Provincial Water Quality Objectives					
Ref. to MOEE Water Management document dated Feb.1999					
N/A = Not Applicable					



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - COMPREHENSIVE (WATER)

Bureau Veritas ID				VHK480		
Sampling Date				2023/03/14 12:45		
		UNITS	Criteria	MW5	RDL	QC Batch
Dissolved Boron (B)		ug/L	200	23	10	8560470
Dissolved Cadmium (Cd)		ug/L	0.2	<0.090	0.090	8560470
Dissolved Calcium (Ca)		ug/L	-	140000	200	8560470
Dissolved Chromium (Cr)		ug/L	-	<5.0	5.0	8560470
Dissolved Cobalt (Co)		ug/L	0.9	<0.50	0.50	8560470
Dissolved Copper (Cu)		ug/L	5	3.9	0.90	8560470
Dissolved Iron (Fe)		ug/L	300	<100	100	8560470
Dissolved Lead (Pb)		ug/L	5	<0.50	0.50	8560470
Dissolved Magnesium (Mg)		ug/L	-	26000	50	8560470
Dissolved Manganese (Mn)		ug/L	-	33	2.0	8560470
Dissolved Molybdenum (Mo)		ug/L	40	0.60	0.50	8560470
Dissolved Nickel (Ni)		ug/L	25	2.3	1.0	8560470
Dissolved Phosphorus (P)		ug/L	-	<100	100	8560470
Dissolved Potassium (K)		ug/L	-	1300	200	8560470
Dissolved Selenium (Se)		ug/L	100	<2.0	2.0	8560470
Dissolved Silicon (Si)		ug/L	-	4000	50	8560470
Dissolved Silver (Ag)		ug/L	0.1	<0.090	0.090	8560470
Dissolved Sodium (Na)		ug/L	-	54000	100	8560470
Dissolved Strontium (Sr)		ug/L	-	250	1.0	8560470
Dissolved Thallium (Tl)		ug/L	0.3	<0.050	0.050	8560470
Dissolved Titanium (Ti)		ug/L	-	<5.0	5.0	8560470
Dissolved Uranium (U)		ug/L	5	2.6	0.10	8560470
Dissolved Vanadium (V)		ug/L	6	<0.50	0.50	8560470
Dissolved Zinc (Zn)		ug/L	30	<5.0	5.0	8560470
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Provincial Water Quality Objectives						
Ref. to MOEE Water Management document dated Feb.1999						

**RCAP - SURFACE WATER (WATER)**

Bureau Veritas ID			VHK481		
Sampling Date			2023/03/14 13:00		
	UNITS	Criteria	SW-001	RDL	QC Batch
Calculated Parameters					
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	-	280	1.0	8555711
Calculated TDS	mg/L	-	910	1.0	8556049
Carb. Alkalinity (calc. as CaCO3)	mg/L	-	4.0	1.0	8555711
Hardness (CaCO3)	mg/L	-	450	1.0	8555710
Langelier Index (@ 20C)	N/A	-	1.23		8557462
Langelier Index (@ 4C)	N/A	-	0.986		8557463
Saturation pH (@ 20C)	N/A	-	6.95		8557462
Saturation pH (@ 4C)	N/A	-	7.20		8557463
Inorganics					
Total Ammonia-N	mg/L	-	<0.050	0.050	8559399
Conductivity	umho/cm	-	1700	1.0	8559024
Orthophosphate (P)	mg/L	-	<0.010	0.010	8559116
pH	pH	6.5:8.5	8.18		8559039
Dissolved Sulphate (SO4)	mg/L	-	130	1.0	8559126
Turbidity	NTU	-	0.4	0.1	8558264
Alkalinity (Total as CaCO3)	mg/L	-	290	1.0	8559028
Dissolved Chloride (Cl-)	mg/L	-	250	3.0	8559107
Nitrite (N)	mg/L	-	<0.010	0.010	8559042
Nitrate (N)	mg/L	-	4.95	0.10	8559042
Metals					
Dissolved Calcium (Ca)	mg/L	-	140	0.05	8560018
Dissolved Magnesium (Mg)	mg/L	-	26	0.05	8560018
Dissolved Potassium (K)	mg/L	-	2	1	8560018
Dissolved Sodium (Na)	mg/L	-	160	0.5	8560018
Total Aluminum (Al)	ug/L	-	43	4.9	8559406
Total Antimony (Sb)	ug/L	20	<0.50	0.50	8559406
Total Arsenic (As)	ug/L	100	<1.0	1.0	8559406
Total Barium (Ba)	ug/L	-	54	2.0	8559406
Total Beryllium (Be)	ug/L	11	<0.40	0.40	8559406
Total Boron (B)	ug/L	200	37	10	8559406
No Fill	No Exceedance Exceeds 1 criteria policy/level Exceeds both criteria/levels				
Grey					
Black					
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Criteria: Ontario Provincial Water Quality Objectives					
Ref. to MOEE Water Management document dated Feb.1999					



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

RCAP - SURFACE WATER (WATER)

Bureau Veritas ID				VHK481		
Sampling Date				2023/03/14 13:00		
		UNITS	Criteria	SW-001	RDL	QC Batch
Total Cadmium (Cd)		ug/L	0.2	<0.090	0.090	8559406
Total Calcium (Ca)		ug/L	-	150000	200	8559406
Total Chromium (Cr)		ug/L	-	<5.0	5.0	8559406
Total Cobalt (Co)		ug/L	0.9	<0.50	0.50	8559406
Total Copper (Cu)		ug/L	5	1.9	0.90	8559406
Total Iron (Fe)		ug/L	300	<100	100	8559406
Total Lead (Pb)		ug/L	5	<0.50	0.50	8559406
Total Magnesium (Mg)		ug/L	-	28000	50	8559406
Total Manganese (Mn)		ug/L	-	2.7	2.0	8559406
Total Molybdenum (Mo)		ug/L	40	<0.50	0.50	8559406
Total Nickel (Ni)		ug/L	25	<1.0	1.0	8559406
Total Potassium (K)		ug/L	-	1900	200	8559406
Total Selenium (Se)		ug/L	100	<2.0	2.0	8559406
Total Silicon (Si)		ug/L	-	3600	50	8559406
Total Silver (Ag)		ug/L	0.1	<0.090	0.090	8559406
Total Sodium (Na)		ug/L	-	170000	100	8559406
Total Strontium (Sr)		ug/L	-	560	1.0	8559406
Total Thallium (Tl)		ug/L	0.3	<0.050	0.050	8559406
Total Titanium (Ti)		ug/L	-	<5.0	5.0	8559406
Total Uranium (U)		ug/L	5	0.53	0.10	8559406
Total Vanadium (V)		ug/L	6	0.50	0.50	8559406
Total Zinc (Zn)		ug/L	30	5.1	5.0	8559406
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Provincial Water Quality Objectives						
Ref. to MOEE Water Management document dated Feb.1999						



