



# Aggregate Resource Assessment - 162 Douro 8th Line, Douro- Dummer, ON

October 13, 2020

Prepared for:  
David White

Cambium Reference: 11329-001

**CAMBIUM INC.**  
866.217.7900  
cambium-inc.com

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## 1.0 Introduction

Cambium Inc. (Cambium) was retained by David White (Client) to complete an aggregate assessment of the property located at 162 Douro 8<sup>th</sup> Line in Douro-Dummer, Ontario (Site).

The intent of this aggregate assessment is to address Section 6.2.13.2 outlined in the County of Peterborough Official Plan (OP) and Policies 2.4.2.2 and 2.5.2.5 of the Provincial Policy Statement, 2020 (PPS). If known aggregate resources are available on the subject property, there is a need to demonstrate

- a) The resource use would not be feasible; or
- b) The proposed land use or development serves a greater long-term public interest; and
- c) Issues of public health, public safety and environmental impact are addressed.

This assessment was completed to satisfy the above clauses of the OP and the PPS by assessing if it is feasible to develop the Site for aggregate extraction.

### 1.1 Site Description

The Site is located at 162 Douro 8<sup>th</sup> Line in the Township of Douro-Dummer, County of Peterborough and is approximately 13.3 hectares (ha). The Site is bound to the north and south by forested land, residential properties to the east fronting on Douro 8<sup>th</sup> Line, and to the west by wetland areas. See Figure 1 for the regional location of the Site.

The client wishes to pursue a site severance of the property for two building lots. At present, the Site contains an existing residence with the majority of the property being vacant land lightly vegetated with grass and trees. According to Schedule A4-1 of the Official Plan of the Township of Douro-Dummer the Site is mostly zoned as Extractive Industrial. The northwest corner of the property is zoned as rural and provincially significant wetland. Available information from the Ministry of Natural Resources and Forestry indicates that there is a licenced aggregate pit located southwest of the Site on the opposite side of the wetland. The zoning of the Site and adjacent lands are depicted on Figure 2.

## **2.0 Methodology**

On August 17 and 18, 2020 a test pit investigation was completed by Cambium. A total of 24 test pits, designated as TP101-20 to TP124-20, were completed for the purpose of characterizing the native soil and subsurface conditions using a track mounted mini excavator.

Soil samples were collected and each soil sample was handled using dedicated nitrile gloves to minimize the potential for cross contamination. Soil samples were logged for soil type, moisture content, odour, and signs of water table presence such as staining or mottling. Open test pits were backfilled with the excavated soils and compacted with the excavator bucket.

Prior to the subsurface investigations, Cambium arranged for public underground utilities through Ontario One Call to be located and marked at the Site.

The locations of the test pits are shown on Figure 3, test pit logs are included as Appendix A, and grain size analysis is included as Appendix B.

### **2.1 Background Information**

A thorough review of the available relevant background information was undertaken for this study, which included the following:

- Ministry of Northern Development and Mines, 1991. Quaternary Geology of Ontario, Southern Sheet, Map 2556, scale 1:1,000,000.
- Ontario Geological Survey, 1991. Bedrock Geology of Ontario, Southern Sheet, Map 2544, scale 1:1,000,000.
- Water well records database, Ministry of Environment, Conservation and Parks (MECP)

### **3.0 Hydrogeological and Geological Context**

A review of the Ontario Geology Survey (OGS) Earth mapping indicates the bedrock geology for the area consists of limestone, dolostone, shale, arkose, and sandstone of the Ottawa Group, Simcoe Group and Shadow Lake Formation. The physiographic landform is identified as till plains. The surficial geology for the Site is identified as glaciofluvial deposits consisting of river deposits and delta topset facies.

A test pit investigation provided additional details of the subsurface soils, as discussed in Section 4.0

#### **3.1 Surrounding Water Well Records**

The Ministry of Environment, Conservation and Parks (MECP) Water Well Information System (WWIS) was accessed to review water well records. There were 10 water well records located within 500 m of the Site. A summary of the information outlined in the well records is provided below:

- Of the records analyzed, 8 were drilled into bedrock, 1 drilled into overburden and 1 dug in the overburden.
- Overburden was reported as a layer of clay, stones, and cobble and bedrock was described as limestone.
- The average and maximum thickness of overburden was 13.2 m and 27.1 m, respectively.
- The drilled bedrock wells were installed to an average depth of 20.4 m below ground surface (mbgs) with an average static water level of 4.6 mbgs.
- The drilled overburden well was installed to a depth of 17.2 mbgs and a static water level was 5.3 mbgs.
- The dug well was installed to a depth of 5.3 mbgs and a static water level was 2.1 mbgs.

- The geometric mean of the recommended flow rate for all 10 wells was 3.7 gallons per minute (USgpm), which is equivalent to approximately 14.1 litres per minute (L/min).

The referenced water well records are attached in Appendix C and can be viewed on Figure 4.

Further details are summarized below in Table 1.

**Table 1 Summary of Surrounding Water Well Record Information**

Well Type		Depth (mbgs)	Water Found (mbgs)	Static Water Level (mbgs)	Flow Rate (L/min)
Drilled Bedrock Count = 8	Maximum	32.3	27.4	11.6	18.9
	Minimum	11.0	5.5	2.4	3.8
	Average	20.4	13.7	4.8	12.5
Drilled Overburden Count = 1	N/A	17.2	10.9	5.3	11.4
Dug Overburden Count = 1	N/A	5.3	4.0	2.1	22.7

1. Value calculated as the geometric mean.

## 4.0 Field Investigation Results

### 4.1 Test Pit Results

A total of 24 test pits were excavated throughout the Site to characterize the native soil and subsurface conditions.

All test pits had a topsoil layer ranging from 0.20 to 0.48 mbgs. Bedrock was not encountered in any of the 24 test pits. Groundwater was encountered in four test pits (TP111-20, TP112-20, TP114-20, and TP115-20) ranging from 2.7 to 2.9 mbgs. Overburden deposits were mostly comprised of varying mixes of gravel, silt, and sand sediments. The results of the test pit investigation is summarized in the table below and test pit logs are included as Appendix A.

**Table 2** *Summary of Test Pit Investigation*

Test Pit	Depth to Bedrock (mbgs)	Depth to Water Table (mbgs)	Soil Description at Depth
TP101-20	-	-	Gravelly sand overlying silt and clay
TP102-20	-	-	Sand and silt, some gravel
TP103-20	-	-	Gravelly sand
TP104-20	-	-	Sand and gravel, trace silt
TP105-20	-	-	Sand and gravel, trace silt
TP106-20	-	-	Gravelly sand, some silt
TP107-20	-	-	Sand and silt, some gravel
TP108-20	-	-	Sand, some silt, trace clay
TP109-20	-	-	Gravelly sand
TP110-20	-	-	Silt, some clay, trace sand
TP111-20	-	2.7 m	Gravelly sand
TP112-20	-	2.7 m	Silt and clay, some sand, trace gravel
TP113-20	-	-	Silt and clay, trace sand
TP114-20	-	2.9 m	Silt and clay, trace sand
TP115-20	-	2.7 m	Sand, some gravel
TP116-20	-	-	Sand, some gravel
TP117-20	-	-	Sand, some gravel



Test Pit	Depth to Bedrock (mbgs)	Depth to Water Table (mbgs)	Soil Description at Depth
TP118-20	-	-	Sand and gravel, trace silt
TP119-20	-	-	Sand and gravel, trace silt
TP120-20	-	-	Sand and gravel, trace silt
TP121-20	-	-	Sand and gravel, trace silt
TP122-20	-	-	Gravelly sand
TP123-20	-	-	Gravelly sand
TP124-20	-	-	Gravelly sand

Grain size analyses were completed on six soil samples. The results are summarized in Table 3. The locations of the test pits are shown on Figure 3, test pit logs are included as Appendix A, and grain size analyses are included as Appendix B.

**Table 3 Summary of Grain Size Analysis**

Test Pit	Depth (mbgs)	Primary Soil Description	USDS Classification	Percolation Rate (min/cm)	Percent Silt and Clay (%)
TP102-20	1.9 – 3.0	Sand and silt, some gravel	SM	20	42
TP104-20	2.1 – 2.9	Sand and gravel, trace silt	SP	3	3
TP107-20	1.8 – 2.8	Sand and silt, some gravel	SM	20	39
TP111-20	1.4 – 2.7	Gravelly sand	SP	4	1
TP118-20	1.2 – 2.4	Sand and gravel, trace silt	SP	4	1
TP120-20	1.8 – 2.9	Sand and gravel, trace silt	SP	4	1

## 5.0 Aggregate Assessment

The depth of overburden at the Site is considered to be greater than 3.0 mbgs as each of the 24 test pits did not encounter bedrock. The average overburden thickness based on the surrounding water well records is 13.2 mbgs but ranges from 3.1 mbgs to 27.1 mbgs. The overburden consistency was generally found to be varying mixes of gravel, silt, and sand sediments. Clean coarse-grained deposits (i.e. gravel and medium to coarse sand) require less than 5% fine-grained materials (silts or clays; fine sands) to be acceptable for use in many aggregate applications by the Ministry of Transport (MTO). As such, materials with more than 5% fine-grained materials are deemed unsuitable for extraction for aggregate operations. The grain-size analysis indicates that two of the six samples were composed of more than 10% silt and clay, with the content of fine-grained particles ranging between 39% to 42%. The test pit logs specify that 9 of the 24 test pits have at least some fine-grained particles (greater than 10% fines) within the test pit. These results indicate that the silt and clay content is consistently greater than 5% in approximately 40% of the test pits, predominately on the northern half of the property. In all of these test pits, a shallow surficial layer of gravelly sand was encountered however it was underlain by primarily fine-grained materials (silts and/or clay). In addition, the review of the surrounding well records consistently showed clay content within the overburden deposits. Considering that fine-grained materials were also encountered in the lower half of the test pits in approximately 40% of the test pits, This suggests that the Site is overlain by a shallow deposit of coarse-grained materials (i.e. sands and/or gravel) however is likely underlain by finer-grained materials (i.e. silts and/or clays). As such, it is concluded that the overburden materials on the Site are not considered to be of suitable quality to be feasible for aggregate applications and development of the Site as an aggregate extraction operation.

In addition to the poor aggregate quality, the extent of aggregate extraction would be limited to only 4.5 ha of the 13.3 ha property as depicted on Figure 5, which results in a rather small area for possible aggregate extraction (assuming that the coarse-grained materials are acceptable material to depth).



Furthermore, there are existing wetland complexes on and adjacent to the property which would reduce the area available for possible aggregate extraction operations (assuming that the aggregate quality was acceptable). Groundwater was encountered in four of the test pits indicating that below water extraction would be required for aggregate extraction. Additional assessments would be required to determine if impacts may result from below water extraction operations at the Site on the surrounding wetland areas and neighbouring wells.

Based on the inconsistent quality of the overburden deposits for aggregate materials, the small area of possible aggregate extraction and the presence of the on-site and adjacent wetland areas, the development of the Site as an aggregate extraction operation is deemed to not be feasible.



## 6.0 Closing

Cambium was retained to complete an Aggregate Resource Assessment of the property located at 162 Douro 8<sup>th</sup> Line in Douro-Dummer. The results of the assessment indicate that the Site is not feasible for development as an extractive aggregate operation.

Respectfully submitted,

**Cambium Inc.**

Jeremy Tracey, P.Eng.  
Project Coordinator

Kevin Warner, M.Sc., P.Geo. (Ltd.)  
Group Manager – Water & Wastewater

## 7.0 References

County of Peterborough. (1994). *Official Plan*.

Ministry of Environment. (1996). *Procedure D-5-5, Technical Guideline For Private Wells: Water Supply Assessment*.

Ministry of Municipal Affairs and Housing. (2020). Provincial Policy Statement. Ontario.

Ministry of Northern Development and Mines. (1991). Quaternary Geology of Ontario Southern Sheet, Map 2556, scale 1:1,000,000.

Ministry of the Environment. (2006). *Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines*.

OGS. (2019). *Bedrock Geology of Ontario, southern sheet; Ontario Geological Survey, scale 1:250 000*.

OGS. (2019). Ontario's Quaternary Geology at a compilation scale of 1:1 000 000.

The Township of Douro-Dummer. (2008). *Official Plan*.



