



D4 Assessment - 2095 County Road 6, Hall's Glen, Douro-Dummer, County of Peterborough, Ontario

March 7, 2023

Prepared for:
Paul Kidd

Cambium Reference: 15726-001

CAMBIUM INC.

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1.0 Introduction

Cambium Inc. (Cambium) was retained by Paul Kidd (Client) to complete a Land Use Compatibility Assessment at 2095 County Road 6, Hall's Glen (Site). The Site is on Lot 26, Concession 4 (Site), Township of Douro-Dummer, Dummer Ward, County of Peterborough (County), about 500 m from the hamlet of Hall's Glen (Figure 1).

The Client intends to sever a portion of the lot with the current residential dwelling (about 0.6 ha) and construct a new residential dwelling in the southeast field on the retained portion of the lot (about 18 ha) (Figure 2). A private supply well is currently installed on-site to service the existing residential dwelling.

The Site is within 500 m of the Hall's Glen closed waste disposal site (1951 County Road 6) and a second historical waste disposal site identified on the Peterborough County GIS and Official Plan (2115 McCracken's Landing Road). The following was noted by the County of Peterborough during planning discussions for the site.

The subject property is located within the influence area (i.e., 500 metres) of both an active and closed waste disposal site. Section 6.2.18.3 (e) of the Official Plan states, "within 500 metres of waste management footprints, only land uses compatible with the potential impacts or their engineered controls shall be permitted and may have to be determined by Official Plan amendment as a result of studies under Section 6.2.18.3 c). Ministry of Environment, Conservation and Parks (Ministry) recommends that the 500 metre assessment area be used as a study area to determine the impact of the landfill on land use proposals in accordance with Ministry Guideline D4: Land Use on or Near Landfills and Dumps."

Although the proposed severed lot currently contains a dwelling, it would appear plans for the retained parcel include a new dwelling. As such, studies to investigate, among other things, gas, leachate, and hydrogeology are to be carried out to the satisfaction of the Township (of Douro Dummer) and the Ministry and those studies shall indicate that development can safely take place. Until this is confirmed the proposal does not conform to the Official Plan.



This report addresses the requirements outlined by the County and was completed using the methodology outlined in the Ministry of the Environment, Conservation and Parks (Ministry) "D4 - Land Use on or Near Landfills and Dumps" (MOEE, 1994a) (Guideline D4).

1.1 Site Description

The Site is about 18.6 ha with about 525 m of frontage on County Road 6. The Site is on Lot 26, Concession 4, Dummer Ward, Township of Douro-Dummer, County of Peterborough. The municipal address for the Site is 2095 County Road 6, Hall's Glen. The Site is about 330 m north of the Hall's Glen Waste Disposal Site and about 320 m south of the property identified as a historical waste disposal site.

The Site is currently developed with a single residential dwelling, barn, and outbuildings. A portion of the property is used for agriculture, while a portion is forested. An unevaluated wetland dissects the central portion of the Site from the northeastern to southwestern property boundary. Adjacent lands uses are primarily rural, residential, and agricultural.

Topography at the Site and the surrounding area is generally flat. Overall drainage is directed from the northwest property boundary (277 m above sea level (asl)) to the central portion of the Site, near the unevaluated wetland (275 masl). There are no mapped watercourses at the Site; however, an unmapped watercourse was identified traversing the central portion of the Site from north to south during the *Environmental Impact Study* (Cambium 2023), provided under separate cover. The watercourse is within the wetland on the Site. In addition, seepage areas were identified within the wetland through the Preliminary Severance Review (PSR) provided by the County.

The Site is zoned as Rural (RU) and Development Zone (D2) in the Township of Douro-Dummer Comprehensive Zoning By-Law No. 2022-59. The adjacent properties are zoned as followed:

- To the north and east: RU and D2
- To the west: Hamlet Residential (HR), Residential (R), D2, and Environmental Conservation Zone (EC)



- To the south: D2, Disposal Industrial Zone (M3), and Special District 209 (S.D. 209)

1.2 County Official Plan Policies

To the south of the Site is the Hall's Glen waste disposal site. The horizontal separation of the site boundary and landfill site is about 330 m at its closest extent. About 320 m north of the Site a historical waste disposal site is documented in the Official Plan.

As the Site is within 500 m of a waste management property use, Section 4.7.3.3 of the Official Plan (County of Peterborough, Official Plan – 1994, with amendments consolidated to March 2020) applies:

To ensure that new development will not be negatively impacted by the disposed waste prior to the approval of new development, local municipalities shall identify a 500 m radius around all operating and closed landfill sites in their local Official Plans. This 500 m radius will serve as an assessment area to require testing and studies, which deal with such issues as methane gas, leachate, hydrogeology and structural stability by qualified professionals unless exempted by the Ministry of the Environment.

Section 6.2.18.3 of the Official Plan further states:

c) Within Waste Management Areas, as designated on Schedule "A", the construction of buildings, structures and hard surface paving shall only be permitted subject to the following policies and in accordance with the underlying land use designation.

i) studies to investigate, among other things, gas leachate and hydrogeology have been carried out to the satisfaction of the Township and the Ministry of the Environment and those studies shall indicate that development can safely take place;

ii) the Township shall be satisfied with the required studies with respect to any matter regarding structural stability, safety and the integrity of any structure.

iii) written approval has been received from the Township;

iv) the studies shall be carried out by a qualified engineer.



The author previously confirmed with the County that a Professional Geoscientist (P.Geo.) can also satisfy the requirement outlined in Section 6.2.18.3 c) iv. of the Official Plan. This report addresses the requirements outlined in the County's Official Plan.

1.3 D4 Assessment

The requirements outlined in the County's Official Plan are broadly defined by Guideline D4. According to Section 4.1 of Guideline D4, factors to be considered when land use is proposed on or near an operating landfill site include:

- groundwater and surface water contamination by leachate
- surface water runoff
- visual impact
- landfill-generated gasses
- odour
- litter
- contaminant discharges from associated vehicular traffic
- dust, noise, other air emissions
- fires
- vector and vermin

Guideline D4 indicates that these factors should be considered with respect to their potential to create a hazard or health and safety risk, a nuisance to people, and/or degradation of the natural environment.



2.0 Work Program and Assessment

This section discusses the work program and results of the assessment.

2.1 Desktop Review

The following sources were accessed to obtain specific details on the landfill and surrounding area:

- The report titled *2021 Annual Report, Hall's Glen Waste Transfer Station* (Cambium, 2022)
- Ministry Water Well Information System (WWIS) website (MECP, 2023)
- The Waste Disposal Site Inventory (MOE, 1991) and Landfill Sites Map (MECP, 2022) which includes a database of Ministry approved landfill sites
- Waste Management Site Dataset (via Google Earth) (LIO, 2023) which includes a dataset of Ministry of Natural Resource and Forestry (MNR) landfill sites

2.1.1 2115 McCracken's Landing Road

A review of available databases did not reveal any details of the closed waste disposal site identified at 2115 McCracken's Landing Road. As such, Cambium contacted the Township of Douro Dummer and the Ministry's Peterborough District Office. The Township indicated they had received information from the Ministry (Gary Muloin, Senior Environmental Officer) that there is no reference to a waste disposal site at 2115 McCracken's Landing Road. Therefore, Guideline D4 is not applicable to that location.

Gary Muloin, Senior Environmental Officer responded from the District Office and indicated the property at 2115 McCracken's Landing Road (Part Lot 27, Concession 4 – former Township of Dummer) is not referenced in the Ministry Landfill Site Inventory, nor does the District have any files for this. The Ministry does not have any file information to confirm that waste disposal activities have occurred at the subject property.

As there is no documentation of a closed waste site at 2115 McCracken's Landing Road, this location was not considered as part of this D4 Assessment.



2.1.2 Hall's Glen Waste Disposal Site

The Hall's Glen waste disposal site is a closed landfill and active transfer station, operated by the Township, and approved by Ministry Provisional Certification of Approval (PC of A) A341004. Annual monitoring and reporting is completed at the site. The *2021 Annual Report* (Cambium, 2022) was reviewed. Relevant details to this study are summarized herein. The summary below includes text paraphrased and quoted directly from the 2021 annual report.

2.1.2.1 Overview

The access road for the Hall's Glen waste disposal site is at the intersection of County Road 6 and Fourth Line Road. The waste disposal site is not visible from the noted intersection as it is well screened by surrounding trees and thick vegetation. Access is only permitted during operating hours.

The Township has owned and operated the Hall's Glen waste disposal site since 1970. The landfill design was based on the principles of natural attenuation. Landfilling activities ceased in 2003 and final closure activities were completed in 2005. No information was available regarding the amount of waste landfilled at the time of closure; however, the existing limit of waste is 1.0 ha within a 48.5 ha property. Currently the Hall's Glen waste disposal site operates as a non-hazardous solid waste and materials transfer station.

2.1.2.2 Groundwater Quality

The Hall's Glen waste disposal site is in an area known as the Dummer Moraine. The waste disposal site is in a relatively flat area with a generally shallow overburden unit, which averages about 3.25 m below ground surface (bgs). Material in the overburden was noted to be silty sand till which is underlain by limestone bedrock (of the Lindsay Formation), with trending drumlins and moraines in a northeast-southwest orientation. The noted features create natural basins and poor drainage conditions.

The current monitoring program at the waste disposal site includes 13 multi-level groundwater wells to monitor the overburden, shallow bedrock, and deep bedrock aquifers.



Results of the water level measurements indicated that groundwater flow in the three aquifers was to the southeast. There was a component of radial flow in the deep bedrock aquifer at a centrally located down-gradient well. Upward vertical hydraulic gradients suggest that leachate impacted groundwater is restricted from migrating into the deeper bedrock aquifer. As such, impacts were interpreted to be confined to the overburden and shallow bedrock aquifer. Given the upward gradients calculated there is a potential for groundwater to discharge to surface, if conditions permit.

The water quality results indicated that natural attenuation is occurring at the landfill as leachate concentrations decreased with distance from the waste mound. The leachate plume was considered stable. Some impacts at the down-gradient monitors were attributed to non-waste related sources such as saturated organic soils and decaying organic vegetation.

Iron and manganese were the only parameters to exceed of the Ontario Drinking Water Quality Standards (ODWQS) (MOE, 2006) in all three aquifers at the farthest down-gradient monitoring wells and wells adjacent the southern property boundary. The noted exceedances were for non-health related objectives.

The water quality in the down-gradient monitors did not comply with the Ministry's Guideline B-7, Reasonable Use Concept (RUC) (MOEE, 1994). It was anticipated that given the distance from most of the down-gradient bedrock monitoring wells to the property boundary, attenuation of leachate impacted groundwater would occur prior to migrating off-site. It was suspected that non-waste related sources were causing compliance issues in the down-gradient overburden aquifer.