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID			VHK481		
Sampling Date			2023/03/14 13:00		
	UNITS	Criteria	SW-001	RDL	QC Batch
Inorganics					
Total Organic Carbon (TOC)	mg/L	-	2.0	0.40	8561706
Total Phosphorus	mg/L	0.01	0.005	0.004	8561743
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Criteria: Ontario Provincial Water Quality Objectives					
Ref. to MOEE Water Management document dated Feb.1999					



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: VHK478

Sample ID: MW3

Matrix: Water

Collected: 2023/03/14

Shipped:

Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8559028	N/A	2023/03/17	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8555711	N/A	2023/03/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8559107	N/A	2023/03/20	Massarat Jan
Conductivity	AT	8559024	N/A	2023/03/17	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8559712	N/A	2023/03/18	Gyulshen Idriz
Hardness (calculated as CaCO ₃)		8555710	N/A	2023/03/20	Automated Statchk
Dissolved Metals by ICPMS	ICP/MS	8560470	N/A	2023/03/20	Prempal Bhatti
Ion Balance (% Difference)	CALC	8556044	N/A	2023/03/20	Automated Statchk
Anion and Cation Sum	CALC	8556048	N/A	2023/03/20	Automated Statchk
Total Ammonia-N	LACH/NH ₄	8559399	N/A	2023/03/20	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	8559042	N/A	2023/03/20	Chandra Nandlal
pH	AT	8559039	2023/03/17	2023/03/17	Kien Tran
Orthophosphate	KONE	8559116	N/A	2023/03/20	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	8557462	N/A	2023/03/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	8557463	N/A	2023/03/20	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	8559126	N/A	2023/03/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	8556049	N/A	2023/03/20	Automated Statchk

Bureau Veritas ID: VHK478 Dup

Sample ID: MW3

Matrix: Water

Collected: 2023/03/14

Shipped:

Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8559107	N/A	2023/03/20	Massarat Jan
Orthophosphate	KONE	8559116	N/A	2023/03/20	Massarat Jan
Sulphate by Automated Turbidimetry	KONE	8559126	N/A	2023/03/20	Alina Dobreanu

Bureau Veritas ID: VHK479

Sample ID: MW4

Matrix: Water

Collected: 2023/03/14

Shipped:

Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8559028	N/A	2023/03/17	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8555711	N/A	2023/03/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8559107	N/A	2023/03/20	Massarat Jan
Conductivity	AT	8559024	N/A	2023/03/17	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8559712	N/A	2023/03/18	Gyulshen Idriz
Hardness (calculated as CaCO ₃)		8555710	N/A	2023/03/21	Automated Statchk
Dissolved Metals by ICPMS	ICP/MS	8560468	N/A	2023/03/20	Arefa Dabhad
Ion Balance (% Difference)	CALC	8556044	N/A	2023/03/21	Automated Statchk
Anion and Cation Sum	CALC	8556048	N/A	2023/03/21	Automated Statchk
Total Ammonia-N	LACH/NH ₄	8559399	N/A	2023/03/20	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	8559042	N/A	2023/03/20	Chandra Nandlal
pH	AT	8559039	2023/03/17	2023/03/17	Kien Tran



**BUREAU
VERITAS**

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: VHK479

Sample ID: MW4

Matrix: Water

Collected: 2023/03/14

Shipped:

Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Orthophosphate	KONE	8559116	N/A	2023/03/20	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	8557462	N/A	2023/03/21	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	8557463	N/A	2023/03/21	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	8559126	N/A	2023/03/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	8556049	N/A	2023/03/21	Automated Statchk

Bureau Veritas ID: VHK480

Sample ID: MW5

Matrix: Water

Collected: 2023/03/14

Shipped:

Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8559028	N/A	2023/03/17	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8555711	N/A	2023/03/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8559107	N/A	2023/03/20	Massarat Jan
Conductivity	AT	8559024	N/A	2023/03/17	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8559712	N/A	2023/03/18	Gyulshen Idriz
Hardness (calculated as CaCO3)		8555710	N/A	2023/03/20	Automated Statchk
Dissolved Metals by ICPMS	ICP/MS	8560470	N/A	2023/03/20	Prempal Bhatti
Ion Balance (% Difference)	CALC	8556044	N/A	2023/03/20	Automated Statchk
Anion and Cation Sum	CALC	8556048	N/A	2023/03/20	Automated Statchk
Total Ammonia-N	LACH/NH4	8559399	N/A	2023/03/20	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	8559042	N/A	2023/03/20	Chandra Nandlal
pH	AT	8559039	2023/03/17	2023/03/17	Kien Tran
Orthophosphate	KONE	8559116	N/A	2023/03/20	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	8557462	N/A	2023/03/20	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	8557463	N/A	2023/03/20	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	8559126	N/A	2023/03/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	8556049	N/A	2023/03/20	Automated Statchk

Bureau Veritas ID: VHK481

Sample ID: SW-001

Matrix: Water

Collected: 2023/03/14

Shipped:

Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8559028	N/A	2023/03/17	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8555711	N/A	2023/03/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8559107	N/A	2023/03/20	Massarat Jan
Conductivity	AT	8559024	N/A	2023/03/17	Kien Tran
Hardness (calculated as CaCO3)		8555710	N/A	2023/03/22	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	8560018	2023/03/17	2023/03/21	Suban Kanapathipillai
Total Metals Analysis by ICPMS	ICP/MS	8559406	2023/03/17	2023/03/20	Arefa Dabhad
Total Ammonia-N	LACH/NH4	8559399	N/A	2023/03/20	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	8559042	N/A	2023/03/20	Chandra Nandlal
pH	AT	8559039	2023/03/17	2023/03/17	Kien Tran



BUREAU
VERITAS

Bureau Veritas Job #: C373807
Report Date: 2023/03/22

GM BluePlan Engineering Limited
Client Project #: 122025-1
Site Location: 79 SIDEROAD 19, FERGUS
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: VHK481
Sample ID: SW-001
Matrix: Water

Collected: 2023/03/14
Shipped:
Received: 2023/03/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Orthophosphate	KONE	8559116	N/A	2023/03/20	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	8557462	N/A	2023/03/22	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	8557463	N/A	2023/03/22	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	8559126	N/A	2023/03/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	8556049	N/A	2023/03/22	Automated Statchk
Total Organic Carbon (TOC)	TOCV/NDIR	8561706	N/A	2023/03/20	Gyulshen Idriz
Total Phosphorus (Colourimetric)	SKAL/P	8561743	2023/03/20	2023/03/20	Prgya Panchal
Turbidity	AT	8558264	N/A	2023/03/17	Surinder Rai