## 8.0 Standard Limitations

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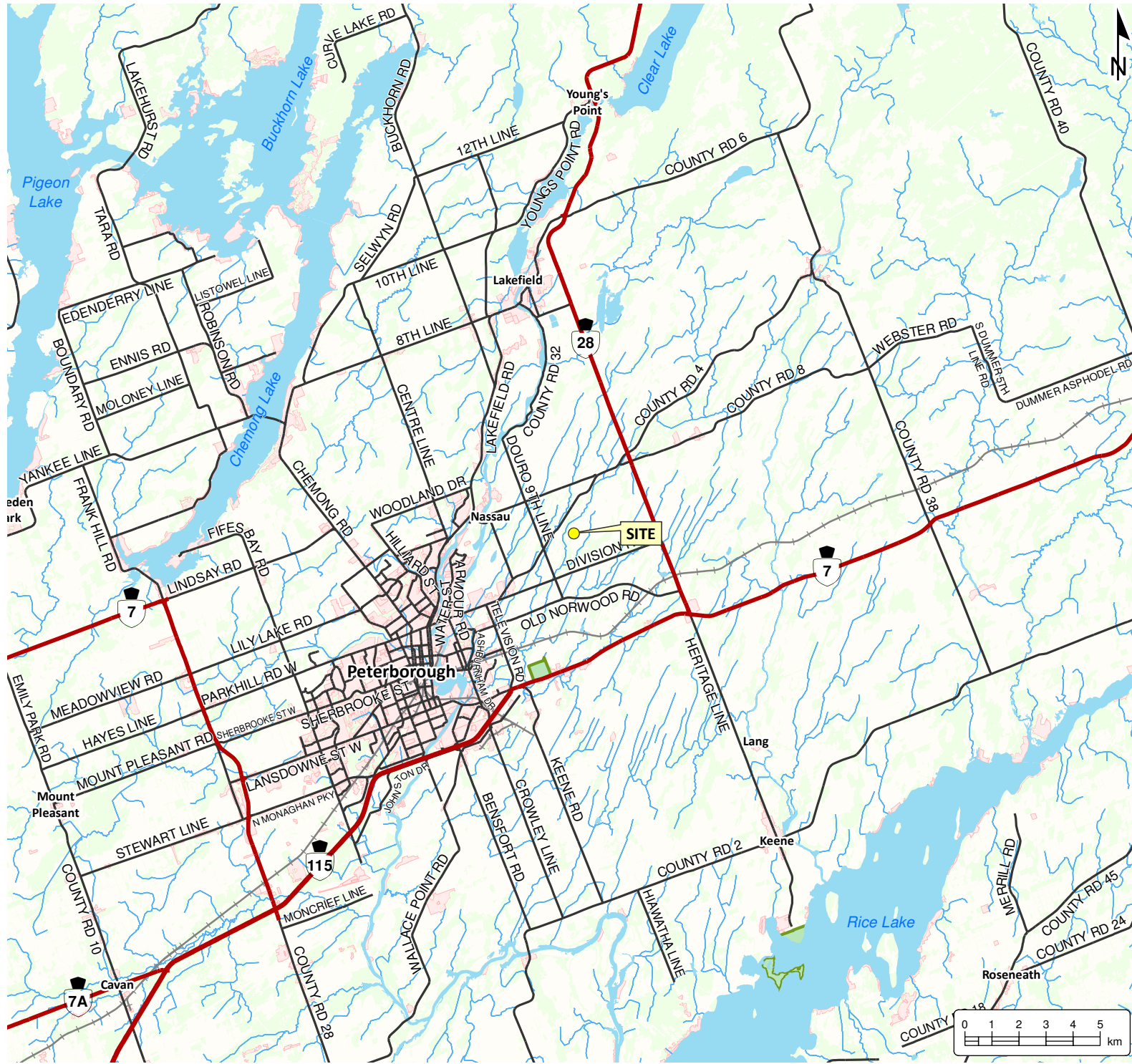
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## Appended Figures

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# **AGGREGATE RESOURCE ASSESSMENT** DAVID WHITE 162 Douro Eighth Line, Douro-Dummer, Ontario

## **LEGEND**

- Highway
- Major Road
- Railroad
- Watercourse
- Water Area
- Provincial Park
- Wooded Area
- Built Up Area

**Notes:**  
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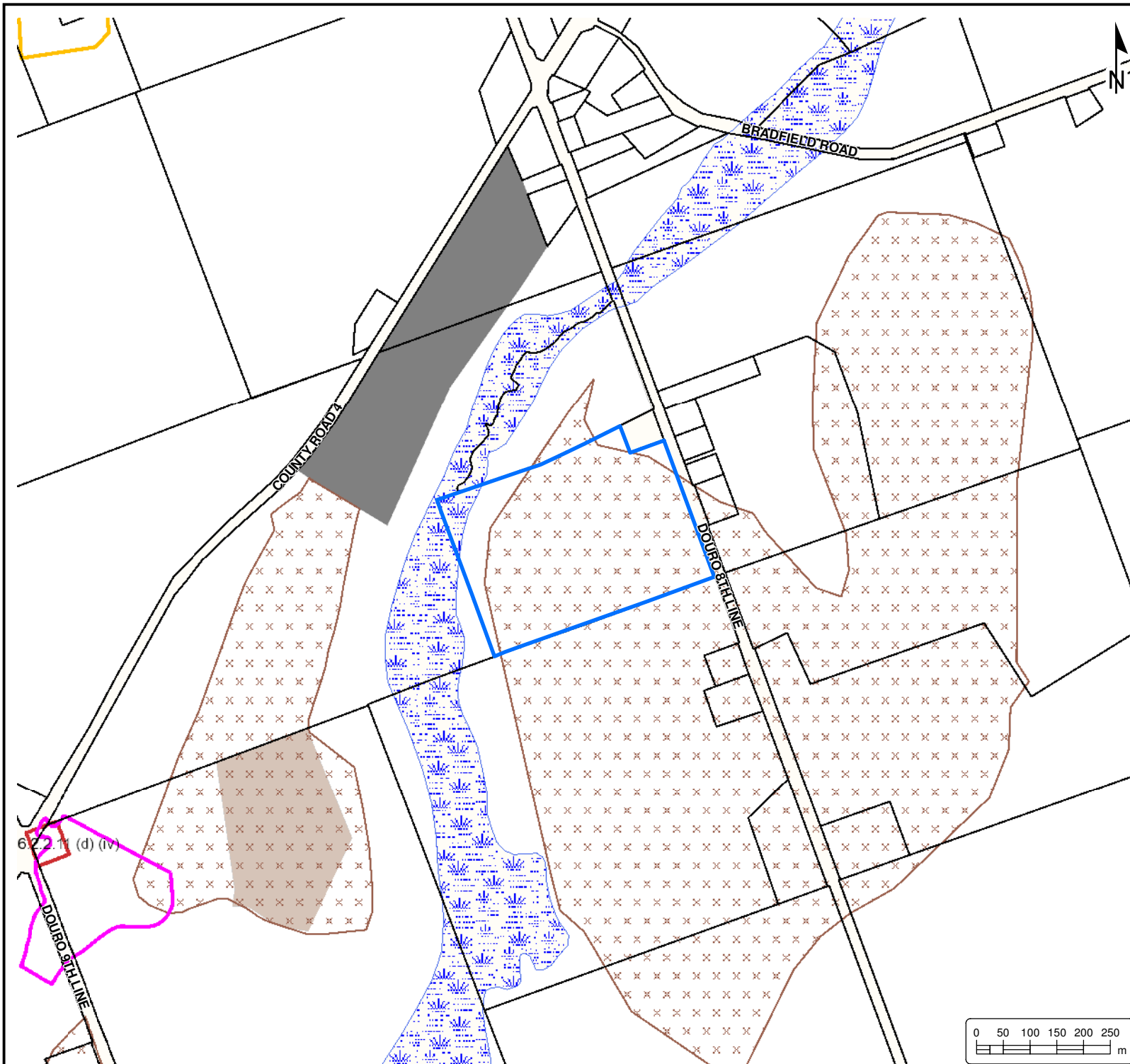


P.O. Box 325, 52 Hunter Street East  
 Peterborough, Ontario, K9H 1G5  
 Tel: (705) 742.7900 Fax: (705) 742.7907  
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## **REGIONAL LOCATION PLAN**

Project No.: 11329-001	Date: September 2020
Scale: 1:200,000	Projection: NAD 1983 UTM Zone 17N
Created by: TLC	Checked by: KW
Figure: <b>1</b>	





# AGGREGATE RESOURCE ASSESSMENT

DAVID WHITE  
162 Douro Eighth Line,  
Douro-Dummer, Ontario

- Site (approximate)
- Parcel Fabric
- Douro-Dummer OP WM 500m Buffer
- ANSI, Life Science
- ANSI, Earth Science
- Douro-Dummer OP ECA
- Douro-Dummer OP Extractive/Industrial
- Douro-Dummer OP Special Section
- Residential
- Environmental Constraint
- Seasonal Residential
- Hamlet
- Rural
- Recreational - Open Space
- First Nations
- Commercial
- Extractive Industrial Licenced
- Industrial
- Waste Management Area - (Former Site)
- Waste Management Area - (Active Site)
- DNA Cluster
- Provincially Significant Wetland
- Locally Significant Wetland
- Highway Commercial
- Recreation Commercial
- Lakeshore Residential

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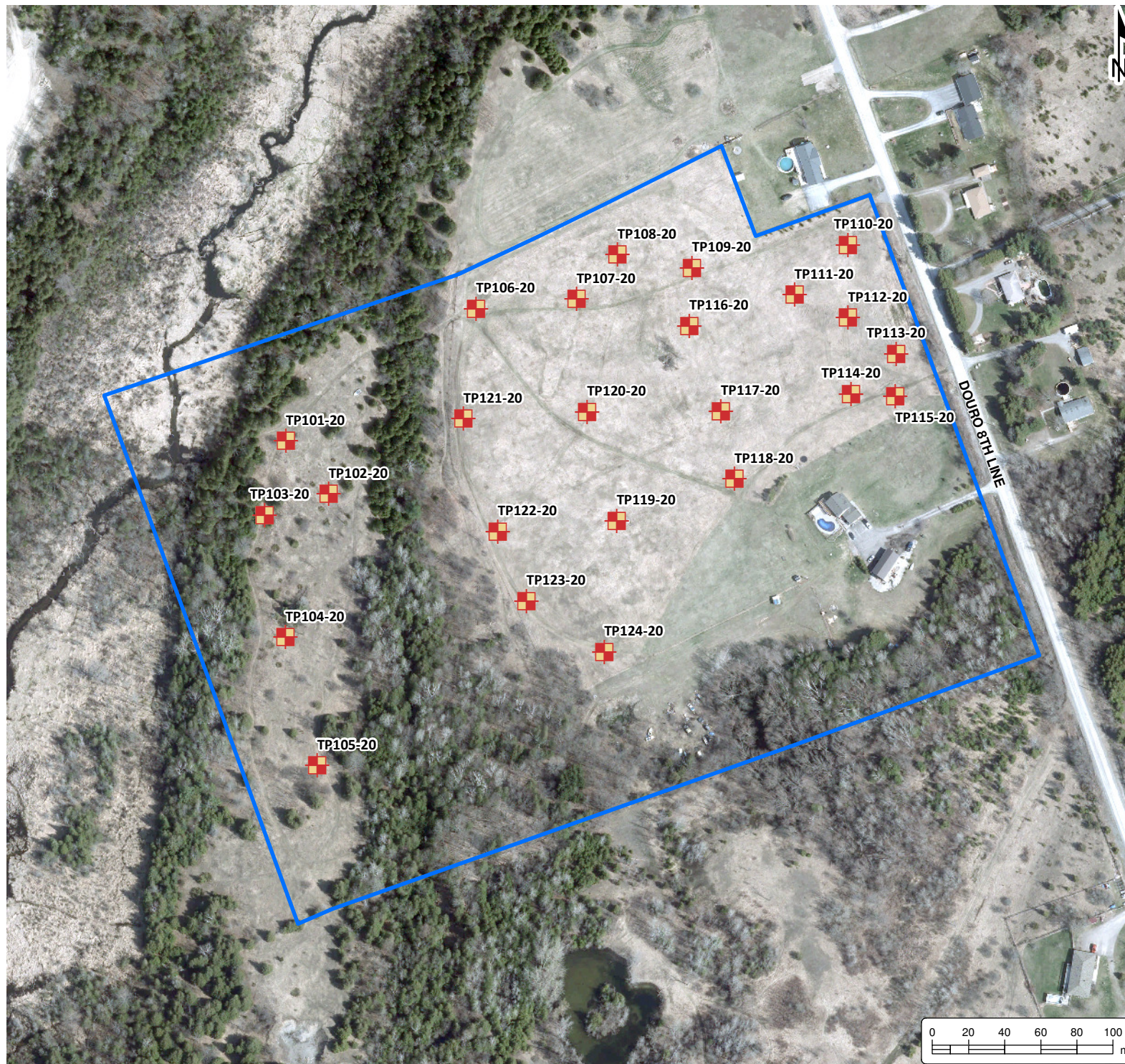