A groundwater trigger mechanism and contingency plan was developed from historically elevated volatile organic compound (VOC) concentrations at various down-gradient monitoring wells. There were no detectable VOC concentrations during the 2021 monitoring year and no further action was warranted.

Four residential wells participate in the current monitoring program: two wells hydraulically up-gradient of the waste disposal site (to the west), one well about 25 m down-gradient from the eastern property boundary, and one well on-site near the southeast property boundary. Of



note, the on-site well is a monitoring well (in the overburden) which replaced a historical dug well. The remainder of the wells were installed in the bedrock. The water quality at the residential wells reported similar water chemistry to the background quality and were determined to be un-impacted from the waste disposal site. Select wells reported ODWQS exceedances attributed to non-waste related sources.

Given that the Site is north of the Hall's Glen waste disposal site and groundwater flow in all three aquifers is to the east/southeast from the landfill, influences to the supply well aquifer at the Site is considered negligible.

Sampling locations are outlined in Figure 2 of the "2021 Annual Report, Hall's Glen Waste Transfer Station" attached to this report in Appendix A.

2.1.2.3 Surface Water Quality

The surface water drainage systems on and near the Hall's Glen waste disposal site have been characterized as stagnant and discontinuous. Unevaluated wetlands were identified within the central portion of the property and on the surrounding lots to the north, southeast, and southwest. The area is poorly drained, and water is interpreted to either evaporate or infiltrate into the subsurface. There are no mapped watercourses at the waste disposal site. The closest mapped watercourse is an unnamed tributary about 1.5 km south, which discharges into the Indian River. Topographic maps suggest surface water flow (run-off) is generally south, when permitted.

Two surface water sampling stations are included in the approved monitoring program. The legitimacy of the background monitoring station was questioned in 2021. It is suspected that potential run-off from the waste mound and/or poor sampling conditions may be influencing the water quality at this location. This station was proposed to remain in the monitoring program with the farthest downstream location as its temporary replacement. A new downstream location was proposed near the southeast property boundary.

It is difficult to assess surface water quality at the waste disposal site, given the uncertainty regarding background quality. Nonetheless, the topography of the area is relatively flat with



disconnected and stagnant surface water features reducing the potential for surface run-off to reach the Site (about 370 m to the north). Any surface water impact at the Hall's Glen site is likely to evaporate or infiltrate into the ground.

Sampling locations are outlined in Figure 2 of the "2021 Annual Report, Hall's Glen Waste Transfer Station" attached to this report in Appendix A.

2.1.2.4 Other Observations

The Township of Douro-Dummer is responsible for the inspection of the following areas at the Hall's Glen waste disposal site as specified in PC of A Section 32 and 33.

- Presence of leachate seeps
- Condition of surface water drainage works
- Erosion and sedimentation in surface water drainage system
- Presence of any ponded water
- Adequacy and integrity of cover material
- Evidence of settlement
- Evidence of vegetative stress
- Presence of insects, vermin, rodents, and scavenging animals
- General site appearance

Results of the inspections conducted in 2021 indicated no deficiencies for the items listed above.

The Hall's Glen waste disposal site is accessed from the intersection of County Road 6 and Fourth Line Road. Vegetation and trees aid in reducing the visual impairment of the Site. Equipment is used on an as-needed basis which reduces the potential for noise to impact the neighbouring properties.



Provided the Hall's Glen waste disposal site continues to be operated in compliance with Ministry approval, the report entitled "Design, Operations, Maintenance, and Closure Report" (DOP), and best management guidelines, issues such as fires and dust are not expected to impact adjacent properties or the Site.

2.1.2.5 Landfill Gas

Landfill gas (LFG), specifically methane and carbon dioxide, is derived from the decomposition of organic wastes. Production of LFG from landfilled wastes normally reaches a maximum rate approximately two years after placement and may continue at this rate for many years. The biological decomposition process results in the generation of LFG until some period, likely decades, after the landfilling of that waste ceases. Methane is explosive at volumes of 5% methane by volume to 17% methane by volume (50,000 ppm to 170,000 ppm) in air (Werner Sölken, 2021).

Once landfill gases are produced under the surface, they tend to migrate from landfills through pore spaces within the refuse and cover material. Landfill gases are lighter than air and naturally tend to move upward, usually through the landfill surface. Where upward migration is restricted by densely compacted waste or impermeable cover or caps, gases tend to migrate horizontally.

Landfill gas measurements, specifically methane and hydrogen sulphide, were collected from all wells in the monitoring program during the spring and autumn. There were no reported concentrations of hydrogen sulphide during either monitoring event. There were no reported concentrations in the spring and only four wells reported detectable methane concentrations during the autumn monitoring event. One well installed within the waste mound reported concentrations of 17 % methane by volume. Given that this well is installed within the waste, high concentrations were no unexpected. Detectable methane concentrations were reported at two wells at the southern property boundary; however, concentrations were significantly less than 2.5 % by volume. As such, the Site complied with Section 4.10 of *Landfill Standards, A Guideline on the Regulatory and Approval Requirements for New and Expanding Landfilling Sites* (MOEE, 1998).



2.2 Water Well Records

According to the Ministry Water Well Information System (WWIS), there are about 70 well records available within 1 km of the Site (Figure 2). Refer to Appendix B for summary details. Information outlined in the well records indicated the following:

- All wells were reported to be installed in the bedrock. Of the 72 records reviewed, 51 were water supply wells, 3 were abandoned supply wells, 12 were observation wells, and 6 were test holes.
- The maximum well depth was 91 mbgs and the minimum was 4 mbgs. The average depth with 19 mbgs.
- Wells were installed in shale, limestone, and /or granitic bedrock. Overburden materials were described as gravel, clay, sand, and fill. Bedrock was found between surface and 30 mbgs.
- Water was found between 1 and 80 mbgs, with an average depth of 13 mbs. Static water levels were between 1 and 49 mbgs, with an average of 5 mbgs.
- There were five well records identified on or immediately adjacent the Site. These wells ranged from 10 to 19 m deep and were drilled between 1964 and 1989. Records include 5101117, 5105312, 5106574, 5112368, and 5113996 (Appendix B). All five wells were reported for domestic supply wells. One well reported sulphur water.

As discussed in Section 2.1.2.2, impacts from the Hall's Glen waste disposal site were reported to be in the overburden and shallow bedrock aquifers. Although numerous domestic supply wells surrounding the Site were within the shallow bedrock aquifer, the reported groundwater flow direction was reported to be to the southeast (i.e., away from the Site). As such, it is not expected that the Hall's Glen waste disposal site will pose a threat to the drinking water source at the Site.



3.0 D4 Assessment Summary

The Hall's Glen waste disposal site formally closed its landfilling operations in 2005. It currently operates as a non-hazardous solid waste and materials transfer station. The property is surrounded by thick vegetation and trees reducing the visibility from County Road 6 and the Site.

Groundwater flow at the Hall's Glen waste disposal site is to the southeast (away from the Site) where any landfill related impacts were reported to be restricted to the overburden and upper bedrock aquifers. It is expected that groundwater may discharge to surface when conditions permit.

Natural attenuation is occurring at the Hall's Glen waste disposal site as leachate concentrations decreased with distance from the waste mound. Although there were some exceedances of the ODWQS criteria at the farthest down-gradient monitoring wells (about 500 m up-gradient of the landfill property boundary), it was expected that impacts would attenuate prior to leaving the property. The overburden monitoring well at the southeastern property boundary reported no landfill related influences in the water quality.

Results of the residential monitoring program indicated no landfill related impacts to the groundwater quality. Two residential wells are up-gradient (west) and two wells were (down-gradient) southeast of the Hall's Glen waste disposal site. There are no residential wells in the monitoring program to the north, in the direction of the Site. Given the direction of groundwater flow impacts to the domestic supply well aquifer at the Site was not anticipated.

The surface water environment at and surrounding the Hall's Glen waste disposal site was characterized as stagnant and discontinuous. It was anticipated that any impacts to the down-gradient surface water quality would evaporate or infiltrate into the subsurface. There were no watercourses reported at the Hall's Glen waste disposal site.

Two wells reported detectable methane concentrations at the southwest property boundary; however, concentrations were significantly less than the regulatory compliance criteria of 2.5%



methane by volume. Given that the distance to the Site from the landfill, impacts from landfill gas were considered negligible.



4.0 Conclusions and Recommendations

There are no anticipated adverse impacts to the Site from the Hall's Glen waste disposal site via groundwater and surface water contamination by leachate, surface water runoff, and/or landfill-generated gasses. Provided the Hall's Glen waste disposal site continues to be operated in compliance with Ministry approvals, the control documents (operations plan), and best management guidelines, no adverse impacts to the Site from the landfill are expected due to odour, litter, contaminant discharges from associated vehicular traffic, visual impact, dust, and noise, other air emissions, fires, and vectors and vermin.

As a matter of due diligence, Cambium recommends that any new supply well installed on-site be sampled at least once for those parameters outlined in Column 2, Schedule 5 of the document titled *Landfill Standards: A Guideline On The Regulatory And Approval Requirements For New Or Expanding Landfilling Sites* (MECP, 2021). In addition, hardness, arsenic, phosphorus, and potassium should also be included as these parameters are referenced in the compliance assessment of the Hall's Glen site. The water quality testing will confirm water treatment needs (if required).



5.0 Closing

We trust this report meets the needs immediate needs of the Client. Please direct questions regarding this assessment to the undersigned at 705-872-8797.

Respectfully submitted,

Cambium Inc.