**BUREAU
VERITAS**

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

GENERAL COMMENTS

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

QUALITY ASSURANCE REPORT

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8558264	Turbidity	2023/03/17			99	80 - 120	<0.1	NTU	1.4	20		
8559024	Conductivity	2023/03/17			101	85 - 115	<1.0	umho/cm	1.5	25		
8559028	Alkalinity (Total as CaCO ₃)	2023/03/17			98	85 - 115	<1.0	mg/L	0.96	20		
8559039	pH	2023/03/17			102	98 - 103			1.1	N/A		
8559042	Nitrate (N)	2023/03/20	84	80 - 120	88	80 - 120	<0.10	mg/L	NC	20		
8559042	Nitrite (N)	2023/03/20	104	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
8559107	Dissolved Chloride (Cl ⁻)	2023/03/20	NC	80 - 120	97	80 - 120	<1.0	mg/L	0.095	20		
8559116	Orthophosphate (P)	2023/03/20	84	75 - 125	91	80 - 120	<0.010	mg/L	NC	20		
8559126	Dissolved Sulphate (SO ₄)	2023/03/20	NC	75 - 125	95	80 - 120	<1.0	mg/L	0.90	20		
8559399	Total Ammonia-N	2023/03/20	100	75 - 125	99	80 - 120	<0.050	mg/L	NC	20		
8559406	Total Aluminum (Al)	2023/03/20	118	80 - 120	103	80 - 120	<4.9	ug/L	1.5	20		
8559406	Total Antimony (Sb)	2023/03/20	106	80 - 120	105	80 - 120	<0.50	ug/L	3.1	20		
8559406	Total Arsenic (As)	2023/03/20	101	80 - 120	100	80 - 120	<1.0	ug/L	1.6	20		
8559406	Total Barium (Ba)	2023/03/20	98	80 - 120	100	80 - 120	<2.0	ug/L	3.1	20		
8559406	Total Beryllium (Be)	2023/03/20	105	80 - 120	102	80 - 120	<0.40	ug/L	NC	20		
8559406	Total Boron (B)	2023/03/20	97	80 - 120	95	80 - 120	<10	ug/L	0.26	20		
8559406	Total Cadmium (Cd)	2023/03/20	100	80 - 120	100	80 - 120	<0.090	ug/L	NC	20		
8559406	Total Calcium (Ca)	2023/03/20	NC	80 - 120	103	80 - 120	<200	ug/L	1.6	20		
8559406	Total Chromium (Cr)	2023/03/20	95	80 - 120	97	80 - 120	<5.0	ug/L	NC	20		
8559406	Total Cobalt (Co)	2023/03/20	98	80 - 120	98	80 - 120	<0.50	ug/L	0.91	20		
8559406	Total Copper (Cu)	2023/03/20	100	80 - 120	100	80 - 120	<0.90	ug/L	20	20		
8559406	Total Iron (Fe)	2023/03/20	99	80 - 120	100	80 - 120	<100	ug/L	0.14	20		
8559406	Total Lead (Pb)	2023/03/20	99	80 - 120	98	80 - 120	<0.50	ug/L	0.87	20		
8559406	Total Magnesium (Mg)	2023/03/20	96	80 - 120	102	80 - 120	<50	ug/L	1.2	20		
8559406	Total Manganese (Mn)	2023/03/20	98	80 - 120	98	80 - 120	<2.0	ug/L	2.8	20		
8559406	Total Molybdenum (Mo)	2023/03/20	98	80 - 120	96	80 - 120	<0.50	ug/L	5.0	20		
8559406	Total Nickel (Ni)	2023/03/20	98	80 - 120	99	80 - 120	<1.0	ug/L	1.4	20		
8559406	Total Potassium (K)	2023/03/20	103	80 - 120	101	80 - 120	<200	ug/L	1.3	20		
8559406	Total Selenium (Se)	2023/03/20	104	80 - 120	104	80 - 120	<2.0	ug/L	NC	20		
8559406	Total Silicon (Si)	2023/03/20	98	80 - 120	98	80 - 120	<50	ug/L	1.7	20		

BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

QUALITY ASSURANCE REPORT(CONT'D)

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8559406	Total Silver (Ag)	2023/03/20	97	80 - 120	98	80 - 120	<0.090	ug/L	3.9	20		
8559406	Total Sodium (Na)	2023/03/20	NC	80 - 120	99	80 - 120	<100	ug/L	0.50	20		
8559406	Total Strontium (Sr)	2023/03/20	96	80 - 120	97	80 - 120	<1.0	ug/L	0.65	20		
8559406	Total Thallium (Tl)	2023/03/20	100	80 - 120	102	80 - 120	<0.050	ug/L	NC	20		
8559406	Total Titanium (Ti)	2023/03/20	99	80 - 120	100	80 - 120	<5.0	ug/L	0.89	20		
8559406	Total Uranium (U)	2023/03/20	NC	80 - 120	99	80 - 120	<0.10	ug/L	1.4	20		
8559406	Total Vanadium (V)	2023/03/20	96	80 - 120	95	80 - 120	<0.50	ug/L	0.49	20		
8559406	Total Zinc (Zn)	2023/03/20	100	80 - 120	101	80 - 120	<5.0	ug/L	1.7	20		
8559712	Dissolved Organic Carbon	2023/03/17	95	80 - 120	99	80 - 120	<0.40	mg/L	1.6	20		
8560018	Dissolved Calcium (Ca)	2023/03/21	NC	80 - 120	97	80 - 120	<0.05	mg/L	0.53	25		
8560018	Dissolved Magnesium (Mg)	2023/03/21	NC	80 - 120	98	80 - 120	<0.05	mg/L	0.087	25		
8560018	Dissolved Potassium (K)	2023/03/21	NC	80 - 120	98	80 - 120	<1	mg/L	0.32	25		
8560018	Dissolved Sodium (Na)	2023/03/21	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.70	25		
8560468	Dissolved Aluminum (Al)	2023/03/20	108	80 - 120	102	80 - 120	<4.9	ug/L				
8560468	Dissolved Antimony (Sb)	2023/03/20	111	80 - 120	101	80 - 120	<0.50	ug/L	NC	20		
8560468	Dissolved Arsenic (As)	2023/03/20	106	80 - 120	98	80 - 120	<1.0	ug/L	NC	20		
8560468	Dissolved Barium (Ba)	2023/03/20	105	80 - 120	99	80 - 120	<2.0	ug/L	2.1	20		
8560468	Dissolved Beryllium (Be)	2023/03/20	108	80 - 120	101	80 - 120	<0.40	ug/L	NC	20		
8560468	Dissolved Boron (B)	2023/03/20	104	80 - 120	96	80 - 120	<10	ug/L	3.1	20		
8560468	Dissolved Cadmium (Cd)	2023/03/20	109	80 - 120	99	80 - 120	<0.090	ug/L	NC	20		
8560468	Dissolved Calcium (Ca)	2023/03/20	NC	80 - 120	102	80 - 120	<200	ug/L				
8560468	Dissolved Chromium (Cr)	2023/03/20	102	80 - 120	95	80 - 120	<5.0	ug/L	NC	20		
8560468	Dissolved Cobalt (Co)	2023/03/20	103	80 - 120	97	80 - 120	<0.50	ug/L	NC	20		
8560468	Dissolved Copper (Cu)	2023/03/20	110	80 - 120	100	80 - 120	<0.90	ug/L	NC	20		
8560468	Dissolved Iron (Fe)	2023/03/20	105	80 - 120	98	80 - 120	<100	ug/L				
8560468	Dissolved Lead (Pb)	2023/03/20	105	80 - 120	96	80 - 120	<0.50	ug/L	NC	20		
8560468	Dissolved Magnesium (Mg)	2023/03/20	99	80 - 120	101	80 - 120	<50	ug/L				
8560468	Dissolved Manganese (Mn)	2023/03/20	103	80 - 120	98	80 - 120	<2.0	ug/L				
8560468	Dissolved Molybdenum (Mo)	2023/03/20	107	80 - 120	95	80 - 120	<0.50	ug/L	2.7	20		
8560468	Dissolved Nickel (Ni)	2023/03/20	103	80 - 120	97	80 - 120	<1.0	ug/L	NC	20		
8560468	Dissolved Phosphorus (P)	2023/03/20	113	80 - 120	108	80 - 120	<100	ug/L				

BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

QUALITY ASSURANCE REPORT(CONT'D)

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8560468	Dissolved Potassium (K)	2023/03/20	109	80 - 120	101	80 - 120	<200	ug/L				
8560468	Dissolved Selenium (Se)	2023/03/20	108	80 - 120	102	80 - 120	<2.0	ug/L	NC	20		
8560468	Dissolved Silicon (Si)	2023/03/20	106	80 - 120	99	80 - 120	<50	ug/L				
8560468	Dissolved Silver (Ag)	2023/03/20	103	80 - 120	94	80 - 120	<0.090	ug/L	NC	20		
8560468	Dissolved Sodium (Na)	2023/03/20	NC	80 - 120	100	80 - 120	<100	ug/L	0.33	20		
8560468	Dissolved Strontium (Sr)	2023/03/20	100	80 - 120	96	80 - 120	<1.0	ug/L				
8560468	Dissolved Thallium (Tl)	2023/03/20	107	80 - 120	102	80 - 120	<0.050	ug/L	NC	20		
8560468	Dissolved Titanium (Ti)	2023/03/20	106	80 - 120	99	80 - 120	<5.0	ug/L				
8560468	Dissolved Uranium (U)	2023/03/20	106	80 - 120	98	80 - 120	<0.10	ug/L	1.5	20		
8560468	Dissolved Vanadium (V)	2023/03/20	102	80 - 120	94	80 - 120	<0.50	ug/L	12	20		
8560468	Dissolved Zinc (Zn)	2023/03/20	105	80 - 120	98	80 - 120	<5.0	ug/L	NC	20		
8560470	Dissolved Aluminum (Al)	2023/03/20	120	80 - 120	102	80 - 120	<4.9	ug/L				
8560470	Dissolved Antimony (Sb)	2023/03/20	117	80 - 120	106	80 - 120	<0.50	ug/L	NC	20		
8560470	Dissolved Arsenic (As)	2023/03/20	108	80 - 120	100	80 - 120	<1.0	ug/L	NC	20		
8560470	Dissolved Barium (Ba)	2023/03/20	NC	80 - 120	101	80 - 120	<2.0	ug/L	1.1	20		
8560470	Dissolved Beryllium (Be)	2023/03/20	107	80 - 120	101	80 - 120	<0.40	ug/L	NC	20		
8560470	Dissolved Boron (B)	2023/03/20	104	80 - 120	100	80 - 120	<10	ug/L	0.39	20		
8560470	Dissolved Cadmium (Cd)	2023/03/20	107	80 - 120	102	80 - 120	<0.090	ug/L	NC	20		
8560470	Dissolved Calcium (Ca)	2023/03/20	NC	80 - 120	104	80 - 120	<200	ug/L				
8560470	Dissolved Chromium (Cr)	2023/03/20	109	80 - 120	98	80 - 120	<5.0	ug/L	NC	20		
8560470	Dissolved Cobalt (Co)	2023/03/20	106	80 - 120	99	80 - 120	<0.50	ug/L	7.1	20		
8560470	Dissolved Copper (Cu)	2023/03/20	109	80 - 120	102	80 - 120	<0.90	ug/L	5.2	20		
8560470	Dissolved Iron (Fe)	2023/03/20	109	80 - 120	101	80 - 120	<100	ug/L				
8560470	Dissolved Lead (Pb)	2023/03/20	100	80 - 120	100	80 - 120	<0.50	ug/L	NC	20		
8560470	Dissolved Magnesium (Mg)	2023/03/20	NC	80 - 120	100	80 - 120	<50	ug/L				
8560470	Dissolved Manganese (Mn)	2023/03/20	106	80 - 120	100	80 - 120	<2.0	ug/L				
8560470	Dissolved Molybdenum (Mo)	2023/03/20	124 (1)	80 - 120	105	80 - 120	<0.50	ug/L	0.87	20		
8560470	Dissolved Nickel (Ni)	2023/03/20	101	80 - 120	98	80 - 120	<1.0	ug/L	0.42	20		
8560470	Dissolved Phosphorus (P)	2023/03/20	121 (1)	80 - 120	116	80 - 120	<100	ug/L				
8560470	Dissolved Potassium (K)	2023/03/20	114	80 - 120	101	80 - 120	<200	ug/L				
8560470	Dissolved Selenium (Se)	2023/03/20	108	80 - 120	101	80 - 120	<2.0	ug/L	NC	20		

BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

QUALITY ASSURANCE REPORT(CONT'D)