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## PROPERTY PLAN

Project No.: 11329-001	Date: September 2020
Scale: 1:10,000	Rev.: NAD 1983 UTM Zone 17N
Created by: TLC	Checked by: KW
Figure: <b>2</b>	







## AGGREGATE RESOURCE ASSESSMENT

DAVID WHITE  
162 Douro Eighth Line,  
Douro-Dummer, Ontario

### LEGEND

-  Test Pit Location
-  Site (approximate)

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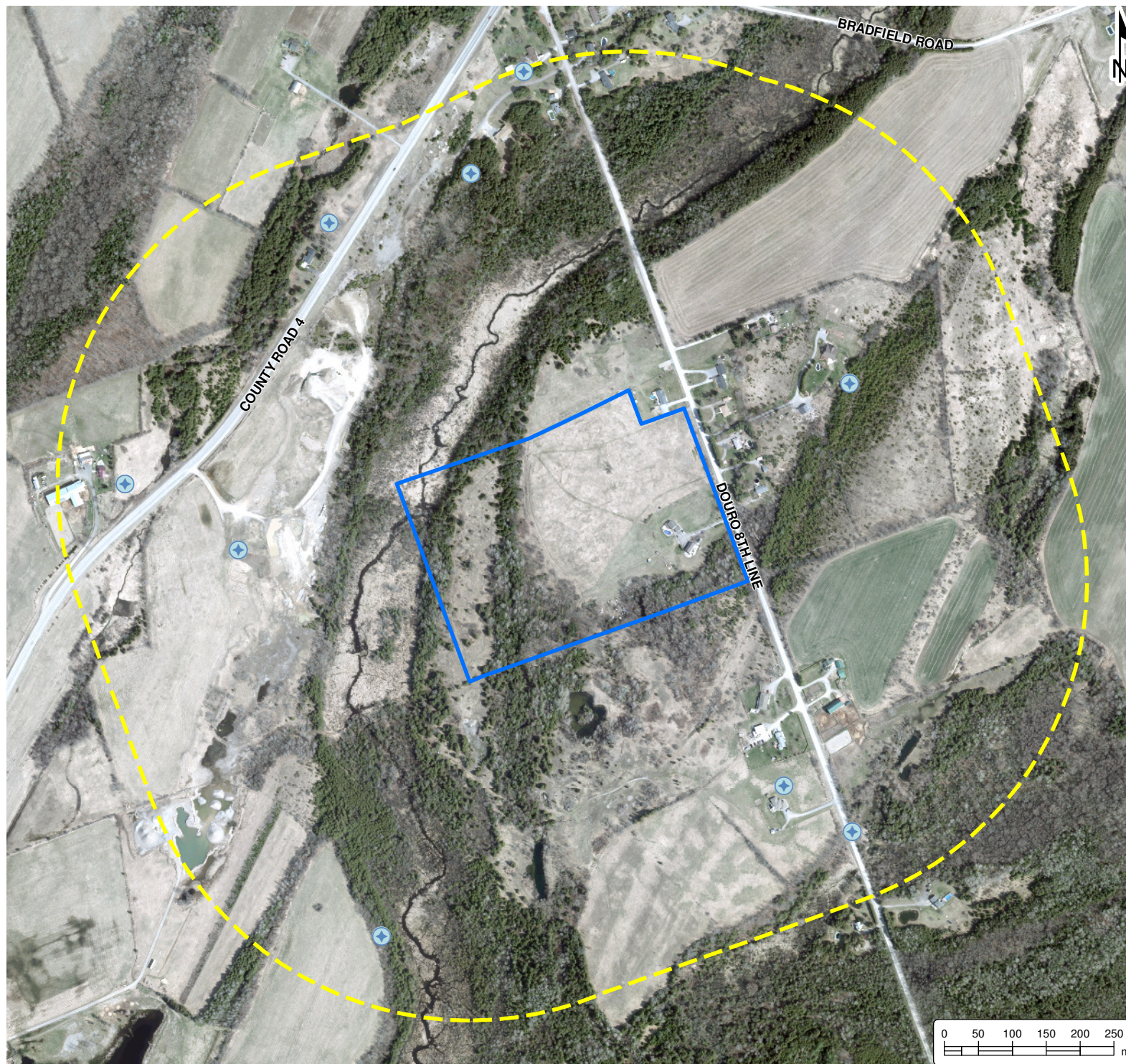


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### TEST PIT LOCATION PLAN

Project No.: 11329-001	Date: September 2020
Scale: 1:3,000	Rev.: NAD 1983 UTM Zone 17N
Created by: TLC	Checked by: KW
Figure: <b>3</b>	





# AGGREGATE RESOURCE ASSESSMENT

DAVID WHITE  
162 Douro Eighth Line,  
Douro-Dummer, Ontario

## LEGEND

- Water Well Record
- 500m Study Area
- Site (approximate)

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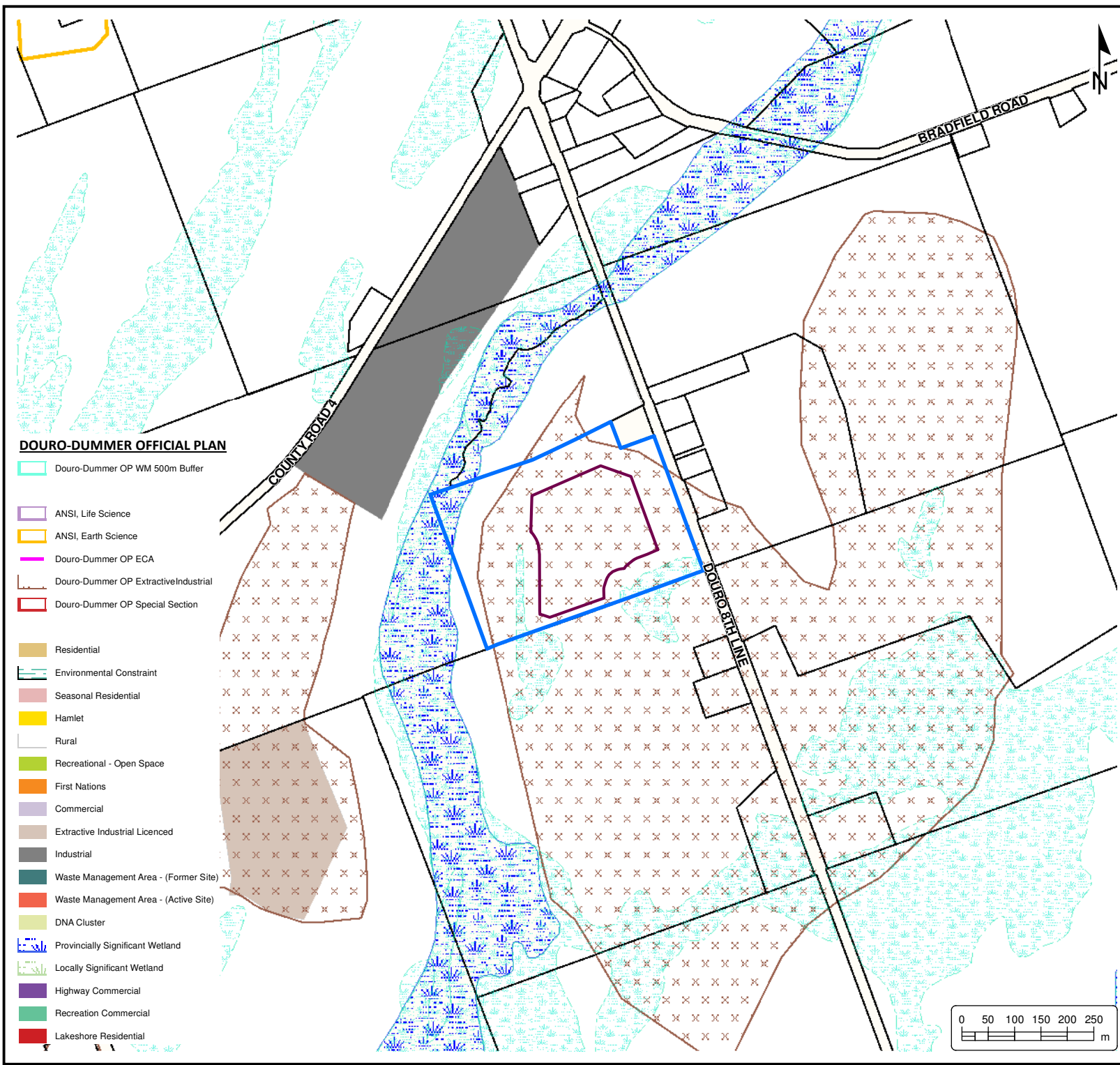
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Tel: (705) 742.7900 Fax: (705) 742.7907  
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## SURROUNDING WATER WELLS

Project No.:	11329-001	Date:	September 2020
Scale:	1:8,000	Rev.:	
Created by:	TLC	Projection:	NAD 1983 UTM Zone 17N
Checked by:	KW	Figure:	<b>4</b>



O:\GIS\MXDs\11300-11399\11329-001 David White - Aggregate Assessment - 162 Douro 8th Line\2020-09-17 FIG 5 - Conceptual Extraction Area.mxd




# AGGREGATE RESOURCE ASSESSMENT

DAVID WHITE  
162 Douro Eighth Line,  
Douro-Dummer, Ontario

- LEGEND**
- Conceptual Extraction Area (4.5 ha)
  - Site (approximate)
  - Wetland Area

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CONCEPTUAL EXTRACTION AREA		
Project No.:	Date:	September 2020
11329-001	Rev.:	
Scale:	Projection:	
1:10,000	NAD 1983 UTM Zone 17N	
Created by:	Checked by:	Figure:
TLC	KW	5



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## **Appendix A**

### **Test Pit Logs**

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## TEST PIT LOGS

Project Name: David White Aggregate Assessment - Test Pit Logs

Cambium Reference No. 11329-001

Date: August 17-18 Staff: J. Munro

Test Pit ID	Depth (mbgs <sup>1</sup> )	Material Description	Sample
TP101-20	0 - 0.203	Topsoil	GS1 GS2
	0.203 - 1.600	Light Red-Brown medium gravelly sand, cobbles, some boulders, loose, dry	
	1.600 - 2.616	Light Brown gravelly silt and clay, trace sand, some cobble, compacted, dry	
	2.616	Test pit terminated on boulder, no water table, no bedrock	
TP102-20	0 - 0.254	Topsoil	GS1 GS2 GS3
	0.254 - 0.864	Grayish-Brown medium gravelly sand, cobble, some boulders, loose, dry	
	0.864 - 1.905	Brown medium gravelly sand, some cobble, trace boulders, loose, dry	
	1.905 - 3.048	Sand and silt, some gravel, cobbles, trace boulders, compacted, moist	
	3.048	Test pit terminated, no water table, no bedrock	
TP103-20	0 - 0.203	Topsoil	GS1 GS2
	0.203 - 2.210	Light brown medium-coarse gravelly sand, cobbles, some boulders, loose, dry	
	2.210 - 2.769	Grayish-brown fine gravelly sand, some cobble, trace boulders, loose, dry	
	2.769	Test pit terminated, no water table, no bedrock	
TP104-20	0 - 0.203	Topsoil	GS1 GS2
	0.203 - 2.108	Grayish-brown medium gravelly sand, cobbles, some boulders, loose, dry	
	2.108 - 2.921	Dark brown medium sand and gravel, trace silt, cobbles, some boulders, loose, dry	
	2.921	Test pit terminated, no water table, no bedrock	
TP105-20	0 - 0.305	Top soil	GS1
	0.305 - 2.692	Grayish-brown medium sand and gravel, trace silt, cobbles, some boulders, loose, dry	
	2.692	Test pit terminated on boulder	
TP106-20	0 - 0.305	Topsoil	GS1 GS2
	0.305 - 2.007	Light brown medium gravelly sand, some cobble, trace boulders, loose, dry	
	2.007 - 2.845	Light brown medium-coarse sand, some silt, gravel, some cobble, compacted, dry	
	2.845	Test pit terminated, no water table, no bedrock	
TP107-20	0 - 0.305	Topsoil	GS1 GS2
	0.305 - 1.803	Light brown, medium-coarse sand, gravel, trace silt and clay, some cobble, loose, dry	
	1.803 - 2.75	Light brown, medium sand and silt, some gravel, some cobble, trace boulders, compacted, dry	
	2.75	Test pit terminated, no water table, no bedrock	
TP108-20	0 - 0.305	Topsoil	GS1 GS2
	0.305 - 1.778	Brown, medium-coarse sand, gravel, some cobble, compacted, dry	
	1.778 - 2.769	Light brown, medium-coarse sand, some silt, trace clay, some gravel, some cobble, trace boulder, compacted, dry	
	2.769	Test pit terminated, no water table, no bedrock	
TP109-20	0 - 0.305	Topsoil	GS1 GS2
	0.305 - 0.610	Light brown medium-coarse gravelly sand, loose, dry	
	0.610 - 2.896	Grayish-brown medium-coarse gravelly sand, loose, moist	
	2.896	Test pit terminated, no water table, no bedrock	