Michael Pion, C.E.T.
Environmental Specialist

Stephanie Reeder, P. Geo, C.E.T.
Senior Project Manager





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Standard Limitations

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A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

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Limitation of Liability

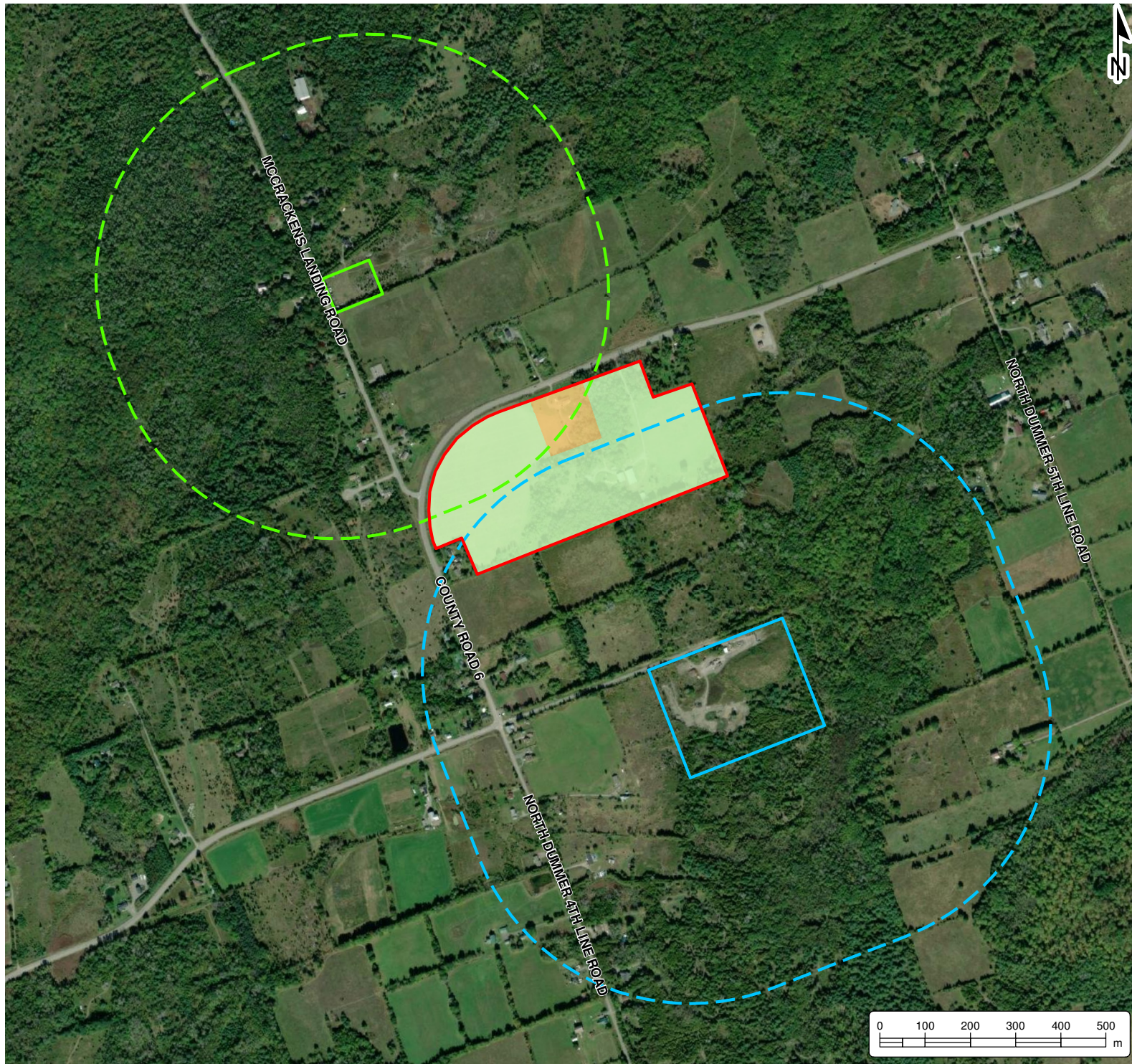
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Personal Liability

The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.










Appended Figures



D4 ASSESSMENT

PAUL KIDD
2095 County Road 6,
Hall's Glen, Ontario

LEGEND

-  Douro-Dummer historical landfill
-  Hall's Glen waste disposal site
-  Hall's Glen 500m Radius
-  Douro-Dummer 500m Radius
-  Sever (0.6ha) (approximate)
-  Retain (18ha) (approximate)
-  Site Boundary (approximate)

Notes:
 - Base mapping features are © Queen's Printer of Ontario, 2019 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
 - Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
 - Cambium Inc. makes every effort to ensure this map is free from errors but cannot be held responsible for any damages due to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.



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SITE PLAN

Project No.:	15726-002	Date:	February 2023
Scale:	1:12,000	Rev.:	
Created by:	DBB	Projection:	NAD 1983 UTM Zone 17N
Checked by:	SNR	Figure:	1

D4 ASSESSMENT

PAUL KIDD
2095 County Road 6,
Hall's Glen, Ontario

LEGEND

-  Water Well Records
-  Site Boundary (approximate)
-  Study Area (1km)
-  Sever (0.6ha) (approximate)
-  Retain (18ha) (approximate)
-  Douro-Dummer historical landfill
-  Hall's Glen waste disposal site

Notes:

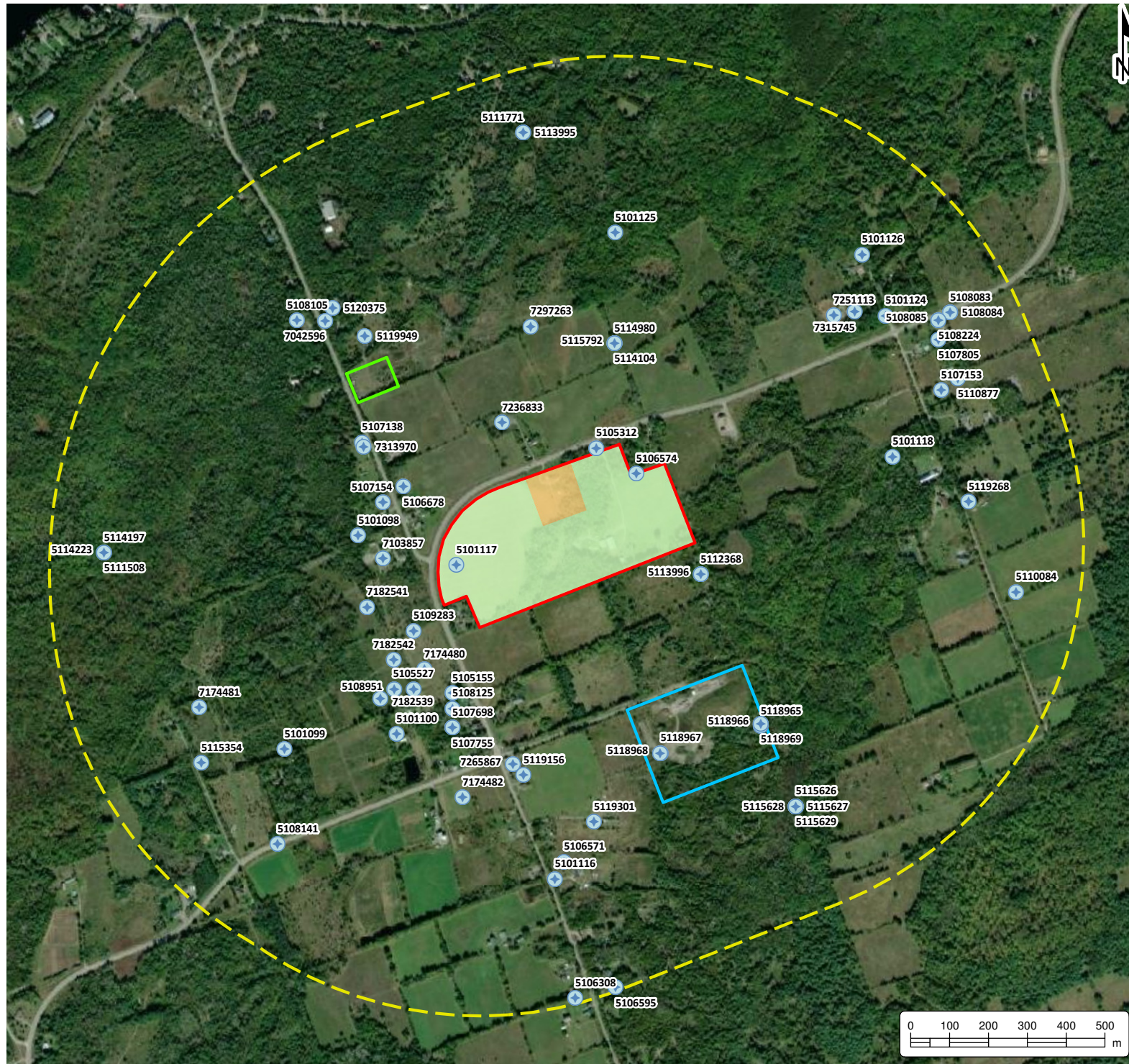
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MECP WATER WELL WITHIN 1000m

Project No.:	15726-002	Date:	February 2023
Scale:	1:14,000	Rev.:	
Created by:	PAS	Checked by:	SNR
Projection:	NAD 1983 UTM Zone 17N	Figure:	2



O:\GIS\MXD\15700-15799\15726-002 Paul Kidd - D4 Assessment - 2095 CR 6, Hall's Glen\2023-02-09 FIG 2 - Ministry\WWS Localtions.mxd
















Appendix A

Additional Mapping

**2021 ANNUAL REPORT
HALL'S GLEN LANDFILL**
THE CORPORATION OF THE
TOWNSHIP OF DOURO - DUMMER
1951 County Road 6
Hall's Glen, Ontario

LEGEND

-  Surface Water Location
-  Residential Well
-  Monitoring Well
-  Major Road
-  Minor Road
-  Contour 5m Interval (Major)
-  Contour 5m Interval (Minor)
-  Lot / Concession
-  Unevaluated Wetlands
-  Water Area
-  Wooded Area
-  Landfill Footprint
-  Site (approximately 48.5 ha.)