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8560470	Dissolved Silicon (Si)	2023/03/20	NC	80 - 120	102	80 - 120	<50	ug/L				
8560470	Dissolved Silver (Ag)	2023/03/20	99	80 - 120	102	80 - 120	<0.090	ug/L	NC	20		
8560470	Dissolved Sodium (Na)	2023/03/20	NC	80 - 120	100	80 - 120	<100	ug/L	5.3	20		
8560470	Dissolved Strontium (Sr)	2023/03/20	NC	80 - 120	100	80 - 120	<1.0	ug/L				
8560470	Dissolved Thallium (Tl)	2023/03/20	101	80 - 120	101	80 - 120	<0.050	ug/L	NC	20		
8560470	Dissolved Titanium (Ti)	2023/03/20	122 (1)	80 - 120	103	80 - 120	<5.0	ug/L				
8560470	Dissolved Uranium (U)	2023/03/20	107	80 - 120	101	80 - 120	<0.10	ug/L	0.29	20		
8560470	Dissolved Vanadium (V)	2023/03/20	114	80 - 120	99	80 - 120	<0.50	ug/L	9.9	20		
8560470	Dissolved Zinc (Zn)	2023/03/20	98	80 - 120	99	80 - 120	<5.0	ug/L	NC	20		
8561706	Total Organic Carbon (TOC)	2023/03/20	96	80 - 120	98	80 - 120	<0.40	mg/L	1.9	20		
8561743	Total Phosphorus	2023/03/21	99	80 - 120	109	80 - 120	<0.004	mg/L	NC	20	110	80 - 120

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference $\leq 2 \times \text{RDL}$).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



www.BVNA.com

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v3

Page 1 of 1

Invoice Information		Invoice to (requires report) ☒		Report Information (if differs from invoice)		Project Information	
Company:	GM Blueplan Engineering		Company:	Mark Ongarato / Joanna Olesiuk		Quotation #:	
Contact Name:	Kim Wilkinson		Contact Name:	Mark Ongarato / Joanna Olesiuk		P.O. #/ AFE#:	
Street Address:	650 Woodlawn Rd W, Blk C, Unit 2		Street Address:			Project #:	122025-1
City:	Guelph	Prov:	ON	City:		Site #:	
Phone:	519-824-8150		Phone:			Site Location:	79 Sideroad 19, Fergus
Email:	info@gmblueplan.ca		Email:	Mark.Ongarato@gmblueplan.ca		Site Location Province:	Ontario
Copies:			Copies:	Joanna.Olesiuk@gmblueplan.ca		Sampled By:	MO

REG 153		Regulatory Criteria		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	
Table 1	☐ Res/Park	☐ Med/Fine	☐ CME	☐ Reg 406, Table:	
Table 2	☐ Ind/Comm	☐ Course	☐ Reg 558*	☐ Sanitary Sewer Bylaw	
Table 3	☐ Agri/other	☐ For RSC	☐ *min 3 day TAT	☐ Storm Sewer Bylaw	
Table			☒ MISA	☐ Municipality	
			☒ WQO	☐ Other:	
Include Criteria on Certificate of Analysis (check if yes): ☒					
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS					
Sample Identification		Date Sampled		Time (24hr)	
		YY	MM	DD	HH MM
					Matrix
1	MW1	23	03	14	Water - Ground
2	MW2	23	03	14	Water - Ground
3	MW3	23	03	14	Water - Ground
4	MW4	23	03	14	Water - Ground
5	MW5	23	03	14	Water - Ground
6	SW-001	23	03	14	Water - Surface
7					
8					
9					
10					
11					
12					

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY		Yes	No	LAB USE ONLY		Yes	No	LAB USE ONLY		Yes	No	LAB USE ONLY		Yes	No	LAB USE ONLY		Yes	No
Seal present	☒			Seal present	☒			Seal present	☒			Seal present	☒			Seal present	☒		
Seal intact	☒			Seal intact	☒			Seal intact	☒			Seal intact	☒			Seal intact	☒		
Cooling media present	☒			Cooling media present	☒			Cooling media present	☒			Cooling media present	☒			Cooling media present	☒		

Relinquished by: (Signature/ Print)		Date		Time		Received by: (Signature/ Print)		Date		Time		Special Instructions	
Mark Ongarato		YY	MM	DD	HH	MM	Jalgi KALGI SOLADHARA		YY	MM	DD	HH	MM
		23	03	15	08	00			2023	03	15	16	08

15-Mar-23 16:08

Ashton Gibson



C373807

A TH

ENV-1584

BV: 663416



BUREAU
VERITAS

Bureau Veritas Job #: C373807

Report Date: 2023/03/22

GM BluePlan Engineering Limited

Client Project #: 122025-1

Site Location: 79 SIDEROAD 19, FERGUS

Sampler Initials: MO

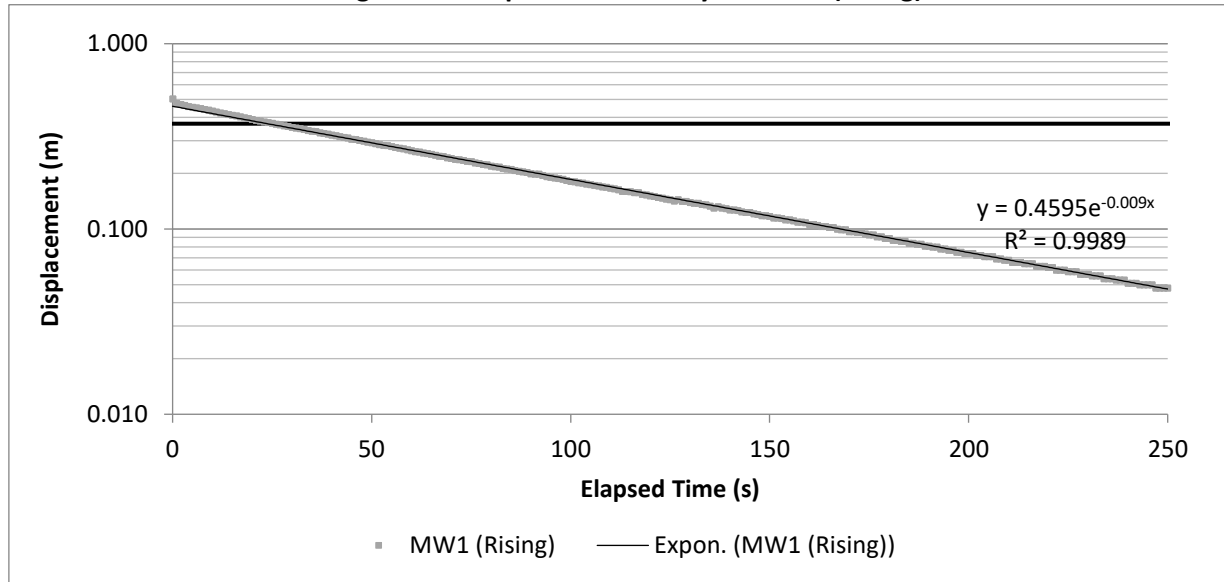
Exceedance Summary Table – Prov. Water Quality Obj.