## TEST PIT LOGS

Project Name: David White Aggregate Assessment - Test Pit Logs

Cambium Reference No. 11329-001

TP110-20	0 - 0.254 0.254 - 0.660 0.660 - 2.159 2.159 - 2.819 2.819	Topsoil Light brown fine-medium sand, gravel, trace cobble, loose, dry Brown fine-medium sand, some gravel, trace silt, trace clay, loose, dry Grayish-brown silt, some clay, trace sand, compact, dry Test pit terminated, no water table, no bedrock	GS1 GS2 GS3
TP111-20	0 - 0.432 0.432 - 1.422 1.422 - 2.70 2.7	Top soil Brown medium-coarse gravelly sand, some cobble, loose, dry Dark brown gravelly sand, trace cobble, loose, wet Test pit terminated, water ponding, no Bedrock	GS1 GS2
TP112-20	0 - 0.483 0.483 - 1.092 1.092 - 2.286 2.286 - 2.819 2.819	Topsoil Grayish-brown medium-coarse gravelly sand, trace cobble, loose, dry Brown medium-coarse gravelly sand, loose, moist Gray silt and clay, some sand, trace gravel, compacted, wet Test pit terminated, water seepage at 2.743, no bedrock	GS1 GS2 GS3
TP113-20	0 - 0.432 0.432 - 1.067 1.067 - 2.083 2.083	Topsoil Brown medium sand, some silt, trace clay, trace gravel, compacted, dry Brown silt and clay, trace sand, compacted, dry Test pit terminated	GS1 GS2
TP114-20	0 - 0.406 0.406 - 1.143 1.143 - 1.651 1.651 - 2.718 2.718 - 3.048 3.048	Topsoil Brown fine-medium sand, some gravel, loose, dry Brown fine sand, loose, dry Brown fine-medium sand, some gravel, lightly compacted, moist Grayish-brown silt and clay, trace sand, compacted, wet Test pit terminated, water seepage at 2.870, no bedrock	GS1 GS2 GS3 GS4
TP115-20	0 - 0.356 0.356 - 2.769 2.769	Topsoil Brown fine-medium sand, some gravel, loose, moist Test pit terminated, water seepage at 2.743, no bedrock	GS1
TP116-20	0 - 0.406 0.406 - 1.041 1.041 - 2.946 2.946	Topsoil Brown fine-medium sand, some gravel, loose, dry Brown fine sand, trace gravel, loose, moist Test pit terminated, no water table, no bedrock	GS1 GS2
TP117-20	0 - 0.305 0.305 - 0.610 0.610 - 2.794 2.794	Topsoil Brown fine-medium sand, gravel, loose, dry Brown fine-medium sand, gravel, trace cobble, loose, dry Test pit terminated, no water table, no bedrock	GS1 GS2
TP118-20	0 - 0.254 0.254 - 0.686 0.686 - 1.168 1.168 - 2.438 2.438	Topsoil Brown fine-medium sand, gravel, some organic material, loose, dry Grayish-brown fine-medium sand, gravel, trace cobble, loose, dry Grayish-brown fine-medium sand and gravel, trace silt, loose, dry Test pit terminated, no water table, no bedrock	GS1 GS2 GS3



## TEST PIT LOGS

Project Name: David White Aggregate Assessment - Test Pit Logs

Cambium Reference No. 11329-001

TP119-20	0 - 0.406 0.406 - 2.743 2.743	Topsoil Grayish-brown medium-coarse sand and gravel, trace silt, loose, dry Test pit terminated, no bedrock, no water table	GS1
TP120-20	0 - 0.381 0.381 - 1.829 1.829 - 2.921 2.921	Topsoil Brown, fine-medium sand, gravel, some cobble, loose, dry Dark brown fine-medium sand and gravel, trace silt, loose, dry Test pit terminated, no bedrock, no water table	GS1 GS2
TP121-20	0 - 0.254 0.254 - 0.787 0.787 - 2.438 2.438	Topsoil Brown fine-medium sand, gravel, some cobble, trace boulders, loose, dry Dark brown fine-medium sand and gravel, trace silt, loose, dry Test pit terminated on large boulder, no water table, no bedrock	GS1 GS2
TP122-20	0 - 0.279 0.279 - 0.940 0.940 - 2.743 2.743	Topsoil Brown medium-coarse sand, gravel, some cobble, loose, dry Dark brown fine-medium gravelly sand, cobble, loose, moist Test pit terminated, no bedrock, no water table	GS1 GS2
TP123-20	0 - 0.254 0.254 - 2.743 2.743	Topsoil Grayish brown, medium-coarse gravelly sand, cobble, lightly compacted, moist Test pit terminated, no bedrock, no water table	GS1 GS2
TP124-20	0 - 0.279 0.279 - 1.245 1.245 - 2.896 2.896	Topsoil Brown medium sand, gravel, some cobble, loose, dry Grayish-brown medium-coarse gravelly sand, loose, moist Test pit terminated, no water table, no bedrock	GS1 GS2

Notes: 1. mbgs = metres below ground surface





---

## **Appendix B**

### **Grain Size Analysis**

---

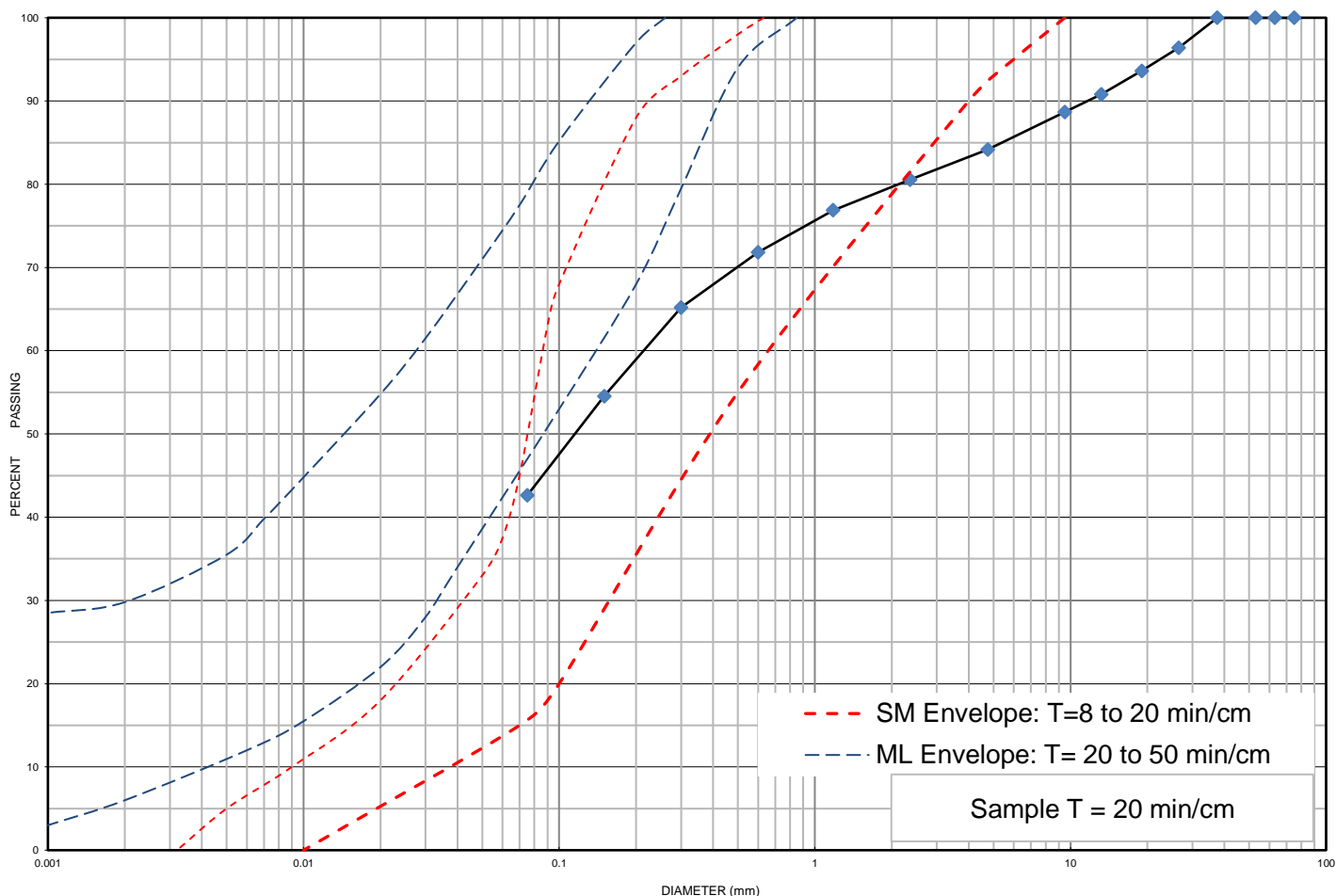


## Grain Size Distribution Chart

**Project Number:** 11329-001 **Client:** David White  
**Project Name:** Aggregate Assessment, 162 Douro 8th Line  
**Sample Date:** August 12, 2020 **Sampled By:** Joshua Munro - Cambium Inc.  
**Location:** TP 102-20 GS 3 **Depth:** **Lab Sample No:** S-20-0702

### UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



### MIT SOIL CLASSIFICATION SYSTEM

MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDER
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
TP 102-20	GS 3		16	42	42		10.8
Description		Classification	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>u</sub>	C <sub>c</sub>
Sand and Silt some Gravel		SM	0.220	0.000	0.000	-	-

Issued By: \_\_\_\_\_

*John Baird*

(Senior Project Manager)