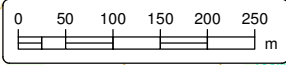
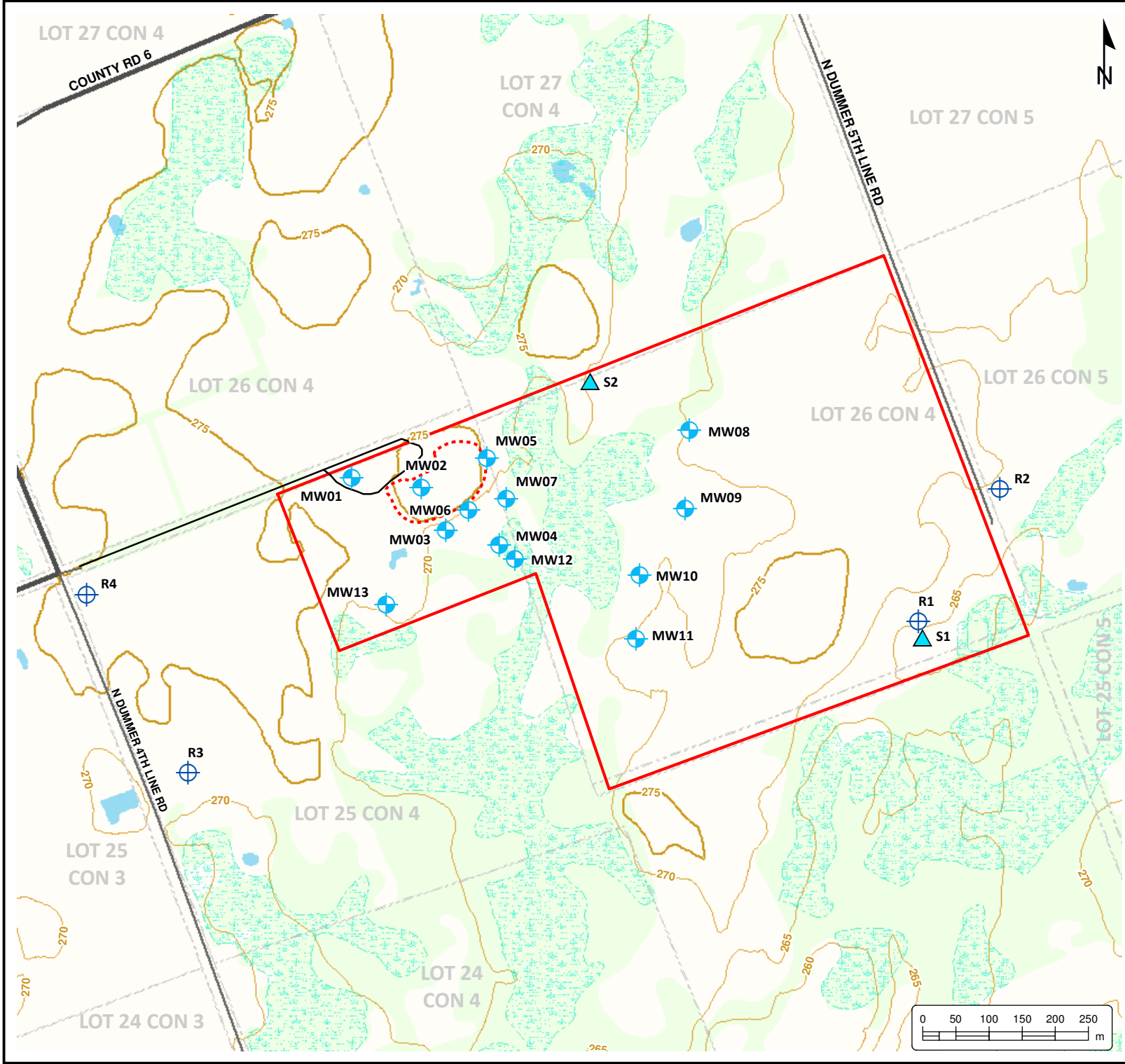
Notes:
 - Base mapping features are © Queen's Printer of Ontario, 2019 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
 - Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
 - Cambium Inc. makes every effort to ensure this map is free from errors but cannot be held responsible for any damages due to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.



194 Sophia Street
Peterborough, Ontario, K9H 1E5
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www.cambium-inc.com

SAMPLE LOCATION PLAN

Project No.:	12987-002	Date:	March 2022
Scale:	1:8,000	Rev.:	
Created by:	TLC	Projection:	NAD 1983 UTM Zone 17N
Checked by:	CM	Figure:	2



O:\GIS\XDS\172000-12987\2022_TDD - Hall's Glen\2022-01-05 FIG 2 - Sample Location Plan.mxd



Appendix B

Well Water Information and Select Records

3109E



UTM 17 727 760 E

51 N 1117

The Ontario Water Resources Commission Act

Elev. 208.80

WATER WELL RECORD

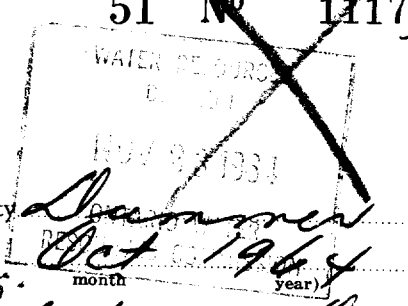
Basin 2A Letchborough

Township, Village, Town or City Sumner

Con. 4 ✓ Lot 27 ✓

Date completed 27 Oct 1964

Address RR2 Wakefield Ont



Casing and Screen Record

Pumping Test

Inside diameter of casing 5 inch
 Total length of casing 20 ft.
 Type of screen
 Length of screen
 Depth to top of screen
 Diameter of finished hole 5 inch

Static level 15 ft.
 Test-pumping rate 5 G.P.M.
 Pumping level 20 ft.
 Duration of test pumping 1/2
 Water clear or cloudy at end of test clear
 Recommended pumping rate 5 G.P.M.
 with pump setting of 33 feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record

Clay & stones
 yellow limestone

From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
0	20	33	fresh
20	35		

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

Household

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

Drilling or Boring Firm

Clinton Guiffith

Address RR2 Warsaw Ont

Licence Number 1287

Name of Driller or Borer Clinton Guiffith

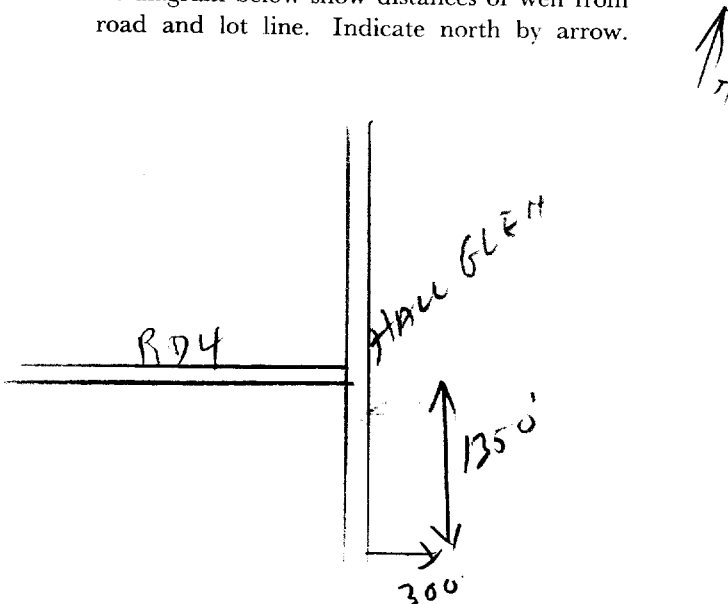
Address RR2 Warsaw

Date Nov 4/64

Clinton Guiffith
(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

31D/9E

Water management in Ontario 1. PRINT ONLY IN SPACES PROVIDED

2. CHECK CORRECT BOX WHERE APPLICABLE

11 15105312-1 51098 CON 04

COUNTY OR DISTRICT: Peterborough TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Dummer

DATE COMPLETED: DAY 17 MO 07 YR 70

R.# 2, Lakefield, Ont.

933.770 4 0900 6 24

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	1
Brown	Med. sand		packed	1	5
Brown	Med. sand	stones	packed	5	13 1/2
Grey	limestone rock		layered	13 1/2	60

31 0001002 0005009 0014699/2 0960215

32

41 WATER RECORD

WATER FOUND AT - FEET: 0050, 56-60

KIND OF WATER: FRESH, SALTY, SULPHUR, MINERAL

15-18 untested

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
10-11	1 <input checked="" type="checkbox"/> STEEL		13-16
06	2 <input checked="" type="checkbox"/> GALVANIZED	.188	0016
6 1/2	3 <input type="checkbox"/> CONCRETE		76
17-18	4 <input type="checkbox"/> OPEN HOLE		20-23
24-25	1 <input type="checkbox"/> STEEL		27-30
	2 <input type="checkbox"/> GALVANIZED		
	3 <input type="checkbox"/> CONCRETE		
	4 <input type="checkbox"/> OPEN HOLE		

SCREEN

SIZE(S) OF OPENING (SLOT NO.): 31-33

DIAMETER: 34-38 INCHES

LENGTH: 39-40 FEET

MATERIAL AND TYPE: 41-44

DEPTH TO TOP OF SCREEN: 41-44 FEET

61 PLUGGING & SEALING RECORD

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

71 PUMPING TEST

PUMPING TEST METHOD: PUMP, BAILER

PUMPING RATE: 0010 GPM.

DURATION OF PUMPING: 01 HOURS 02 MINS.

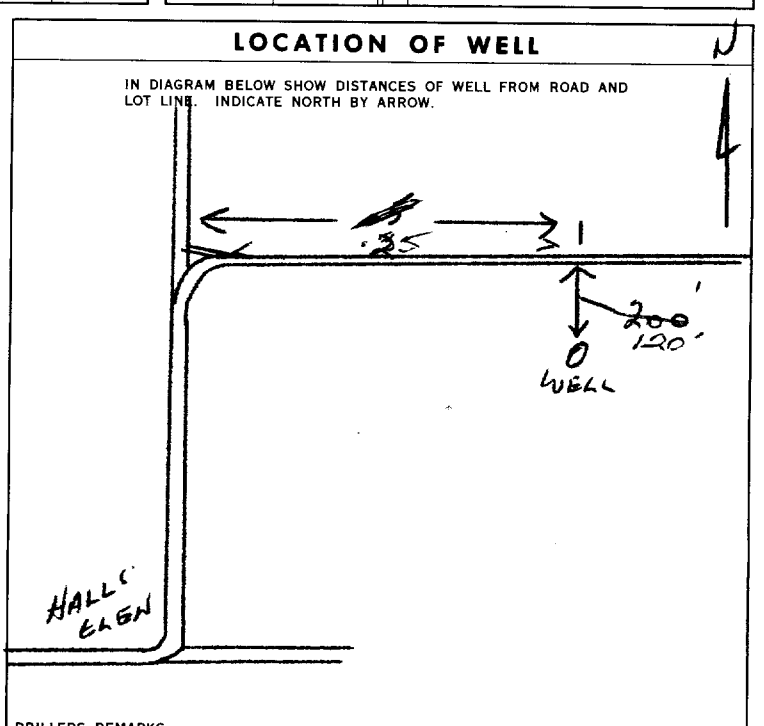
WATER LEVELS DURING PUMPING: 035 FEET

RECOMMENDED PUMP TYPE: SHALLOW, DEEP

RECOMMENDED PUMP SETTING: 055 FEET

RECOMMENDED PUMPING RATE: 0010 GPM.

50-53 000.7 GPM./FT. SPECIFIC CAPACITY



FINAL STATUS OF WELL

WATER SUPPLY, OBSERVATION WELL, TEST HOLE, RECHARGE WELL

WATER USE

DOMESTIC, STOCK, IRRIGATION, INDUSTRIAL, OTHER

METHOD OF DRILLING

CABLE TOOL, ROTARY (CONVENTIONAL), ROTARY (REVERSE), ROTARY (AIR), AIR PERCUSSION

CONTRACTOR

NAME OF WELL CONTRACTOR: Faulkner Well Drilling Co. Ltd. LICENCE NUMBER: 2104

ADDRESS: 687 Water St., Peterborough, Ont.