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.						

Appendix H Single Well Response Test Results

Single Well Response Test Analysis: MW1 (Rising)



Bouwer-Rice Analysis

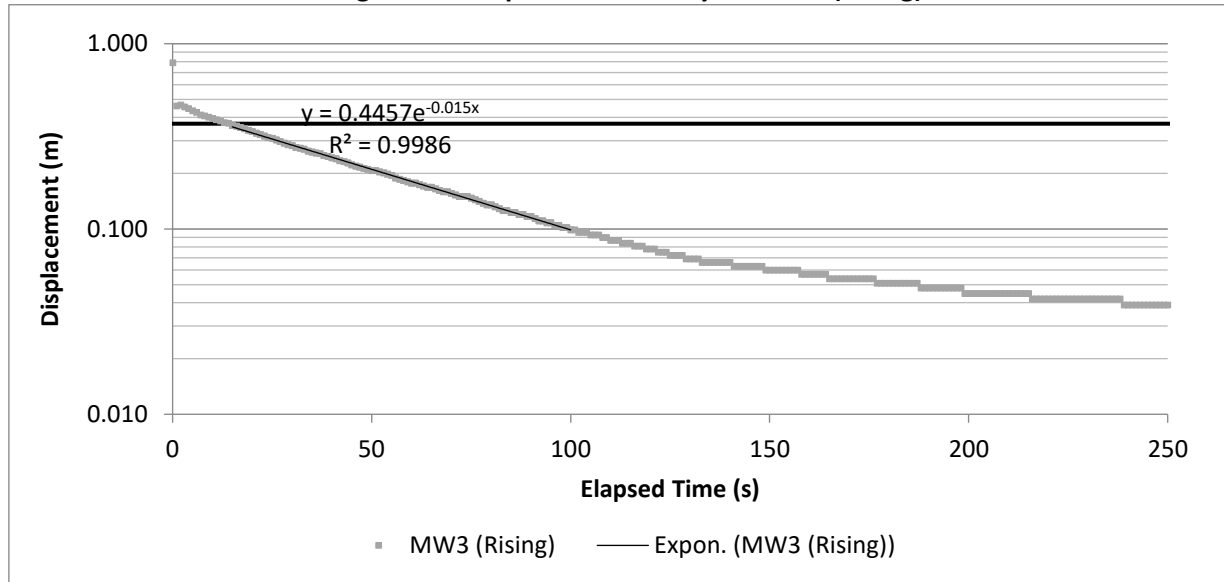
Governing Equation:

$$k = \frac{r_c^2 \ln \left(\frac{R_e}{r_w} \right) \left(\frac{1}{t} \right) \ln \left(\frac{y_o}{y_t} \right)}{2L}$$

$(1/t)(\ln(y_o/y_t)) =$	9.00E-03	(from slope of data)
$L =$	3.05	(Saturated Length of Screen)
$r_w =$	0.1048	(radius of filter pack)
$L/r_w =$	29.1	(ratio)
$A =$	2.50	(from shape factor curves in Bouwer and Rice, 1976)
$B =$	0.375	(from shape factor curves in Bouwer and Rice, 1976)
$C =$	2	(from shape factor curves in Bouwer and Rice, 1976)
$\ln(R_e/r_w) =$	2.897	(from shape factor equation in Bouwer and Rice, 1976)
$D =$	5.6	(Saturated Thickness of Geologic Unit)
$H =$	5.6	(Height of water column above bottom of well)
$r_c =$	0.025	(radius of well casing)
$k =$	2.7E-06	m/s

Hydraulic Conductivity of SAND, trace to some Silt is 2.7E-06 m/s

Single Well Response Test Analysis: MW3 (Rising)



Bouwer-Rice Analysis

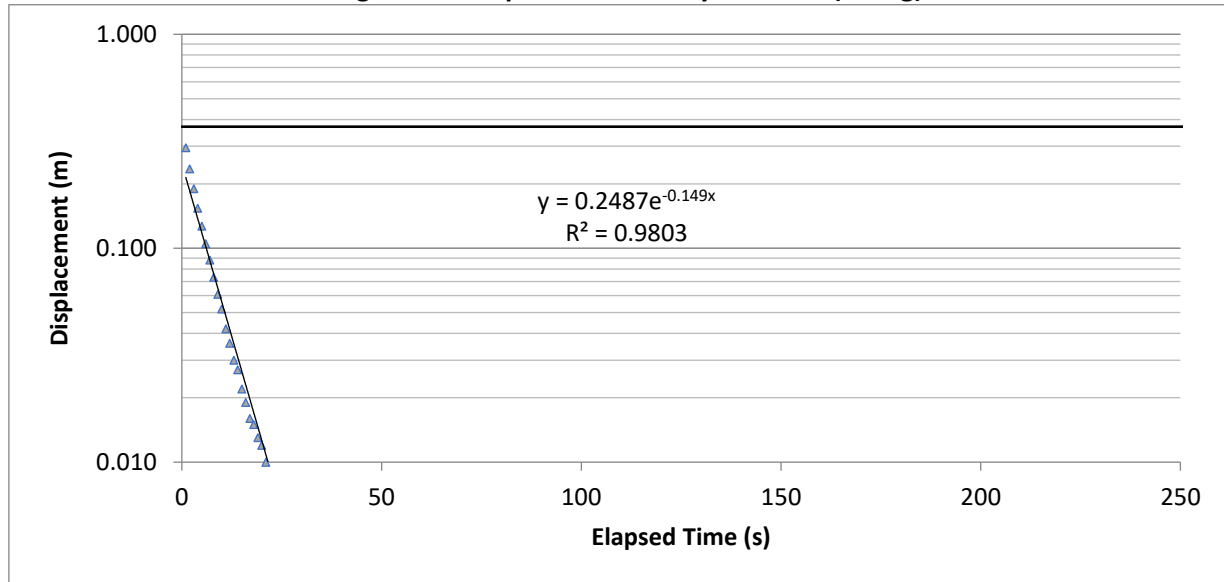
Governing Equation:

$$k = \frac{r_c^2 \ln\left(\frac{R_e}{r_w}\right) \left(\frac{1}{t}\right) \ln\left(\frac{y_o}{y_t}\right)}{2L}$$

$(1/t)(\ln(y_o/y_t)) =$	1.50E-02	(from slope of data)
$L =$	1.52	(Saturated Length of Screen)
$r_w =$	0.1048	(radius of filter pack)
$L/r_w =$	14.5	(ratio)
$A =$	2.00	(from shape factor curves in Bouwer and Rice, 1976)
$B =$	0.25	(from shape factor curves in Bouwer and Rice, 1976)
$C =$	1.5	(from shape factor curves in Bouwer and Rice, 1976)
$\ln(R_e/r_w) =$	2.306	(from shape factor equation in Bouwer and Rice, 1976)
$D =$	2.93	(Saturated Thickness of Geologic Unit)
$H =$	2.93	(Height of water column above bottom of well)
$r_c =$	0.025	(radius of well casing)
$k =$	7.1E-06	m/s