Date Issued: \_\_\_\_\_

September 11, 2020

**Cambium Inc. (Laboratory)**

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Form: L6V.2 - Grad.Hydo

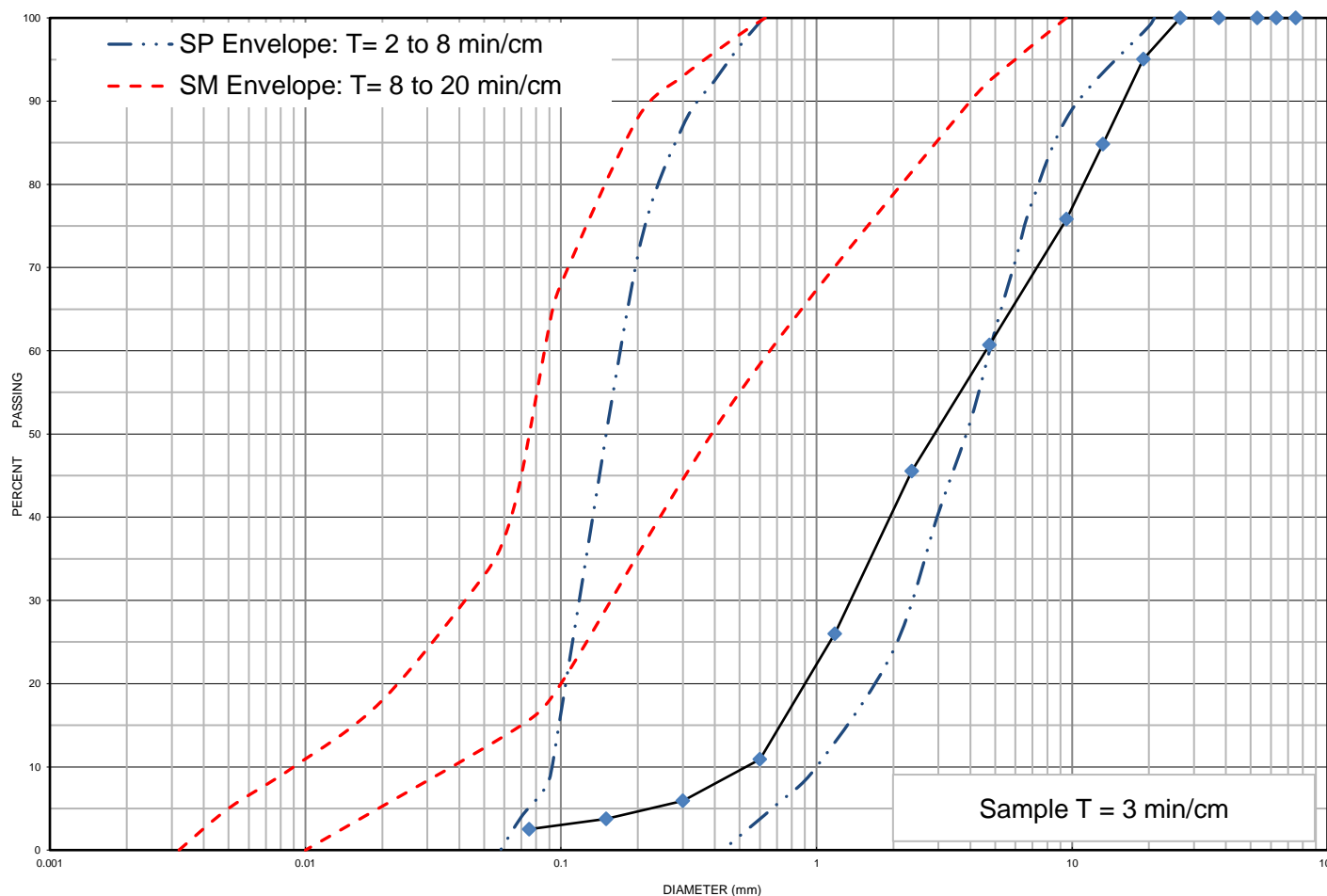


# Grain Size Distribution Chart

**Project Number:** 11329-001 **Client:** David White  
**Project Name:** Aggregate Assessment, 162 Douro 8th Line  
**Sample Date:** August 12, 2020 **Sampled By:** Joshua Munro - Cambium Inc.  
**Location:** TP 104-20 GS 2 **Depth:** **Lab Sample No:** S-20-0703

## UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



## MIT SOIL CLASSIFICATION SYSTEM

MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDER
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
TP 104-20	GS 2		39	58	3		2.3
Description		Classification	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>u</sub>	C <sub>c</sub>
Sand and Gravel trace Silt		SP	4.600	1.400	0.540	8.52	0.79

Issued By: \_\_\_\_\_

*John Baird*

(Senior Project Manager)

Date Issued: \_\_\_\_\_

September 14, 2020

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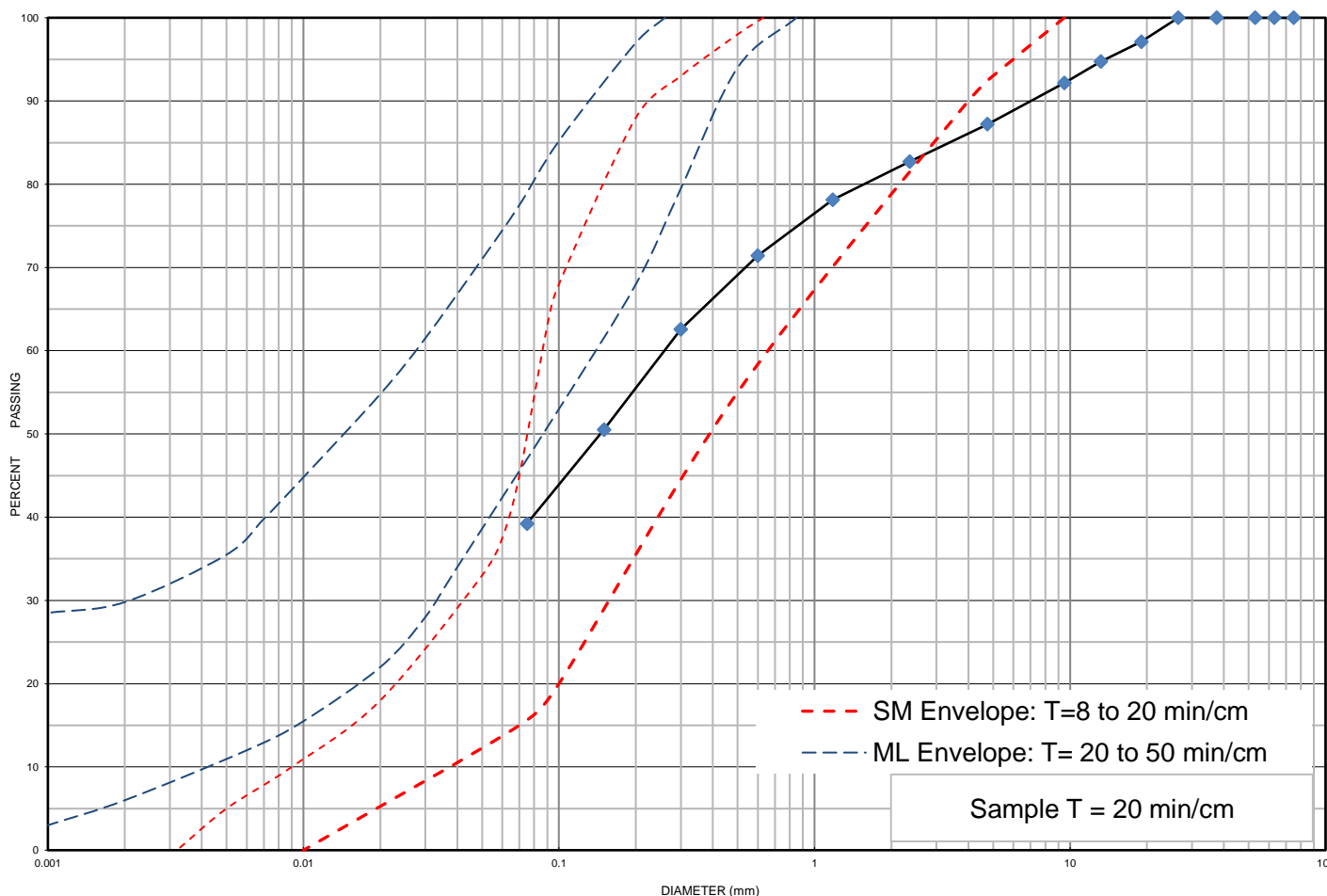
Form: L6V.2 - Grad.Hydo



# Grain Size Distribution Chart

**Project Number:** 11329-001      **Client:** David White  
**Project Name:** Aggregate Assessment, 162 Douro 8th Line  
**Sample Date:** August 12, 2020      **Sampled By:** Joshua Munro - Cambium Inc.  
**Location:** TP 107-20 GS 2      **Depth:**      **Lab Sample No:** S-20-0704

UNIFIED SOIL CLASSIFICATION SYSTEM					
CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDER
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
TP 107-20	GS 2		13	48	39		7.9
Description		Classification	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>u</sub>	C <sub>c</sub>
Sand and Silt some Gravel		SM	0.260	0.000	0.000	-	-

**Issued By:**  **Date Issued:** September 14, 2020  
 (Senior Project Manager)

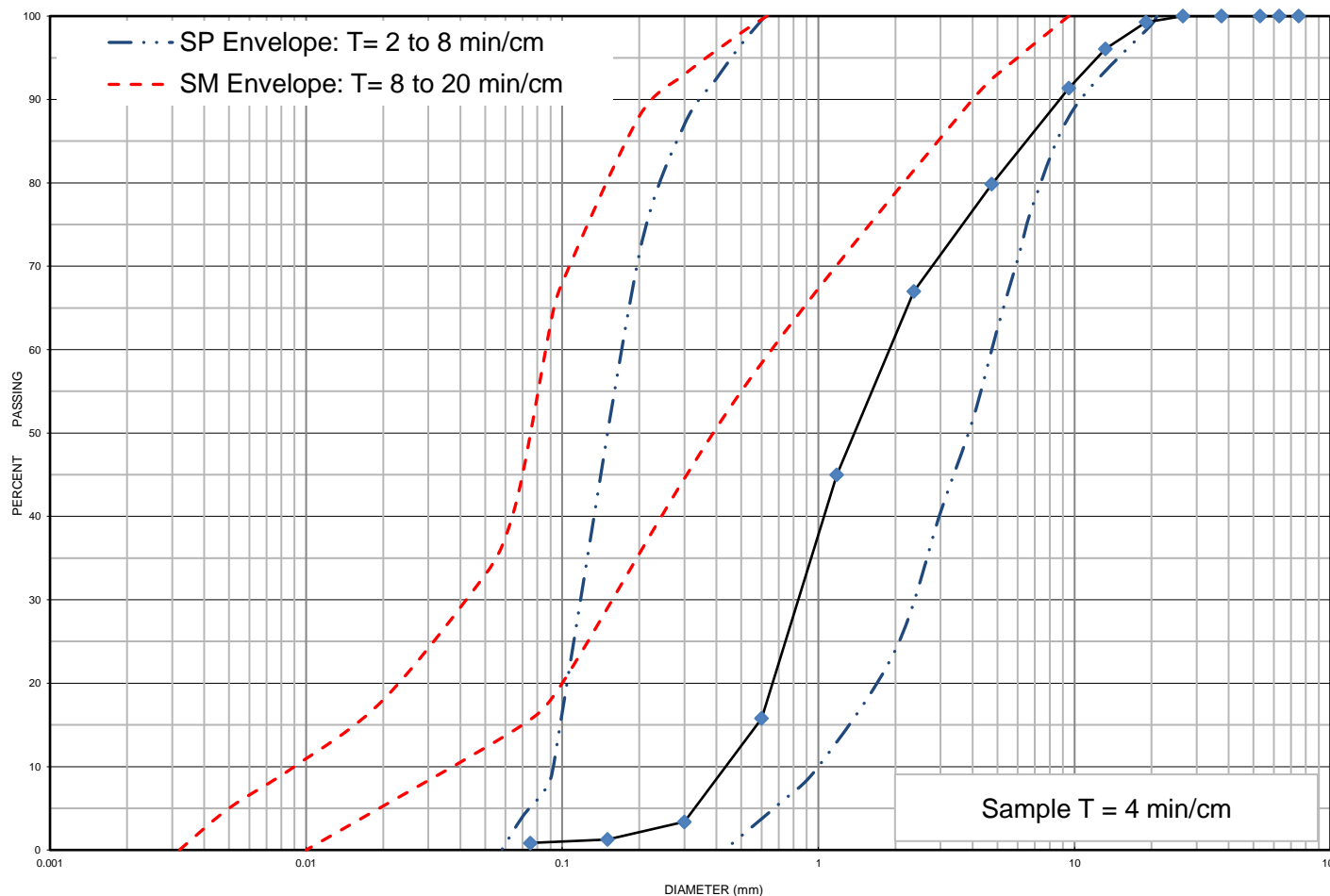


# Grain Size Distribution Chart

**Project Number:** 11329-001 **Client:** David White  
**Project Name:** Aggregate Assessment, 162 Douro 8th Line  
**Sample Date:** August 12, 2020 **Sampled By:** Joshua Munro - Cambium Inc.  
**Location:** TP 111-20 GS 2 **Depth:** **Lab Sample No:** S-20-0705

## UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



## MIT SOIL CLASSIFICATION SYSTEM

MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDER
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
TP 111-20	GS 2		20	79	1		5.1
Description		Classification	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>u</sub>	C <sub>c</sub>
Gravelly Sand		SP	1.950	0.830	0.440	4.43	0.80

Issued By:

(Senior Project Manager)

Date Issued:

September 11, 2020

**Cambium Inc. (Laboratory)**

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Form: L6V.2 - Grad.Hydo

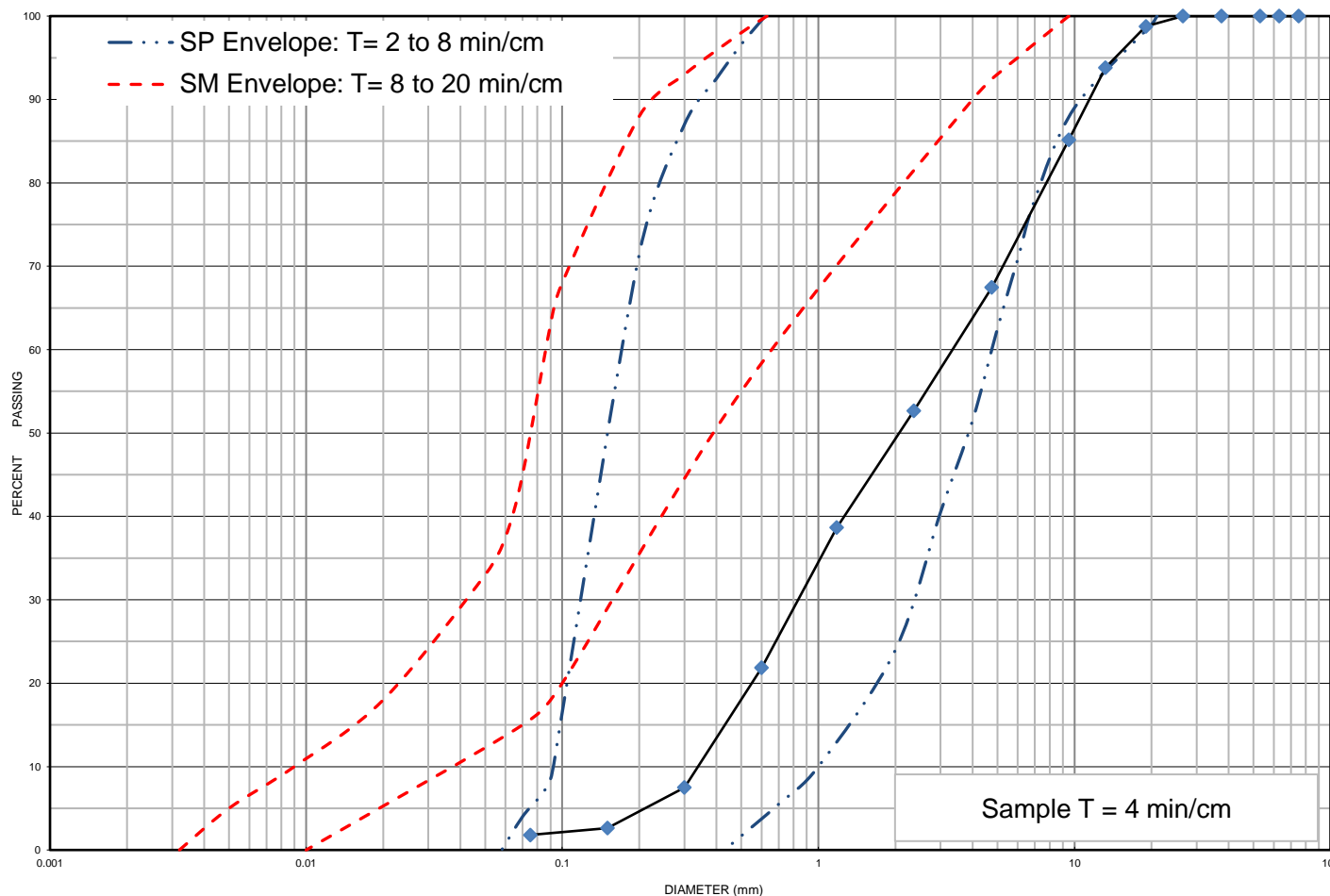


## Grain Size Distribution Chart

**Project Number:** 11329-001 **Client:** David White  
**Project Name:** Aggregate Assessment, 162 Douro 8th Line  
**Sample Date:** August 12, 2020 **Sampled By:**  
**Location:** TP 118-20 GS 3 **Depth:** **Lab Sample No:** S-20-0706

### UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



### MIT SOIL CLASSIFICATION SYSTEM

MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDER
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
TP 118-20	GS 3		33	66	1		2.5
Description		Classification	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>u</sub>	C <sub>c</sub>
Sand and Gravel trace Silt		SP	3.400	0.820	0.340	10.00	0.58

Issued By: \_\_\_\_\_

*John Baird*

(Senior Project Manager)

Date Issued: \_\_\_\_\_

September 14, 2020

**Cambium Inc. (Laboratory)**

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Form: L6V.2 - Grad.Hydo

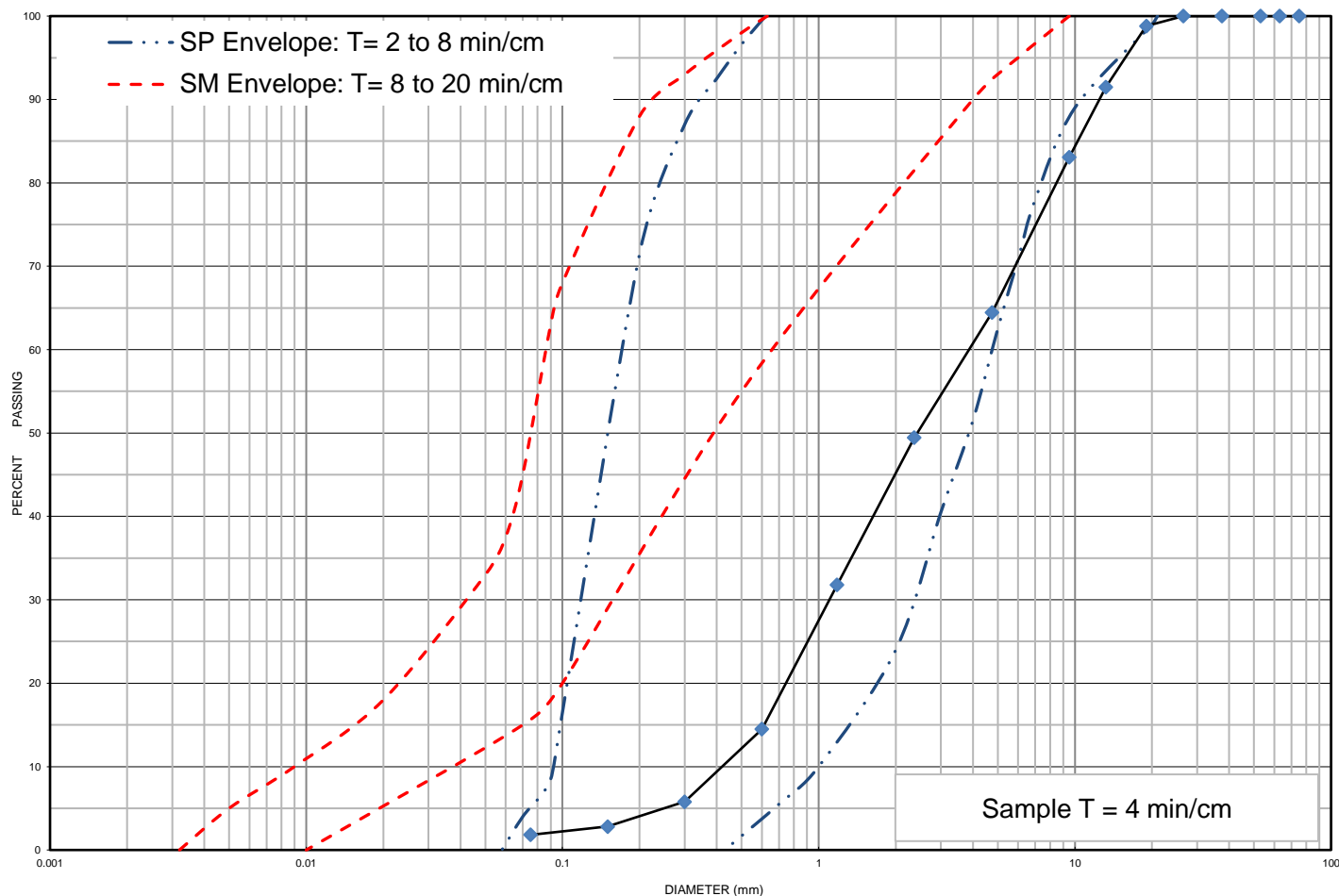


## Grain Size Distribution Chart

**Project Number:** 11329-001 **Client:** David White  
**Project Name:** Aggregate Assessment, 162 Douro 8th Line  
**Sample Date:** August 12, 2020 **Sampled By:** Joshua Munro - Cambium Inc.  
**Location:** TP 120-20 GS 2 **Depth:** **Lab Sample No:** S-20-0707

### UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



### MIT SOIL CLASSIFICATION SYSTEM

MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDER
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
TP 120-20	GS 2		36	63	1		2.1
Description		Classification	D <sub>60</sub>	D <sub>30</sub>	D <sub>10</sub>	C <sub>u</sub>	C <sub>c</sub>
Sand and Gravel trace Silt		SP	3.900	1.200	0.420	9.29	0.88

Issued By: \_\_\_\_\_

*John Baird*

(Senior Project Manager)

Date Issued: \_\_\_\_\_

September 14, 2020

**Cambium Inc. (Laboratory)**

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701 The Queensway | Units 5-6 | Peterborough | ON | K9J 7J6

Form: L6V.2 - Grad.Hydo



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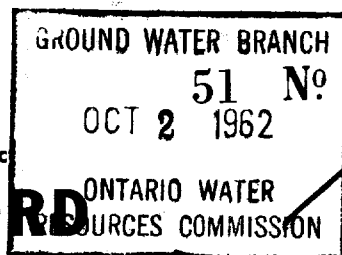
## **Appendix C**

## **Well Records**

---



3108E



UTM 17 Z 719384E

SR 4913228N

The Ontario Water Resources Commission Act

Elev. SR 10675

## WATER WELL RECORD

Basin 2A Pelitane

County or District Pelitane

Con. 8 WH Lot 2

Township, Village, Town or City Dore

Date completed 6 8 62 (day month year)

Address R.R.# 10 Pelitane

## Casing and Screen Record

Inside diameter of casing 6 1/4"

Total length of casing 65'

Type of screen nil

Length of screen

Depth to top of screen

Diameter of finished hole 6 1/4"

## Pumping Test

Static level 35'

Test-pumping rate 7 G.P.M.

Pumping level 25'

Duration of test pumping 2 hrs

Water clear or cloudy at end of test clear

Recommended pumping rate 25 G.P.M.

with pump setting of 30' feet below ground surface

## Well Log

## Overburden and Bedrock Record

Old well dug.

Clay + stones

Sandy gravel

From ft.

To ft.

Depth(s) at which water(s) found

Kind of water (fresh, salty, sulphur)

0

27

63

27

63

65

Fresh

## Water Record

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

Farm Supply

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

Drilling or Boring Firm M. Sanderson

Address Pelitane

Licence Number 654

Name of Driller or Borer Sam

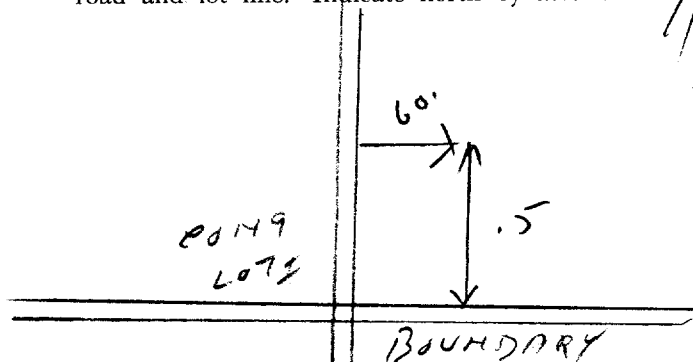
Address

Date Sept 17/62

(Signature of Licensed Drilling or Boring Contractor)

## Location of Well

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



Form 5  
15M-58-4149





## The Ontario Water Resources Act

# WATER WELL RECORD

5113195

51007

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Not on here	Not on here	9	2
P.O. box 1106, Wakefield, Ont. N0L2H0			DATE COMPLETED DAY 28 MO 6 YR 88

[illegible][illegible]

41		WATER RECORD			
WATER FOUND AT - FEET		KIND OF WATER			
146	10-13	1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	14	
ntested	15-18	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL		
		1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	19	
	20-23	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL		
		1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	24	
	25-28	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL		
		1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	29	
	30-33	2 <input type="checkbox"/> SALTY	4 <input type="checkbox"/> MINERAL		
		1 <input type="checkbox"/> FRESH	3 <input type="checkbox"/> SULPHUR	34	

51		OPENING & OPEN HOLE RECORD		
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 6 1/4	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE	12 .138	0	13-16 47
17-18	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE	19		20-23
24-25	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> 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	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	