NAME OF DRILLER OR BORER: James Faulkner LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: [Signature]

SUBMISSION DATE: DAY 17 MO 7 YR 70

OFFICE USE ONLY

DATA SOURCE: 58 CONTRACTOR: 59-62 DATE RECEIVED: 63-68

DATE OF INSPECTION: 1 2104 030271

INSPECTOR: [Signature]

REMARKS:

P [Signature]

WI



ONTARIO

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

31D/9E

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

11

15106574

MUNICIP. 51008

CON. CON

04

COUNTY OR DISTRICT: **PETERBOROUGH** TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: **DUMFRIES** CON. DECON. TRACT, SURVEY, ETC.: **IV** LOT: **27** 027

DATE COMPLETED: DAY **17** MO. **05** YR. **73**

WELL NO.: **2833** HING: **05** RC: **4** ELEVATION: **0900** RC: **6** BASIN CODE: **24**

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
BROWN	CLAY	SHALE		0	1
GREY	LIME STONE			1	32
			OWRC V.7		
			OWRC P-5		

31: 0001/605/17 0132/215

32: [Scale]

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
31-32 0030	1 <input type="checkbox"/> FRESH 3 <input checked="" type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
30-33	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
6 1/4 06	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE	1.98	0	13-16
06	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE		1	0001 0032
24-25	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE			20-23 27-30

SCREEN

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

61 PLUGGING & SEALING RECORD

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

71 PUMPING TEST

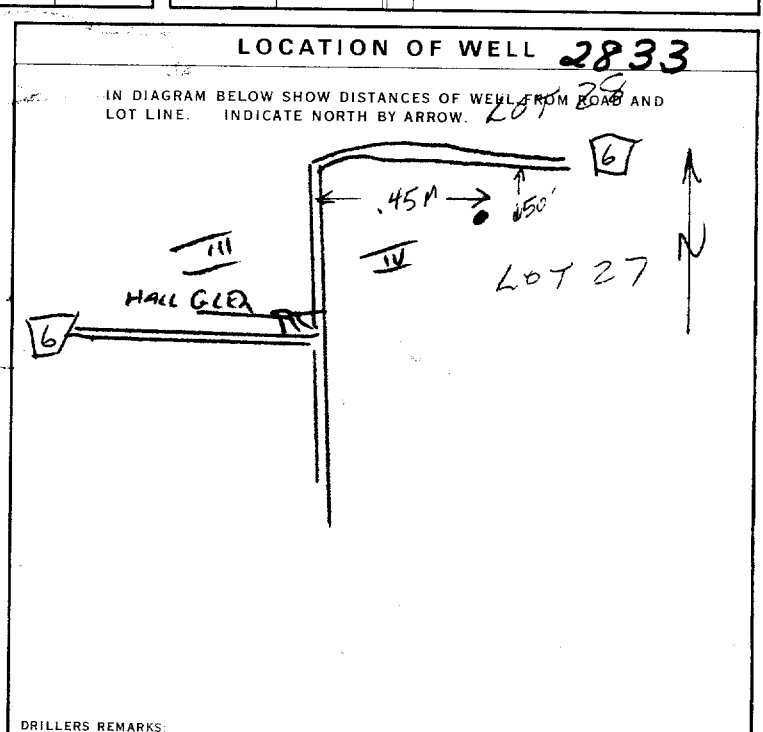
PUMPING TEST METHOD: 1 PUMP 2 BAILER

PUMPING RATE: 0020 GPM. DURATION OF PUMPING: 02 HOURS 00 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING			
19-21	22-24	MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
015 FEET	016 FEET	26-28	29-31	32-34	35-37
		016 FEET	016 FEET	016 FEET	016 FEET

IF FLOWING, GIVE RATE: 35 GPM. PUMP INTAKE SET AT: 38-41 FEET. WATER AT END OF TEST: 1 CLEAR 2 CLOUDY

RECOMMENDED PUMP TYPE: SHALLOW DEEP. RECOMMENDED PUMP SETTING: 020.0 "/FT. SPECIFIC CAPACITY.



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: **P. ELLIOTT WELL DRILLING** LICENCE NUMBER: **1904**
ADDRESS: **Po Box 93 PTBO**

NAME OF DRILLER OR BORER: **ED LAFONTE** LICENCE NUMBER: **1904**
SIGNATURE OF CONTRACTOR: *T. Ellinger* SUBMISSION DATE: **May 21/73**

OFFICE USE ONLY

DATA SOURCE: **1** CONTRACTOR: **1904** DATE RECEIVED: **18 10 73**

DATE OF INSPECTION: **May 21/73** INSPECTOR: **K**

REMARKS: **P/WI**



WATER WELL RECORD

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

11

5113996

MUNICIPALITY 51008

CON. 104

LOT 27

COUNTY OR DISTRICT: Essex TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Windsor CON. BLOCK TRACT, SURVEY ETC: 4 LOT: 27

DATE COMPLETED: DAY 30 MO 07 YR 89

ADDRESS: RR#2 LAKEFIELD

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
<u>Brown</u>	<u>Clay</u>	<u>Boulders</u>		<u>0</u>	<u>8</u>
<u>Area</u>	<u>Limestone</u>			<u>8</u>	<u>45</u>

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER		
<u>41</u>	<input checked="" type="checkbox"/> FRESH	<input type="checkbox"/> SULPHUR	<input type="checkbox"/> MINERALS
	<input type="checkbox"/> SALTY	<input type="checkbox"/> GAS	

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
<u>10-11</u>	<input checked="" type="checkbox"/> STEEL	<u>1.88</u>	<u>0</u>	<u>20</u>
<u>17-18</u>	<input type="checkbox"/> GALVANIZED			
<u>24-25</u>	<input type="checkbox"/> STEEL			

SCREEN

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

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE
<u>10-13</u>	<u>14-17</u>
<u>18-21</u>	<u>22-25</u>
<u>26-29</u>	<u>30-33</u>

71 PUMPING TEST

PUMPING TEST METHOD: AIR BAILER

PUMPING RATE: 10 GPM

DURATION OF PUMPING: 1 HOURS — MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING			
<u>10</u> FEET	<u>45</u> FEET	15 MINUTES: <u>10</u> FEET	30 MINUTES: <u>10</u> FEET	45 MINUTES: <u>10</u> FEET	60 MINUTES: <u>10</u> FEET

IF FLOWING, GIVE RATE: 45 GPM

RECOMMENDED PUMP TYPE: SHALLOW DEEP

RECOMMENDED PUMP SETTING: 40 FEET

RECOMMENDED PUMPING RATE: 5 GPM

LOCATION OF WELL

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

CTY RD #6

66123

DRILLERS REMARKS

FINAL STATUS OF WELL

WATER SUPPLY

WATER USE

DOMESTIC

METHOD OF CONSTRUCTION

AIR PERCUSSION

CONTRACTOR

NAME OF WELL CONTRACTOR: Thomas Doherty Drilling

WELL CONTRACTOR'S LICENCE NUMBER: 1748

NAME OF WELL TECHNICIAN: Bob Bugbe

WELL TECHNICIAN'S LICENCE NUMBER: 10436

SIGNATURE OF TECHNICIAN/CONTRACTOR: [Signature]

SUBMISSION DATE: DAY ___ MO ___ YR ___

OFFICE USE ONLY

DATA SOURCE: 1748

DATE RECEIVED: AUG 14 1989

DATE OF INSPECTION: _____

INSPECTOR: _____

REMARKS: _____

CSS.ES

Water Well Records Summary Report

Produced by Cambium Inc. using MOECP Water Well Information System (WWIS)



All units in meters unless otherwise specified

Well ID: 5101098 **Easting:** 727523 **UTM Zone** 17
Construction Date: 1949-03-30 **Northing:** 4933768 **Positional Accuracy:** unknown UTM

Well Depth: 8.84 **Water Kind** FRESH **Pump Rate (LPM):** 9
Well Diameter (cm): 12.7 **Final Status** Water Supply **Recommended Pump Rate:**
Water First Found: 8.84 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 3 : 0
Static Level: 3

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	3.05
2	GRAVEL	3.05	3.35
3	LIMESTONE	3.35	8.84

Well ID: 5101099 **Easting:** 727333 **UTM Zone** 17
Construction Date: 1957-10-07 **Northing:** 4933218 **Positional Accuracy:** unknown UTM

Well Depth: 6.4 **Water Kind** SULPHUR **Pump Rate (LPM):** 5
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:**
Water First Found: 6.1 **Primary Water Use:** Irrigation **Pumping Duration (h:m):** 0 : 15
Static Level: 4

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	0.91
2	LIMESTONE	0.91	6.40

Well ID: 5101100 **Easting:** 727621 **UTM Zone** 17
Construction Date: 1967-11-20 **Northing:** 4933258 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 9.14 **Water Kind** FRESH **Pump Rate (LPM):** 14
Well Diameter (cm): 12.7 **Final Status** Water Supply **Recommended Pump Rate:** 14
Water First Found: 8.23 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 0 : 30
Static Level: 4

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	6.71
2	LIMESTONE	6.71	9.14

Well ID: 5101101 **Easting:** 727119 **UTM Zone** 17
Construction Date: 1957-08-29 **Northing:** 4934766 **Positional Accuracy:** unknown UTM

Well Depth: 6.71 **Water Kind** FRESH **Pump Rate (LPM):** 5
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:**
Water First Found: 5.79 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 3

Layer:	Driller's Description:	Top:	Bottom:
1	MEDIUM SAND	0	3.96
2	LIMESTONE	3.96	6.71

Well ID: 5101116 **Easting:** 728028 **UTM Zone** 17
Construction Date: 1964-08-31 **Northing:** 4932883 **Positional Accuracy:** unknown UTM

Well Depth: 8.53 **Water Kind** FRESH **Pump Rate (LPM):** 18
Well Diameter (cm): 12.7 **Final Status** Water Supply **Recommended Pump Rate:** 18
Water First Found: 7.92 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 0 : 30
Static Level: 8

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	5.49
2	LIMESTONE	5.49	8.53

Well ID: 5101117 **Easting:** 727775 **UTM Zone** 17
Construction Date: 1964-11-23 **Northing:** 4933692 **Positional Accuracy:** unknown UTM

Well Depth: 10.7 **Water Kind** FRESH **Pump Rate (LPM):** 23
Well Diameter (cm): 12.7 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 10.1 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 0 : 30
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	6.1
2	LIMESTONE	6.1	10.7