Hydraulic Conductivity of SAND, trace Silt is 7.1E-06 m/s

Single Well Response Test Analysis: MW4 (Rising)



Bouwer-Rice Analysis

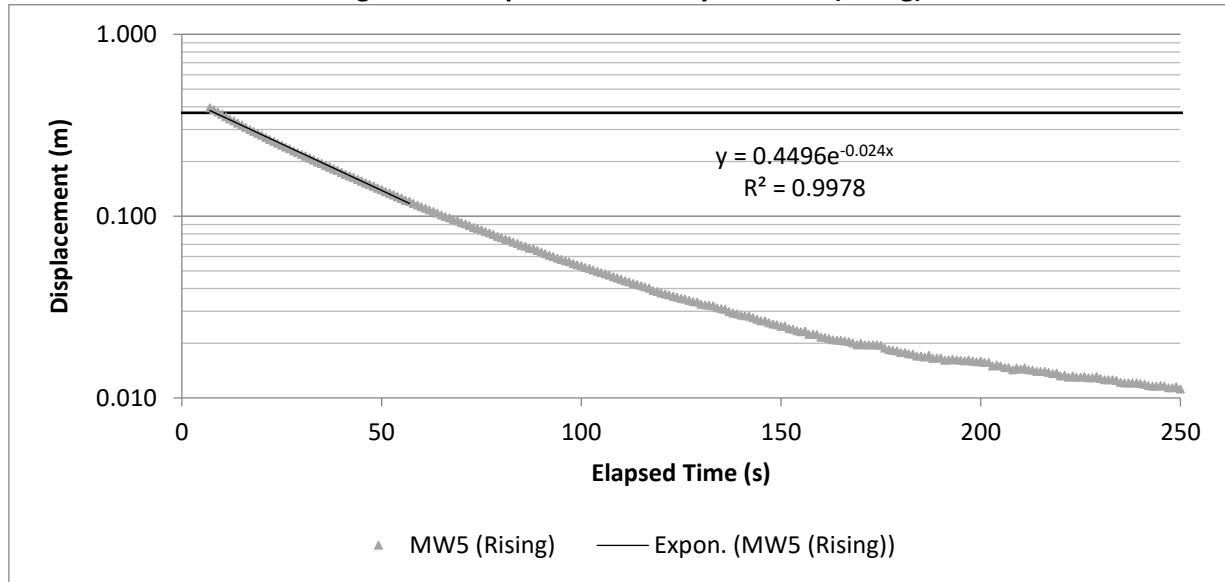
Governing Equation:

$$k = \frac{r_c^2 \ln \left(\frac{R_e}{r_w} \right) \left(\frac{1}{t} \right) \ln \left(\frac{y_o}{y_t} \right)}{2L}$$

$(1/t)(\ln(y_o/y_t))=$	1.49E-01	(from slope of data)
$L =$	1.52	(Saturated Length of Screen)
$r_w =$	0.1048	(radius of filter pack)
$L/r_w =$	14.5	(ratio)
$A =$	1.75	(from shape factor curves in Bouwer and Rice, 1976)
$B =$	0.35	(from shape factor curves in Bouwer and Rice, 1976)
$C =$	2	(from shape factor curves in Bouwer and Rice, 1976)
$\ln(R_e/r_w) =$	2.381	(from shape factor equation in Bouwer and Rice, 1976)
$D =$	4.8	(Saturated Thickness of Geologic Unit)
$H =$	5.172	(Height of water column above bottom of well)
$r_c =$	0.025	(radius of well casing)
$k =$	7.3E-05	m/s

Hydraulic Conductivity of SAND, trace Silt is 7.3E-05 m/s

Single Well Response Test Analysis: MW5 (Rising)



Bouwer-Rice Analysis

Governing Equation:

$$k = \frac{r_c^2 \ln\left(\frac{R_e}{r_w}\right) \left(\frac{1}{t}\right) \ln\left(\frac{y_o}{y_t}\right)}{2L}$$

$(1/t)(\ln(y_o/y_t)) =$	2.40E-02	(from slope of data)
$L =$	1.52	(Saturated Length of Screen)
$r_w =$	0.1048	(radius of filter pack)
$L/r_w =$	14.5	(ratio)
$A =$	1.90	(from shape factor curves in Bouwer and Rice, 1976)
$B =$	0.375	(from shape factor curves in Bouwer and Rice, 1976)
$C =$	1.45	(from shape factor curves in Bouwer and Rice, 1976)
$\ln(R_e/r_w) =$	2.459	(from shape factor equation in Bouwer and Rice, 1976)
$D =$	3.783	(Saturated Thickness of Geologic Unit)
$H =$	3.783	(Height of water column above bottom of well)
$r_c =$	0.025	(radius of well casing)
$k =$	1.2E-05	m/s

Hydraulic Conductivity of SAND, trace Silt is 1.2E-05 m/s

Appendix I Construction Dewatering Estimates

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

Description of Project:

Re-development of residential properties for increased density.

Description of Conceptual Model for Dewatering Estimation:

Based on assessment of proposed works in relation to groundwater levels, it is expected that construction dewatering will be required at three types of excavation:

1) Dewatering for Site Servicing

Description: Seepage into Excavation

Model Type: Flow to Finite Trench in Unconfined Aquifer

Static Groundwater Level = 417.35 masl (max GWL at MW-1)

Base of Deepest Structure = 413.3 masl (existing sanitary sewer on SR 19/Manhole MH-C)

Target Groundwater Level = 412.8 masl (= 0.5 m buffer below base of structure))

Elevation of Impermeable Bottom = 411.6 masl (Till at MW-1)

Excavation Dimensions = 3 m wide by 30 m long

Hydraulic Conductivity, k

Max $k = 7 \times 10^{-5}$ m/s, per maximum slug test result, c.f. MW4

Typical $k = 2 \times 10^{-6}$ m/s, per slug test at MW1, nearest well to SR 19

2) Dewatering for SWM Pond Construction

Description: Seepage into Excavation

Model Type: Flow to Equivalent Well in Unconfined Aquifer

Static Groundwater Level = 415.8 masl (max GWL at MW-5)

Base of Deepest Excavation = 414 masl (SWM Pond Forebay)

Target Groundwater Level = 413.5 masl (0.5 m buffer below base of excavation)

Elevation of Impermeable Bottom = 411.9 masl (Till at MW-5)