71	PUMPING TEST METHOD		10	PUMPING RATE		11-14	DURATION OF PUMPING	
	1 <input type="checkbox"/> PUMP 2 <input type="checkbox"/> BAILER			4		GPM	15-16 HOURS 17-18 MINS	
	STATIC LEVEL	WATER LEVEL END OF PUMPING	25	WATER LEVELS DURING				1 <input checked="" type="checkbox"/> PUMPING 2 <input type="checkbox"/> RECOVERY
	19-21	22-24	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES		
	9	60	25 26-28	40 29-31	60 32-34	60 35-37		
	FEET	FEET	FEET	FEET	FEET	FEET		
IF FLOWING, GIVE RATE		38-41	PUMP INTAKE SET AT			WATER AT END OF TEST		
---		GPM	62		FEET	1 <input checked="" type="checkbox"/> CLEAR 2 <input type="checkbox"/> CLOUDY		
RECOMMENDED PUMP TYPE			RECOMMENDED PUMP SETTING	43-45	RECOMMENDED PUMPING RATE	46-49		
<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP			62	FEET	4	GPM		
50-53								

<div>34</div> <div>FINAL STATUS OF WELL</div>	<div>1 <input checked="" type="checkbox"/> WATER SUPPLY</div> <div>2 <input type="checkbox"/> OBSERVATION WELL</div> <div>3 <input type="checkbox"/> TEST HOLE</div> <div>4 <input type="checkbox"/> RECHARGE WELL</div>	<div>5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY</div> <div>6 <input type="checkbox"/> ABANDONED, POOR QUALITY</div> <div>7 <input type="checkbox"/> UNFINISHED</div>
<div>55-56</div> <div>WATER USE</div>	<div>1 <input checked="" type="checkbox"/> DOMESTIC</div> <div>2 <input type="checkbox"/> STOCK</div> <div>3 <input type="checkbox"/> IRRIGATION</div> <div>4 <input type="checkbox"/> INDUSTRIAL</div> <div><input type="checkbox"/> OTHER _____</div>	<div>5 <input type="checkbox"/> COMMERCIAL</div> <div>6 <input type="checkbox"/> MUNICIPAL</div> <div>7 <input type="checkbox"/> PUBLIC SUPPLY</div> <div>8 <input type="checkbox"/> COOLING OR AIR CONDITIONING</div> <div>9 <input type="checkbox"/> NOT USED</div>
<div>57</div> <div>METHOD OF DRILLING</div>	<div>1 <input type="checkbox"/> CABLE TOOL</div> <div>2 <input type="checkbox"/> ROTARY (CONVENTIONAL)</div> <div>3 <input type="checkbox"/> ROTARY (REVERSE)</div> <div>4 <input checked="" type="checkbox"/> ROTARY (AIR)</div> <div>5 <input type="checkbox"/> AIR PERCUSSION</div>	<div>6 <input type="checkbox"/> BORING</div> <div>7 <input type="checkbox"/> DIAMOND</div> <div>8 <input type="checkbox"/> JETTING</div> <div>9 <input type="checkbox"/> DRIVING</div>

LOCATION OF WELL

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

8' →

4.3

TV RD.

WARSAW RD.

1.3

6.5'

BOUNDARY

5 Y W

DRILLERS REMARKS

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER
	Faulkner Well Drilling Co. Ltd		2104
	ADDRESS		
	789 Erskine Ave., Peterborough, Ont.		
	NAME OF DRILLER OR BORER		LICENCE NUMBER
	Robert McLean		13
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE	
	<i>John Faulkner</i>	DAY 29 MO. 6 YR. 88	

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	80
			2104		JUL 14 1988		
	DATE OF INSPECTION		INSPECTOR				
	REMARKS						

CSS-ES

**MINISTRY OF THE ENVIRONMENT COPY**

**CSS-ES**  
FORM NO. 0506-4-77 FORM 7



# The Ontario Water Resources Act

## WATER WELL RECORD

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

11

5117723

Municipality  
**51007**

Con. **CON** 09  
15 22 23 24

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
	Duro	9	3
Address	Rte 10 Peterborough		Date completed 29 day 7 month 97 year
21	Northing	RC	Elevation
		RC	Basin Code

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

[illegible]

41		<b>WATER RECORD</b>	
Water found at - feet	Kind of water		
10-13 35	1 <input checked="" type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	14
15-18	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	19
20-23	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	24
25-28	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	29
30-33	1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 <input type="checkbox"/> Sulphur 4 <input type="checkbox"/> Minerals 6 <input type="checkbox"/> Gas	34

51 CASING & OPEN HOLE RECORD					
Inside diam inches	Material	Wall thickness inches	Depth - feet		
			From	To	
10-11	1 <input checked="" type="checkbox"/> Steel 2 <input type="checkbox"/> Galvanized 3 <input type="checkbox"/> Concrete 4 <input type="checkbox"/> Open hole 5 <input type="checkbox"/> Plastic	12	188	0	13-16
64					32
17-18	1 <input type="checkbox"/> Steel 2 <input type="checkbox"/> Galvanized 3 <input type="checkbox"/> Concrete 4 <input type="checkbox"/> Open hole 5 <input type="checkbox"/> Plastic	19			20-23
24-25	1 <input type="checkbox"/> Steel 2 <input type="checkbox"/> Galvanized 3 <input type="checkbox"/> Concrete 4 <input type="checkbox"/> Open hole 5 <input type="checkbox"/> Plastic	26			27-30

<b>SCREEN</b>	Sizes of opening (Slot No.)	31-33	Diameter	34-38	Length	39-46
			inches		feet	
	Material and type			Depth at top of screen		30
				feet		41-44

61 PLUGGING & SEALING RECORD			
		<input type="checkbox"/> Annular space	<input type="checkbox"/> Abandonment
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)	
From	To		
10-13	14-17		
18-21	22-25		
26-29	30-33		
		90	

71	Pumping test method <sup>10</sup> 1 <input checked="" type="checkbox"/> Pump 2 <input type="checkbox"/> Bailer		Pumping rate <sup>11-14</sup> 3 GPM		Duration of pumping <sup>17-18</sup> ...2 Hours ..... Mins	
	Static level		Water level end of pumping		Water levels during 1 <input checked="" type="checkbox"/> Pumping 2 <input type="checkbox"/> Recovery	
	19-21	22-24	15 minutes <sup>26-28</sup>	30 minutes <sup>29-31</sup>	45 minutes <sup>32-34</sup>	60 minutes <sup>35-37</sup>
	8 feet	35 feet	30 feet	35 feet	35 feet	35 feet
	If flowing give rate <sup>38-41</sup> GPM		Pump intake set at <sup>42</sup> 40 feet		Water at end of test <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Cloudy	
Recommended pump type <input checked="" type="checkbox"/> Shallow <input type="checkbox"/> Deep		Recommended pump setting <sup>46-49</sup> 30 feet		Recommended pump rate 3 GPM		

<b>FINAL STATUS OF WELL</b>			54
1	<input checked="" type="checkbox"/> Water supply	5	<input type="checkbox"/> Abandoned, insufficient supply
2	<input type="checkbox"/> Observation well	6	<input type="checkbox"/> Abandoned, poor quality
3	<input type="checkbox"/> Test hole	7	<input type="checkbox"/> Abandoned (Other)
4	<input type="checkbox"/> Recharge well	8	<input type="checkbox"/> Dewatering
		9	<input type="checkbox"/> Unfinished
		10	<input type="checkbox"/> Replacement well

---

<b>WATER USE</b>			55-56
1	<input checked="" type="checkbox"/> Domestic	5	<input type="checkbox"/> Commercial
2	<input type="checkbox"/> Stock	6	<input type="checkbox"/> Municipal
3	<input type="checkbox"/> Irrigation	7	<input type="checkbox"/> Public supply
4	<input type="checkbox"/> Industrial	8	<input type="checkbox"/> Cooling & air conditioning
		9	<input type="checkbox"/> Not used
		10	<input type="checkbox"/> Other .....

---

<b>METHOD OF CONSTRUCTION</b>			57
1	<input type="checkbox"/> Cable tool	5	<input type="checkbox"/> Air percussion
2	<input type="checkbox"/> Rotary (conventional)	6	<input type="checkbox"/> Boring
3	<input type="checkbox"/> Rotary (reverse)	7	<input type="checkbox"/> Diamond
4	<input checked="" type="checkbox"/> Rotary (air)	8	<input type="checkbox"/> Jetting
		9	<input type="checkbox"/> Driving
		10	<input type="checkbox"/> Digging
		11	<input type="checkbox"/> Other .....

**LOCATION OF WELL**

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

Duro Twp R

Warsaw Rd

100

120

9th line

187653

Name of Well Contractor	Well Contractor's Licence No.
Mountain Well Drilling	6851
Address	
RR#10 Peterborough	
Name of Well Technician	Well Technician's Licence No.
ROBERT SAUNDERS	T2322
Signature of Technician/Contractor	Submission date
Robt. Saunders	day 10 mo 8 yr 97

MINISTRY USE ONLY	Data source	58 Contractor	59-62	Date received	63-68
		6851		JAN 0 5 1998	
	Date of inspection	Inspector			
	Remarks				



# The Ontario Water Resources Act

## WATER WELL RECORD

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

5117939

Municipality **51007** Con. **CON** **09**

County or District <b>Peterborough</b>	Township/Borough/City/Town/Village <b>Douro Township</b>	Con block tract survey, etc. <b>Con. 9</b>	Lot <b>3</b>
Address <b>R.R. # 10 Peterborough, Ont</b>		Date completed <b>19 10 98</b> day month year	
21	Zone <b>K75</b>	Elevation <b>643</b>	Basin Code <b>ii</b>

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

[illegible][illegible]

WATER RECORD					
<b>Water found at - feet</b>	<b>Kind of water</b>				
13-13 1 <input checked="" type="checkbox"/> Fresh 1 <input type="checkbox"/> Salty	3 4 6	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	14		
15-18 1 <input type="checkbox"/> Fresh 7 <input type="checkbox"/> Salty	3 4 6	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	19		
20-23 1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 4 6	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	24		
25-28 1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 4 6	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	29		
30-33 1 <input type="checkbox"/> Fresh 2 <input type="checkbox"/> Salty	3 4 6	<input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals <input type="checkbox"/> Gas	34		

51 CASING & OPEN HOLE RECORD					
Inside diam inches	Material	Wall thickness inches	Depth - feet		
			From	To	
10-11 36	1 <input type="checkbox"/> Steel 2 <input type="checkbox"/> Galvanized 3 <input checked="" type="checkbox"/> Concrete 4 <input type="checkbox"/> Open hole 5 <input type="checkbox"/> Plastic	12 2 1/2	1	20	
17-18	1 <input type="checkbox"/> Steel 2 <input type="checkbox"/> Galvanized 3 <input type="checkbox"/> Concrete 4 <input type="checkbox"/> Open hole 5 <input type="checkbox"/> Plastic	19		20-23	
24-25	1 <input type="checkbox"/> Steel 2 <input type="checkbox"/> Galvanized 3 <input type="checkbox"/> Concrete 4 <input type="checkbox"/> Open hole 5 <input type="checkbox"/> Plastic	26		27-30	

SCREEN	Sizes of opening (Slot No.)	31 33	Diameter	14 38	Length	39 44
	12 x 10'		inches		feet	
	Material and type	Depth at top of screen		41 44	3'	
	Clear Stone	14		feet		

61				PLUGGING & SEALING RECORD			
<input type="checkbox"/> Annular space				<input type="checkbox"/> Abandonment			
Depth set at - feet				Material and type (Cement grout, bentonite, etc.)			
From		To					
10-13		15-17		Cement			
13-21		22-25		Clayee Slurr			
26-29		30-33		80			

71	Pumping test method		10	Pumping rate		11-14	Duration of pumping	
	<input checked="" type="checkbox"/> Pump	<input type="checkbox"/> Baller		3.52		GPM	.....	45-46 Hours 3.0 Mins
	Static level		19-21	Water level end of pumping		25	Water levels during	
	1		2	1		Pumping		2
	Recovery							
8		feet	0	feet	15 minutes	26-28	30 minutes	29-31
16		feet	20	feet	45 minutes	32-34	60 minutes	35-37
If flowing give rate		38-41	Pump intake set at			Water at end of test		42
GPM			1.5		feet	<input checked="" type="checkbox"/> Clear		<input type="checkbox"/> Cloudy
Recommended pump type			Recommended pump setting		43-45	Recommended pump rate		46-49
<input checked="" type="checkbox"/> Shallow		<input type="checkbox"/> Deep	1.5		feet	6		GPM

<b>FINAL STATUS OF WELL</b>			54
1	<input checked="" type="checkbox"/> Water supply	5	<input type="checkbox"/> Abandoned, insufficient supply
2	<input type="checkbox"/> Observation well	6	<input type="checkbox"/> Abandoned, poor quality
3	<input type="checkbox"/> Test hole	7	<input type="checkbox"/> Abandoned (Other)
4	<input type="checkbox"/> Recharge well	8	<input type="checkbox"/> Dewatering
		9	<input type="checkbox"/> Unfinished
		10	<input type="checkbox"/> Replacement well

---

<b>WATER USE</b>		55-56	
1	<input checked="" type="checkbox"/> Domestic	5	<input type="checkbox"/> Commercial
2	<input type="checkbox"/> Stock	6	<input type="checkbox"/> Municipal
3	<input type="checkbox"/> Irrigation	7	<input type="checkbox"/> Public supply
4	<input type="checkbox"/> Industrial	8	<input type="checkbox"/> Cooling & air conditioning
		9	<input type="checkbox"/> Not used
		10	<input type="checkbox"/> Other .....