Well ID: 5101118 **Easting:** 728897 **UTM Zone** 17
Construction Date: 1962-01-25 **Northing:** 4933971 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 9.14 **Water Kind** FRESH **Pump Rate (LPM):** 18
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 18
Water First Found: 5.18 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 3 : 0
Static Level: 3

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	CLAY	0.30	2.44
3	LIMESTONE	2.44	9.14

Well ID: 5101124 **Easting:** 728879 **UTM Zone** 17
Construction Date: 1964-10-21 **Northing:** 4934334 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 13.7 **Water Kind** FRESH **Pump Rate (LPM):** 0
Well Diameter (cm): 12.7 **Final Status** Water Supply **Recommended Pump Rate:** 5
Water First Found: 6.1 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 0 : 30
Static Level: 4

Layer:	Driller's Description:	Top:	Bottom:
1	PREVIOUSLY DUG	0	3.05
2	LIMESTONE	3.05	13.7

Well ID: 5101125
Construction Date: 1952-07-28

Easting: 728184
Northing: 4934549

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 10.1
Well Diameter (cm): 12.7
Water First Found: 9.14
Static Level: 4

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 9
Recommended Pump Rate:
Pumping Duration (h:m): :

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	0.91
2	MEDIUM SAND	0.91	6.40
3	LIMESTONE	6.40	10.1

Well ID: 5101126
Construction Date: 1963-11-15

Easting: 728819
Northing: 4934492

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 7.01
Well Diameter (cm): 12.7
Water First Found: 6.1
Static Level: 1

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Livestock

Pump Rate (LPM): 23
Recommended Pump Rate: 23
Pumping Duration (h:m): 0 : 30

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	2.13
2	LIMESTONE	2.13	7.01

Well ID: 5105155
Construction Date: 1970-09-17

Easting: 727765
Northing: 4933363

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 6.71
Well Diameter (cm): 15.2
Water First Found: 4.57
Static Level: 1

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 18
Recommended Pump Rate: 18
Pumping Duration (h:m): 1 : 7

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	MED. SAND	0.30	1.83
3	MED. SAND	1.83	3.05
4	LIMESTONE	3.05	4.88
5	LIMESTONE	4.88	6.71

Well ID: 5105312 **Easting:** 728135 **UTM Zone** 17
Construction Date: 1971-02-03 **Northing:** 4933993 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 18.3 **Water Kind** FRESH **Pump Rate (LPM):** 45
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 45
Water First Found: 17.1 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 2
Static Level: 11

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	MEDIUM SAND	0.30	1.52
3	MEDIUM SAND	1.52	4.27
4	LIMESTONE	4.27	18.3

Well ID: 5105527 **Easting:** 727665 **UTM Zone** 17
Construction Date: 1969-01-21 **Northing:** 4933373 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 9.14 **Water Kind** FRESH **Pump Rate (LPM):** 23
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 8.84 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 3 : 0
Static Level: 3

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	CLAY	0.30	2.44
3	LIMESTONE	2.44	9.14

Well ID: 5106571 **Easting:** 728052 **UTM Zone** 17
Construction Date: 1973-10-18 **Northing:** 4932928 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 10.7 **Water Kind** FRESH **Pump Rate (LPM):** 36
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 10.1 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	4.88
2	LIMESTONE	4.88	10.7

Well ID: 5106574 **Easting:** 728238 **UTM Zone** 17
Construction Date: 1973-10-18 **Northing:** 4933928 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 9.75 **Water Kind** SULPHUR **Pump Rate (LPM):** 91
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 9.14 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	0.30
2	LIMESTONE	0.30	9.75

Well ID: 5106678 **Easting:** 727639 **UTM Zone** 17
Construction Date: 1973-11-22 **Northing:** 4933894 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 10.1 **Water Kind** FRESH **Pump Rate (LPM):** 23
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:**
Water First Found: 9.75 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	1.22
2	SHALE	1.22	3.05
3	LIMESTONE	3.05	10.1

Well ID: 5107138 **Easting:** 727533 **UTM Zone** 17
Construction Date: 1974-10-15 **Northing:** 4934008 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 7.01 **Water Kind** FRESH **Pump Rate (LPM):** 18
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 18
Water First Found: 4.88 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	1.22
2	LIMESTONE	1.22	4.88
3	LIMESTONE	4.88	7.01

Well ID: 5107153 **Easting:** 729022 **UTM Zone** 17
Construction Date: 1974-10-15 **Northing:** 4934142 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 25.9 **Water Kind** FRESH **Pump Rate (LPM):** 5
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 5
Water First Found: 6.1 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 4 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	1.52
2	LIMESTONE	1.52	25.9

Well ID: 5107154 **Easting:** 727586 **UTM Zone** 17
Construction Date: 1974-10-15 **Northing:** 4933854 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 9.14 **Water Kind** SULPHUR **Pump Rate (LPM):** 55
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 9.14 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	1.52
2	LIMESTONE	1.52	9.14

Well ID: 5107698 **Easting:** 727765 **UTM Zone** 17
Construction Date: 1975-12-09 **Northing:** 4933273 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 7.92 **Water Kind** FRESH **Pump Rate (LPM):** 23
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 7.32 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 6 : 30
Static Level: 3

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	1.52
2	LIMESTONE	1.52	9.14

1	TOPSOIL	0	0.30
2	SAND	0.30	1.83
3	SHALE	1.83	7.32
4	FINE GRAVEL	7.32	7.92

Well ID: 5107755 **Eastings:** 727765 **UTM Zone** 17
Construction Date: 1975-12-29 **Northing:** 4933273 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 7.32 **Water Kind** FRESH **Pump Rate (LPM):** 14
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 14
Water First Found: 7.32 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 5 : 30
Static Level: 4

Layer: Driller's Description: Top: Bottom:

1	PREV. DRILLED	0	4.57
2	LIMESTONE	4.57	7.32

Well ID: 5107805 **Eastings:** 729015 **UTM Zone** 17
Construction Date: 1976-03-09 **Northing:** 4934273 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 16.2 **Water Kind** FRESH **Pump Rate (LPM):** 23
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 4.27 **Primary Water Use:** Livestock **Pumping Duration (h:m):** 2 : 10
Static Level: 3

Layer: Driller's Description: Top: Bottom:

1	CLAY	0	1.52
2	LIMESTONE	1.52	16.1

Well ID: 5108083 **Eastings:** 729045 **UTM Zone** 17
Construction Date: 1976-09-16 **Northing:** 4934343 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 25.9 **Water Kind** **Pump Rate (LPM):**
Well Diameter (cm): **Final Status** Abandoned-Su **Recommended Pump Rate:**
Water First Found: **Primary Water Use:** **Pumping Duration (h:m):**
Static Level:

Layer: Driller's Description: Top: Bottom:

1	CLAY	0	0.61
2	LIMESTONE	0.61	25.9

Well ID: 5108084 **Eastings:** 729045 **UTM Zone** 17
Construction Date: 1976-09-16 **Northing:** 4934343 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 83.5 **Water Kind** **Pump Rate (LPM):**
Well Diameter (cm): **Final Status** Abandoned-Su **Recommended Pump Rate:**
Water First Found: **Primary Water Use:** **Pumping Duration (h:m):**
Static Level:

Layer: Driller's Description: Top: Bottom:

1	CLAY	0	0.91
2	LIMESTONE	0.91	35.4
3	LIMESTONE	35.4	46.3
4	GRANITE	46.3	59.1
5	GRANITE	59.1	83.5

Well ID: 5108085
Construction Date: 1976-09-16

Easting: 729015
Northing: 4934323

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 58.8
Well Diameter (cm):
Water First Found:
Static Level:

Water Kind
Final Status Abandoned-Su
Primary Water Use:

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	0.91
2	LIMESTONE	0.91	36.6
3	LIMESTONE	36.6	55.5
4	GRANITE	55.5	58.8

Well ID: 5108103
Construction Date: 1976-09-16

Easting: 727165
Northing: 4934723

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 7.62
Well Diameter (cm):
Water First Found: 2.74
Static Level: 1

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 114
Recommended Pump Rate: 23
Pumping Duration (h:m): 2 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	SHALE	0	0.91
2	LIMESTONE	0.91	7.62

Well ID: 5108105
Construction Date: 1976-09-16

Easting: 727365
Northing: 4934323

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 9.45
Well Diameter (cm): 15.2
Water First Found: 4.57
Static Level: 1

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 136
Recommended Pump Rate: 23
Pumping Duration (h:m): 2 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	2.13
2	LIMESTONE	2.13	4.57
3	LIMESTONE	4.57	9.45

Well ID: 5108125
Construction Date: 1976-09-16

Easting: 727765
Northing: 4933323

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 8.23
Well Diameter (cm):
Water First Found: 7.62
Static Level: 5

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 36
Recommended Pump Rate: 23
Pumping Duration (h:m): 2 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	SAND	0	2.44
2	LIMESTONE	2.44	3.96
3	LIMESTONE	3.96	7.62
4	LIMESTONE	7.62	8.23

Well ID: 5108141
Construction Date: 1976-09-16

Easting: 727315
Northing: 4932973

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 7.62
Well Diameter (cm):
Water First Found: 3.66
Static Level: 2

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 136
Recommended Pump Rate: 23
Pumping Duration (h:m): 3 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	3.35
2	LIMESTONE	3.35	7.62

Well ID: 5108224
Construction Date: 1976-10-19

Easting: 729015
Northing: 4934323

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 59.4
Well Diameter (cm): 15.2
Water First Found: 48.8
Static Level: 49

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 5
Recommended Pump Rate: 5
Pumping Duration (h:m): 4 : 30

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	LIMESTONE	0.30	37.5
3	LIMESTONE	37.5	39.0
4	LIMESTONE	39.0	39.9
5	LIMESTONE	39.9	49.4
6	GRANITE	49.4	59.4

Well ID: 5108951 **Easting:** 727615 **UTM Zone** 17
Construction Date: 1978-03-03 **Northing:** 4933373 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 15.2 **Water Kind** SULPHUR **Pump Rate (LPM):** 45
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 10.7 **Primary Water Use:** Livestock **Pumping Duration (h:m):** 3 : 0
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	PREVIOUSLY DUG	0	6.71
2	CLAY	6.71	8.23
3	LIMESTONE	8.23	15.2

Well ID: 5109283 **Easting:** 727665 **UTM Zone** 17
Construction Date: 1979-02-07 **Northing:** 4933523 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 12.2 **Water Kind** FRESH **Pump Rate (LPM):** 45
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 11.9 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 6

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	4.88
2	LIMESTONE	4.88	6.1
3	LIMESTONE	6.1	11.9
4	LIMESTONE	11.9	12.2