Excavation Dimensions = 8 m by 2 m (equivalent well of 2.3 m radius)

Hydraulic Conductivity, k

Max $k = 7 \times 10^{-5}$ m/s, per maximum slug test result cf. MW-4

Typical $k = 1 \times 10^{-5}$ m/s, per slug test at MW-5, nearest to SWM Pond

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

Description of Conceptual Model for Dewatering Estimation:

Based on assessment of proposed works in relation to groundwater levels, it is expected that construction dewatering will be required at three types of excavation:

3) Dewatering for Basement

Description: Seepage into Excavation

Model Type: Flow Equivalent Well in Unconfined Aquifer

Required Drawdown (H-h)

Maximum Drawdown = 0.3 m

Typical Drawdown = 0.0 m (i.e., no dewatering needed)

Static Groundwater Level (H) = 416.7 m - 412.1 m = 4.6 m

(Max GWL at MW3 - Top of Till at MW3)

Excavation Dimensions = 45 m by 15 m (equivalent well of 14.7 m)

Hydraulic Conductivity, k

$k = 5 \times 10^{-6}$ m/s, estimated hydraulic conductivity for shallow silt material.

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

1A DEWATERING FOR SITE SERVICING - Maximum

Radius of Influence

Sichart (Unconfined)

$$R_o = 3000(H - h)\sqrt{k}$$

R ₀ =	114.2	m (Radius of Influence)
H=	417.35	m (Initial Head)
h=	412.8	m (Head at Drawdown)
k=	7.00E-05	m/s (Hydraulic Conductivity)

Aquifer Type:

Unconfined (Water Table)

Calculation Approach:

Flow to Finite Trench

Governing Equation:

$$Q = \pi k \frac{(H^2 - h^2)}{\ln \frac{R_o}{r_w}} + xk \frac{(H^2 - h^2)}{L}$$

Q=	239,161	L/d (Dewatering Flow)
x=	30	m (Length of Trench)
k=	7.00E-05	m/s (Hydraulic Conductivity)
H=	5.75	m (Initial Head)
h=	1.2	m (Head at Drawdown)
L=	57.1	m (Distance to "Source")
R ₀ =	114.2	m (Radius of Influence)
r _w =	1.5	m (Radius of Well or System)

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

1B) DEWATERING FOR SITE SERVICING - Typical

Radius of Influence

Sichart (Unconfined)

$$R_o = 3000(H - h)\sqrt{k}$$

R ₀ =	19.3	m (Radius of Influence)
H=	417.35	m (Initial Head)
h=	412.8	m (Head at Drawdown)
k=	2.00E-06	m/s (Hydraulic Conductivity)

Aquifer Type:

Unconfined (Water Table)

Calculation Approach:

Flow to Finite Trench

Governing Equation:

$$Q = \pi k \frac{(H^2 - h^2)}{\ln \frac{R_o}{r_w}} + xk \frac{(H^2 - h^2)}{L}$$

Q=	23,703	L/d (Dewatering Flow)
x=	30	m (Length of Trench)
k=	2.00E-06	m/s (Hydraulic Conductivity)
H=	5.75	m (Initial Head)
h=	1.2	m (Head at Drawdown)
L=	9.7	m (Distance to "Source")
R ₀ =	19.3	m (Radius of Influence)
r _w =	1.5	m (Radius of Well or System)

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

2A) DEWATERING FOR SWM POND - Maximum

Radius of Influence

Sichart (Unconfined)

$$R_o = 3000(H - h)\sqrt{k}$$

R ₀ =	57.5	m (Radius of Influence)
H=	415.79	m (Initial Head)
h=	413.5	m (Head at Drawdown)
k=	7.00E-05	m/s (Hydraulic Conductivity)

Aquifer Type:

Unconfined (Water Table)

Calculation Approach:

Flow to Well

Governing Equation:

$$Q = \pi k \frac{(H^2 - h^2)}{\ln \frac{R_o}{r_w}}$$

Q=	74,219	L/d (Dewatering Flow)
k=	7.00E-05	m/s (Hydraulic Conductivity)
H=	3.89	m (Initial Head)
h=	1.6	m (Head at Drawdown)
R ₀ =	57.5	m (Radius of Influence)
r _w =	2.3	m (Radius of Well or System)

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

2B) DEWATERING FOR SWM POND - Typical

Radius of Influence

Sichart (Unconfined)

$$R_o = 3000(H - h)\sqrt{k}$$

R ₀ =	21.7	m (Radius of Influence)
H=	415.79	m (Initial Head)
h=	413.5	m (Head at Drawdown)
k=	1.00E-05	m/s (Hydraulic Conductivity)

Aquifer Type:

Unconfined (Water Table)

Calculation Approach:

Flow to Well

Governing Equation:

$$Q = \pi k \frac{(H^2 - h^2)}{\ln \frac{R_o}{r_w}}$$

Q=	15,197	L/d (Dewatering Flow)
k=	1.00E-05	m/s (Hydraulic Conductivity)
H=	3.89	m (Initial Head)
h=	1.6	m (Head at Drawdown)
R ₀ =	21.7	m (Radius of Influence)
r _w =	2.3	m (Radius of Well or System)

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

3A) DEWATERING FOR BASEMENT - Maximum

Radius of Influence

Sichart (Unconfined)

$$R_o = 3000(H - h)\sqrt{k}$$

R ₀ =	2.0	m (Radius of Influence)
H=	4.6	m (Initial Head)
h=	4.3	m (Head at Drawdown)
k=	5.00E-06	m/s (Hydraulic Conductivity)

Aquifer Type:

Unconfined (Water Table)

Calculation Approach:

Flow to Well

Governing Equation:

$$Q = \pi k \frac{(H^2 - h^2)}{\ln \frac{R_o}{r_w}}$$

Q=	28,242	L/d (Dewatering Flow)
k=	5.00E-06	m/s (Hydraulic Conductivity)
H=	4.6	m (Initial Head)
h=	4.3	m (Head at Drawdown)
R ₀ =	16.7	m (Radius of Influence)
r _w =	14.7	m (Radius of Well or System)

Hydrogeological Calculations for Dewatering Estimates

Project:

2402265 - 79 Sideroad 19

Date: 2024/Jun/14

Engineer/Technician: MRL

3B) DEWATERING FOR BASEMENT - Typical

No dewatering expected in the typical case for basement excavation.
Excavations likely to be above groundwater.

Summary	Typical Rate (L/d)	Max. Rate (L/d)	Radius of Influence (m)†
Dewatering for Site Servicing	24,000	240,000	114
Dewatering for SWM Pond	16,000	75,000	57
Dewatering for Basement	0	29,000	2

†- Based on maximum dewatering scenario