Well ID: 5110877 **Easting:** 729065 **UTM Zone** 17
Construction Date: 1983-10-24 **Northing:** 4934173 **Positional Accuracy:** margin of error : 100 m - 300 m

Well Depth: 31.4 **Water Kind** **Pump Rate (LPM):**
Well Diameter (cm): **Final Status** Water Supply **Recommended Pump Rate:**
Water First Found: **Primary Water Use:** **Pumping Duration (h:m):** :
Static Level:

Layer:	Driller's Description:	Top:	Bottom:
1	PREVIOUSLY DUG	0	16.1
2	LIMESTONE	16.1	31.4

Well ID: 5111771 **Easting:** 727947 **UTM Zone** 17
Construction Date: 1986-05-15 **Northing:** 4934806 **Positional Accuracy:** unknown UTM

Well Depth: 8.23 **Water Kind** FRESH **Pump Rate (LPM):** 114
Well Diameter (cm): **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 6.1 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 3 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	CLAY	0.30	3.66
3	LIMESTONE	3.66	8.23

Well ID: 5112368 **Easting:** 728404 **UTM Zone** 17
Construction Date: 1987-06-03 **Northing:** 4933668 **Positional Accuracy:** unknown UTM

Well Depth: 13.4 **Water Kind** Not stated **Pump Rate (LPM):** 364
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 364
Water First Found: 12.2 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	FILL	0	0.61
2	LIMESTONE	0.61	13.4

Well ID: 5113995 **Easting:** 727947 **UTM Zone** 17
Construction Date: 1989-08-14 **Northing:** 4934806 **Positional Accuracy:** unknown UTM

Well Depth: 19.2 **Water Kind** FRESH **Pump Rate (LPM):** 36
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 17.4 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	LIMESTONE	0	19.2

Well ID: 5113996 **Easting:** 728404 **UTM Zone** 17
Construction Date: 1989-08-14 **Northing:** 4933668 **Positional Accuracy:** unknown UTM

Well Depth: 13.7 **Water Kind** FRESH **Pump Rate (LPM):** 45
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 12.5 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 3

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	2.44
2	LIMESTONE	2.44	13.7

Well ID: 5114104 **Easting:** 728182 **UTM Zone** 17
Construction Date: 1989-10-05 **Northing:** 4934263 **Positional Accuracy:** unknown UTM

Well Depth: 44.2 **Water Kind** FRESH **Pump Rate (LPM):** 9
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 9
Water First Found: 37.5 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 10
Static Level: 11

Layer:	Driller's Description:	Top:	Bottom:
1	FILL	0	1.22
2	LIMESTONE	1.22	38.4
3	GRANITE	38.4	44.2

Well ID: 5114980 **Easting:** 728182 **UTM Zone** 17
Construction Date: 1990-11-21 **Northing:** 4934263 **Positional Accuracy:** unknown UTM

Well Depth: 24.4 **Water Kind** FRESH **Pump Rate (LPM):** 23
Well Diameter (cm): 15.2 **Final Status** Water Supply **Recommended Pump Rate:** 23
Water First Found: 23.8 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 2 : 0
Static Level: 9

Layer:	Driller's Description:	Top:	Bottom:
1	LIMESTONE	0	22.6
2	LIMESTONE	22.6	24.4

Well ID: 5115354
Construction Date: 1991-07-12

Easting: 727119
Northing: 4933183

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 12.2
Well Diameter (cm): 15.2
Water First Found: 5.49
Static Level: 1

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 100
Recommended Pump Rate: 27
Pumping Duration (h:m): 2 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	CLAY	0.30	2.44
3	LIMESTONE	2.44	3.35
4	LIMESTONE	3.35	7.92
5	LIMESTONE	7.92	8.53
6	LIMESTONE	8.53	12.2

Well ID: 5115626
Construction Date: 1992-01-10

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 6.71
Well Diameter (cm): 5.08
Water First Found: 6.1
Static Level:

Water Kind Not stated
Final Status Observation W
Primary Water Use: Not Used

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	0.61
2	GRAVEL	0.61	2.13
3	LIMESTONE	2.13	6.1
4	SHALE	6.1	6.71

Well ID: 5115627
Construction Date: 1992-01-10

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 5.79
Well Diameter (cm): 5.08
Water First Found: 5.18
Static Level:

Water Kind Not stated
Final Status Observation W
Primary Water Use: Not Used

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.61
2	GRAVEL	0.61	2.74
3	LIMESTONE	2.74	5.18
4	SHALE	5.18	5.79

Well ID: 5115628
Construction Date: 1992-01-10

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 7.01
Well Diameter (cm): 5.08
Water First Found: 6.40
Static Level:

Water Kind Not stated
Final Status Observation W
Primary Water Use: Not Used

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer: Driller's Description: Top: Bottom:

1	CLAY	0	1.83
2	GRAVEL	1.83	3.35
3	CLAY	3.35	3.66
4	LIMESTONE	3.66	7.01

Well ID: 5115629
Construction Date: 1992-01-10

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 4.88
Well Diameter (cm): 5.08
Water First Found: 3.66
Static Level:

Water Kind Not stated
Final Status Observation W
Primary Water Use: Not Used

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer: Driller's Description: Top: Bottom:

1	GRAVEL	0	2.74
2	LIMESTONE	2.74	3.66
3	SHALE	3.66	4.88

Well ID: 5115630
Construction Date: 1992-01-10

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 4.27
Well Diameter (cm): 15.2
Water First Found: 3.66
Static Level:

Water Kind Not stated
Final Status Observation W
Primary Water Use: Not Used

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer: Driller's Description: Top: Bottom:

1	CLAY	0	0.91
2	GRAVEL	0.91	1.52
3	LIMESTONE	1.52	4.2.7

Well ID: 5115631
Construction Date: 1992-01-10

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 9.14
Well Diameter (cm): 5.08
Water First Found: 8.53
Static Level:

Water Kind Not stated
Final Status Water Supply
Primary Water Use: Not Used

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m):

Layer:	Driller's Description:	Top:	Bottom:
1	SAND	0	1.22
2	UNKNOWN TYPE	1.22	3.05
3	SAND	3.05	4.88
4	GRAVEL	4.88	5.49
5	SHALE	5.49	6.71
6	LIMESTONE	6.71	8.53
7	SHALE	8.53	9.14

Well ID: 5115792
Construction Date: 1992-03-05

Easting: 728182
Northing: 4934263

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 39.6
Well Diameter (cm): 15.2
Water First Found: 38.7
Static Level: 5

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 14
Recommended Pump Rate: 14
Pumping Duration (h:m): 1 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.91
2	SHALE	0.91	4.57
3	LIMESTONE	4.57	28.4
4	LIMESTONE	28.4	35.0
5	LIMESTONE	35.0	39.6

Well ID: 5117608
Construction Date: 1997-10-06

Easting: 728648
Northing: 4933071

UTM Zone 17
Positional Accuracy: unknown UTM

Well Depth: 6.71
Well Diameter (cm): 15.2
Water First Found: 5.49
Static Level: 2

Water Kind Not stated
Final Status Observation W
Primary Water Use: Not Used

Pump Rate (LPM): 45
Recommended Pump Rate: 0
Pumping Duration (h:m): 0 : 30

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30

2	CLAY	0.30	2.74
3	SHALE	2.74	4.27
4	LIMESTONE	4.27	5.49
5	LIMESTONE	5.49	6.71

Well ID: 5118965
Construction Date: 2002-03-11

Easting: 728558
Northing: 4933278

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 10.7
Well Diameter (cm): 5.08
Water First Found: 5.79
Static Level: 5

Water Kind Not stated
Final Status Observation W
Primary Water Use:

Pump Rate (LPM): 45
Recommended Pump Rate:
Pumping Duration (h:m): : 30

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	GRAVEL	0.30	2.74
3	GRAVEL	2.74	4.57
4	ROCK	4.57	5.18
5	LIMESTONE	5.18	4.57

Well ID: 5118966
Construction Date: 2002-03-11

Easting: 728558
Northing: 4933283

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 9.14
Well Diameter (cm): 5.08
Water First Found: 7.92
Static Level: 2

Water Kind Not stated
Final Status Observation W
Primary Water Use:

Pump Rate (LPM): 45
Recommended Pump Rate:
Pumping Duration (h:m): : 30

Layer: Driller's Description: Top: Bottom:

1	TOPSOIL	0	0.30
2	GRAVEL	0.30	3.05
3	ROCK	3.05	3.66
4	LIMESTONE	3.66	9.14

Well ID: 5118967
Construction Date: 2002-03-11

Easting: 728301
Northing: 4933208

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 9.14
Well Diameter (cm): 15.2
Water First Found: 8.84
Static Level: 3

Water Kind Not stated
Final Status Observation W
Primary Water Use:

Pump Rate (LPM): 14
Recommended Pump Rate:
Pumping Duration (h:m): : 30

Layer: Driller's Description: Top: Bottom:

1	TOPSOIL	0	0.30
2	GRAVEL	0.30	1.52
3	GRAVEL	1.52	3.05
4	ROCK	3.05	3.66
5	LIMESTONE	3.66	9.14

Well ID: 5118968
Construction Date: 2002-03-11

Easting: 728299
Northing: 4933208

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 12.2
Well Diameter (cm): 15.2
Water First Found: 3.96
Static Level: 1

Water Kind Not stated
Final Status Observation W
Primary Water Use:

Pump Rate (LPM): 68
Recommended Pump Rate:
Pumping Duration (h:m): :

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	GRAVEL	0.30	2.44
3	GRAVEL	2.44	3.96
4	LIMESTONE	3.96	8.84
5	LIMESTONE	8.84	9.14
6	LIMESTONE	9.14	12.2

Well ID: 5118969
Construction Date: 2002-03-11

Easting: 728558
Northing: 4933283

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 9.14
Well Diameter (cm): 5.08
Water First Found: 3.96
Static Level: 3

Water Kind Not stated
Final Status Observation W
Primary Water Use:

Pump Rate (LPM): 27
Recommended Pump Rate:
Pumping Duration (h:m): : 30

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	GRAVEL	0.30	2.74
3	GRAVEL	2.74	4.57
4	LIMESTONE	4.57	9.14

Well ID: 5119156
Construction Date: 2002-08-19

Easting: 727948
Northing: 4933152

UTM Zone 17
Positional Accuracy: margin of error : 100 m - 300 m

Well Depth: 16.8
Well Diameter (cm): 15.2
Water First Found: 15.5
Static Level: 5

Water Kind FRESH
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 36
Recommended Pump Rate: 36
Pumping Duration (h:m): 1 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	CLAY	0.30	4.88
3	LIMESTONE	4.88	16.8

Well ID: 5119301
Construction Date: 2003-02-19

Easting: 728129
Northing: 4933031

UTM Zone 17
Positional Accuracy: margin of error : 300 m - 1 km

Well Depth: 5.18
Well Diameter (cm): 15.2
Water First Found: 4.88
Static Level: 2

Water Kind Not stated
Final Status Observation W
Primary Water Use:

Pump Rate (LPM):
Recommended Pump Rate:
Pumping Duration (h:m): :

Layer:	Driller's Description:	Top:	Bottom:
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1	TOPSOIL	0	0.30
2	GRAVEL	0.30	2.74
3	LIMESTONE	2.74	5.18

Well ID: 5119949
Construction Date: 2004-08-31

Easting: 727540
Northing: 4934281

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 15.6 **Water Kind** FRESH **Pump Rate (LPM):** 36
Well Diameter (cm): 16.8 **Final Status** Water Supply **Recommended Pump Rate:** 36
Water First Found: 12.5 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 3 : 0
Static Level: 7

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
2	LIMESTONE	0.30	6
3	LIMESTONE	6	11.8
4	LIMESTONE	11.8	12.5
5	LIMESTONE	12.5	15.6

Well ID: 5120375
Construction Date: 2005-09-07

Easting: 727457
Northing: 4934354

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 22 **Water Kind** FRESH **Pump Rate (LPM):** 18
Well Diameter (cm): **Final Status** Water Supply **Recommended Pump Rate:** 18
Water First Found: 18.3 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	LIMESTONE	0	0.61
2	LIMESTONE	0.61	8.84
3	LIMESTONE	8.84	11
4	LIMESTONE	11	18
5	LIMESTONE	18	18.6
6	LIMESTONE	18.6	22

Well ID: 7042596
Construction Date: 2007-04-16

Easting: 727438
Northing: 4934321

UTM Zone 17
Positional Accuracy: margin of error : 10 - 30 m

Well Depth: 15.5 **Water Kind** FRESH **Pump Rate (LPM):** 45
Well Diameter (cm): **Final Status** Water Supply **Recommended Pump Rate:** 45
Water First Found: 15.5 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
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1	TOPSOIL	0	0.60
2	CLAY	0.60	4.87
3	LIMESTONE	4.87	15.5

Well ID: 7103857 **Easting:** 727586 **UTM Zone** 17
Construction Date: 2008-04-11 **Northing:** 4933709 **Positional Accuracy:** margin of error : 10 - 30 m
Well Depth: 17.7 **Water Kind** FRESH **Pump Rate (LPM):** 68
Well Diameter (cm): 15.9 **Final Status** Water Supply **Recommended Pump Rate:** 45
Water First Found: 17.7 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 2

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	0.30
1	TOPSOIL	0	0.30
2	CLAY	0.30	3.65
2	CLAY	0.30	3.65
3		3.65	
3		3.65	
4	LIMESTONE		17.7
4	LIMESTONE		17.7

Well ID: 7174480 **Easting:** 727693 **UTM Zone** 17
Construction Date: 2012-01-03 **Northing:** 4933423 **Positional Accuracy:** margin of error : 30 m - 100 m
Well Depth: 31.4 **Water Kind** Untested **Pump Rate (LPM):** 32
Well Diameter (cm): 15.6 **Final Status** Test Hole **Recommended Pump Rate:** 32
Water First Found: 13.1 **Primary Water Use:** Test Hole **Pumping Duration (h:m):** 1 :
Static Level: 7

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	3.35
2	LIMESTONE	3.35	11.3
3	LIMESTONE	11.3	13.1
4	LIMESTONE	13.1	31.4

Well ID: 7174481 **Easting:** 727114 **UTM Zone** 17
Construction Date: 2012-01-03 **Northing:** 4933326 **Positional Accuracy:** margin of error : 30 m - 100 m
Well Depth: 31.4 **Water Kind** Untested **Pump Rate (LPM):** 27
Well Diameter (cm): 16.8 **Final Status** Test Hole **Recommended Pump Rate:** 27
Water First Found: 11 **Primary Water Use:** Test Hole **Pumping Duration (h:m):** 1 :
Static Level: 4

Layer:	Driller's Description:	Top:	Bottom:
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1	SAND	0	1.83
2	LIMESTONE	1.83	11
3	LIMESTONE	11	11.9
4	LIMESTONE	11.9	23.2
5	LIMESTONE	23.2	24.1
6	LIMESTONE	24.1	31.4

Well ID: 7174482
Construction Date: 2012-01-03

Easting: 727791
Northing: 4933095

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 31.4
Well Diameter (cm): 15.6
Water First Found: 22
Static Level: 4

Water Kind Untested
Final Status Test Hole
Primary Water Use: Test Hole

Pump Rate (LPM): 32
Recommended Pump Rate: 32
Pumping Duration (h:m): 1 :

Layer: Driller's Description: Top: Bottom:

1	CLAY	0	2.44
2	LIMESTONE	2.44	8.84
3	LIMESTONE	8.84	19.5
4	LIMESTONE	19.5	21.3
5	LIMESTONE	21.3	25.6
6	LIMESTONE	25.6	31.4

Well ID: 7182539
Construction Date: 2012-06-14

Easting: 727580
Northing: 4933348

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 31.4
Well Diameter (cm): 15.6
Water First Found: 9.14
Static Level: 1

Water Kind Untested
Final Status Test Hole
Primary Water Use: Test Hole

Pump Rate (LPM): 14
Recommended Pump Rate: 14
Pumping Duration (h:m): 1 :

Layer: Driller's Description: Top: Bottom:

1	SAND	0	3.96
2	LIMESTONE	3.96	5.18
3	LIMESTONE	5.18	9.14
4	LIMESTONE	9.14	11
5	LIMESTONE	11	31.4

Well ID: 7182541
Construction Date: 2012-06-14

Easting: 727546
Northing: 4933584

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 31.4
Well Diameter (cm): 16.8
Water First Found: 7.62
Static Level: 2

Water Kind Untested
Final Status Test Hole
Primary Water Use: Test Hole

Pump Rate (LPM): 68
Recommended Pump Rate: 45
Pumping Duration (h:m): 1 :

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	3.35
2	LIMESTONE	3.35	7.32
3	LIMESTONE	7.32	8.84
4	LIMESTONE	8.84	31.4

Well ID: 7182542
Construction Date: 2012-06-14

Easting: 727614
Northing: 4933448

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 31.4
Well Diameter (cm): 15.6
Water First Found: 13.7
Static Level: 4

Water Kind Untested
Final Status Test Hole
Primary Water Use: Test Hole

Pump Rate (LPM): 68
Recommended Pump Rate: 45
Pumping Duration (h:m): 1 :

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	3.96
2	LIMESTONE	3.96	12.5
3	LIMESTONE	12.5	14.3
4	LIMESTONE	14.3	31.4

Well ID: 7236833
Construction Date: 2015-01-30

Easting: 727893
Northing: 4934059

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 48.8
Well Diameter (cm): 15.9
Water First Found: 29
Static Level: 7

Water Kind Water Supply
Final Status Domestic
Primary Water Use: Domestic

Pump Rate (LPM): 23
Recommended Pump Rate: 18
Pumping Duration (h:m): 1 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	1.83
2	SHALE	1.83	3.66
3	LIMESTONE	3.66	42.7
4	GRAVEL	42.7	48.8

Well ID: 7251113 **Eastings:** 728746 **UTM Zone** 17
Construction Date: 2015-10-28 **Northing:** 4934335 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 30.5 **Water Kind** Untested **Pump Rate (LPM):** 14
Well Diameter (cm): 15.6 **Final Status** Water Supply **Recommended Pump Rate:** 14
Water First Found: 24.4 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 :
Static Level: 18

Layer:	Driller's Description:	Top:	Bottom:
1	LIMESTONE	0	24.4
2	LIMESTONE	24.4	30.5

Well ID: 7265867 **Eastings:** 727921 **UTM Zone** 17
Construction Date: 2016-07-04 **Northing:** 4933179 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 13.1 **Water Kind** Untested **Pump Rate (LPM):** 45
Well Diameter (cm): 16.8 **Final Status** Water Supply **Recommended Pump Rate:** 27
Water First Found: 12.2 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 :
Static Level: 5

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	2.44
2	LIMESTONE	2.44	13.1

Well ID: 7297263 **Eastings:** 727967 **UTM Zone** 17
Construction Date: 2017-10-16 **Northing:** 4934306 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 15.2 **Water Kind** FRESH **Pump Rate (LPM):** 68
Well Diameter (cm): 15.9 **Final Status** Water Supply **Recommended Pump Rate:** 45
Water First Found: 1.22 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 : 0
Static Level: 10

Layer:	Driller's Description:	Top:	Bottom:
1	TOPSOIL	0	2.44
2	CLAY	2.44	4.88
3	SHALE	4.88	8.23
4	LIMESTONE	8.23	15.2

Well ID: 7313970 **Eastings:** 727537 **UTM Zone** 17
Construction Date: 2018-07-03 **Northing:** 4933997 **Positional Accuracy:** margin of error : 30 m - 100 m

Well Depth: 54.9 **Water Kind** Untested **Pump Rate (LPM):** 32
Well Diameter (cm): 15.6 **Final Status** Water Supply **Recommended Pump Rate:** 32
Water First Found: 51.8 **Primary Water Use:** Domestic **Pumping Duration (h:m):** 1 :
Static Level: 23

Layer:	Driller's Description:	Top:	Bottom:
1	LIMESTONE	0	42.7
2	GRANITE	42.7	48.8
3	GRANITE	48.8	54.9

Well ID: 7315745
Construction Date: 2018-08-03

Easting: 728800
Northing: 4934344

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 91.4
Well Diameter (cm): 15.6
Water First Found: 79.3
Static Level: 29

Water Kind Untested
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 18
Recommended Pump Rate: 18
Pumping Duration (h:m): 1 : 0

Layer:	Driller's Description:	Top:	Bottom:
1	LIMESTONE	0	2.74
2	LIMESTONE	2.74	42.7
3	GRANITE	42.7	91.4

Well ID: 7320971
Construction Date: 2018-10-19

Easting: 727204
Northing: 4934692

UTM Zone 17
Positional Accuracy: margin of error : 30 m - 100 m

Well Depth: 73.2
Well Diameter (cm): 15.6
Water First Found: 48.8
Static Level: 16

Water Kind Untested
Final Status Water Supply
Primary Water Use: Domestic

Pump Rate (LPM): 14
Recommended Pump Rate: 14
Pumping Duration (h:m): 1 :

Layer:	Driller's Description:	Top:	Bottom:
1	CLAY	0	1.83
2	LIMESTONE	1.83	30.5
3	GRANITE	30.5	73.2