---

<b>METHOD OF CONSTRUCTION</b>		57	
1	<input type="checkbox"/> Cable tool	5	<input type="checkbox"/> Air percussion
2	<input type="checkbox"/> Rotary (conventional)	6	<input type="checkbox"/> Boring
3	<input type="checkbox"/> Rotary (reverse)	7	<input type="checkbox"/> Diamond
4	<input type="checkbox"/> Rotary (air)	8	<input type="checkbox"/> Jetting
		9	<input type="checkbox"/> Driving
		10	<input checked="" type="checkbox"/> Digging
		11	<input type="checkbox"/> Other .....

**LOCATION OF WELL**

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

IV

well

50 FT

House

lane way

lot line

169600

Name of Well Contractor	Well Contractor's Licence No.
Jeff Fallis Excavating Ltd.	6023
Address	
R.R. #11 Peterborough, Ont.	
Name of Well Technician	Well Technician's Licence No.
Jeff Fallis	T-0451
Signature of Technician/Contractor	Submission date
Jeff Fallis	day 14 mo 11 yr 95

MINISTRY USE ONLY	Data source	58	Contract no.	59 62	Date received	63 68
			6023		NOV 19 1998	
	Date of inspection		Inspector			
	Remarks					
	CSS. ES9					

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 1/10<sup>th</sup> of a metre.
- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information

[Redacted Well Owner Information]

Address of Well Location (County/District/Municipality) PETER BOURGHE... Township DOUGO... Lot 26 Concession 9  
RR#/Street Number/Name 8th Line DOUGO... City/Town/Village Site/Compartment/Block/Tract etc.  
GPS Reading NAD Zone Easting Northing Unit Make/Model Mode of Operation: ☐ Undifferentiated ☒ Averaged  
8 3 17 7188378 4914423 GARMIN ☐ Differentiated, specify TM.

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
BROWN	TOPSOIL			0	0.30
BROWN	CLAY, COBBLES,			0.30	3.81
GREY	CLAY, SILT			3.81	5.48
GREY	SHALE, GRAVEL, LAYERS.			5.48	6.09
GREY	LIMESTONE ROCK			6.09	32.30

<b>Hole Diameter</b> Depth From To Metres Centimetres 0 32.80 159	<b>Construction Record</b> Inside diam centimetres Material Wall thickness centimetres Depth From To Metres 15.9 Steel Fibreglass 15.9 0 5.48 Casing Screen No Casing or Screen Open hole 5.48 32.30	<b>Test of Well Yield</b> Pumping test method Draw Down Recovery PUMP Pump intake set at - (metres) 31.08 Static Level 2.43 Pumping rate - (litres/min) 9.09 1 3.04 1 27.52 Duration of pumping 2 3.65 2 27.00 Final water level end of pumping 3 4.26 3 26.21 Recommended pump type 4 4.87 4 25.60 Recommended pump depth. 31.08 metres 5 5.48 5 24.38 Recommended pump rate. 9.09 (litres/min) 10 8.07 10 23.01 If flowing give rate - (litres/min) 15 9.75 15 21.73 20 12.34 20 20.87 25 14.63 25 19.20 If pumping discontinued, give reason. 30 17.06 30 18.57 40 21.03 40 16.79 50 22.77 50 15.24 60 28.04 60 13.96
---	--	--

**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 5.48 BENTONITE SLURRY  
5.48 6.09 GRAVEL.

**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 BURGESS WELL DRILLING Well Contractor's Licence No. 1455  
Business Address (street name, number, city etc.) RR#1 OMBEE, ONT.  
Name of Well Technician (last name, first name) LARRY BERT Well Technician's Licence No. T-10  
Signature of Technician/Contractor Date Submitted YYYY MM DD  
X [Signature] 2006 08 01

**Location of Well**  
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.  
WAGHAN RD.  
[Diagram showing well location relative to road, lot line, and building]  
Audit No. Z 36084 Date Well Completed YYYY MM DD 2006 07 31  
Was the well owner's information package delivered? ☒ Yes ☐ No Date Delivered YYYY MM DD 2006 08 01

**Ministry Use Only**  
Data Source Contractor 1455  
Date Received APR 16 2007 MM DD Date of Inspection YYYY MM DD  
Remarks Well Record Number



A067046

Measurements recorded in: ☐ Metric ☒ Imperial

Page of

## Well Owner's Information

Address of Well Location (Street Number/Name) 142 8th line Douco. Township Douco. Range 2 Section 9

County/District/Municipality Peterborough City/Town/Village Lakefield Province Ontario Postal Code

UTM Coordinates Zone 17 Easting 719298 Northing 4913519 Municipal Plan and Sublot Number 45R-14180 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 CLAY		BOULDER, GRAVEL,		0 36
GREY GRAVEL.		CLAY, COBBLES, SAND.		36 75
GREY LIMESTONE ROCK				75 90

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
From To		
0 20'	BEUTONITE SLURRY.	

Method of Construction	Well Use
<input checked="" type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (Conventional) <input type="checkbox"/> Rotary (Reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Air percussion <input type="checkbox"/> Other, specify	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Livestock <input type="checkbox"/> Industrial <input type="checkbox"/> Other, specify
<input type="checkbox"/> Diamond <input type="checkbox"/> Jetting <input type="checkbox"/> Driving <input type="checkbox"/> Digging	<input type="checkbox"/> Commercial <input type="checkbox"/> Municipal <input type="checkbox"/> Test Hole <input type="checkbox"/> Cooling & Air Conditioning <input type="checkbox"/> Not used <input type="checkbox"/> Dewatering <input type="checkbox"/> 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	
6 1/4"	STEEL	188W	0 75'	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Replacement Well <input type="checkbox"/> Test Hole <input type="checkbox"/> Recharge Well <input type="checkbox"/> Dewatering Well <input type="checkbox"/> Observation and/or Monitoring Hole <input type="checkbox"/> Alteration (Construction) <input type="checkbox"/> Abandoned, Insufficient Supply <input type="checkbox"/> Abandoned, Poor Water Quality <input type="checkbox"/> Abandoned, other, specify <input type="checkbox"/> Other, specify

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: <input checked="" type="checkbox"/> Fresh <input type="checkbox"/> Untested	Depth (m/ft)	Diameter (cm/in)
		From To	
75-90 (m/ft)	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	0 90	6 1/4"
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Well Contractor and Well Technician Information

Business Name of Well Contractor BURGESS WELL DRILLING Well Contractor's Licence No. 1455

Business Address (Street Number/Name) 467 Emily Park Rd. Municipality Ormeau

Province Ont. Postal Code K0L2W0 Business E-mail Address

Bus. Telephone No. (inc. area code) 705-799-5871 Name of Well Technician (Last Name, First Name) WATSON, KYLE

Well Technician's Licence No. 3424 Signature of Technician and/or Contractor [Signature] Date Submitted 20080915

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
<input checked="" type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify		Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m/ft) <u>85'</u>		1	26
Pumping rate (l/min / GPM) <u>5.6 R.M.</u>		2	30.1
Duration of pumping <u>1</u> hrs + <u>0</u> min		3	33
Final water level end of pumping (m/ft) <u>48'</u>		4	35.4
If flowing give rate (l/min / GPM)		5	37
Recommended pump depth (m/ft) <u>85'</u>		10	39.5
Recommended pump rate (l/min / GPM) <u>5.6 R.M.</u>		15	46.7
Well production (l/min / GPM) <u>5.6 R.M.</u>		20	51.3
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		25	54.2
		30	56.2
		40	57.5
		50	59
		60	56.2
			48

Map of Well Location

Please provide a map below following instructions on the back.

Douco.

8th line.

142

467

Emily Park Rd.

Ormeau

Comments:

Well owner's information package delivered ☒ Yes ☐ No

Date Package Delivered 20080924

Date Work Completed 20080915

Ministry Use Only

Audit No. 85441

Recd. APR 06 2009



A067031

Address of Well Location (Street Number/Name) 312 County Rd Mail		Township Doup Dummer	Lot PT 3	Concession 9
County/District/Municipality Peterbro		City/Town/Village Peterbro	Province Ontario	Postal Code K9B 6Y2
UTM Coordinates NAD 83	Zone 17	Eastings 718327	Northings 4913964	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	Depth (m/ft)	
			From	To
DK BROWN	Topsoil		0	2.5
BROWN	CLAY	COBBLES	2.5	41
GREY	CLAY	Cobbles, gravel.	41	85
GREY, GRAVEL, SHALE,	SAND, CLAY.		85	89
GREY LIMESTONE	ROCK		89	100

Annular Space			Results of Well Yield Testing			
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m <sup>3</sup> /ft <sup>3</sup> )	Draw Down		Recovery	
From	To		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
0	20'	BENTONITE SLURRY.				
			Static Level	38-5		
			1	46	1	67
					2	62
			2	42		
			3	44.5	3	59-5
			4	47	4	54-9
			5	49.7	5	51-7
			10	56	10	46-1
			15	61	15	44-
			20	66	20	40-2
			25	71-5	25	39.4
			30	74.0	30	38.7
			40	"	40	38.5
			50	"	50	
			60	"	60	

Method of Construction		Well Use		
<input checked="" type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, specify		<input type="checkbox"/> 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 1/4	STEEL	88W	0	89	<input type="checkbox"/> Water Supply
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Insufficient Supply
					<input type="checkbox"/> Abandoned, Poor Water Quality
					<input type="checkbox"/> Abandoned, other, specify
					<input type="checkbox"/> Other, specify

Construction Record - Screen				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)		
			From	To	
					<input type="checkbox"/> Water Supply
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Insufficient Supply
					<input type="checkbox"/> Abandoned, Poor Water Quality
					<input type="checkbox"/> Abandoned, other, specify
					<input type="checkbox"/> Other, specify

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input checked="" type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	Depth (m/ft)	Diameter (cm/in)
		From	To
89-100		0	100'
			6 1/4

Well Contractor and Well Technician Information			
Business Name of Well Contractor BURGESS WELL DRILLING	Well Contractor's Licence No. 1455		
Business Address (Street Number/Name) 467 Emily Park Rd.	Municipality Oranmore		
Province ONT.	Postal Code K0L 2W0	Business E-mail Address	
Bus. Telephone No. (inc. area code) 705 799 5871	Name of Well Technician (Last Name, First Name) WARREN, KYLE		
Well Technician's Licence No. 3424	Signature of Technician and/or Contractor 	Date Submitted 20080820	

Map of Well Location			
Please provide a map below following instructions on the back.			
<p>Comments:</p>			

Ministry Use Only	
Audit No. <b>Z 80941</b>	Received
<b>APR 08 2009</b>	

Measurements recorded in: ☐ Metric ☒ Imperial

Well Location

Address of Well Location (Street Number/Name) <b>185 DOURO 8TH LINE</b>		Township <b>DOURO</b>	Lot <b>3</b>	Concession <b>8</b>
County/District/Municipality <b>PETERBOROUGH</b>		City/Town/Village	Province <b>Ontario</b>	Postal Code
UTM Coordinates NAD 83	Zone <b>17</b>	Easting <b>719395</b>	Northings <b>4914113</b>	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)
BROWN	TOP SOIL		SOFT	0 6
BROWN	CLAY		SOFT	6 18
GREY	GRAVEL	COBBLES	LOOSE	18 23
GREY	CLAY	GRAVEL	HARD PACKED	23 42
GREY	SHALE LIMESTONE		LAYERED	42 43
GREY	LIMESTONE		HARD	43 61

Annular Space			
Depth Set at (m)	Type of Sealant Used (Material and Type)	Volume Placed (m³)	
0 20	BENTONITE SLURRY	30 GAL	
	1 BAG HOLE PLUG	50 LBS	

Method of Construction	Well Use
<input checked="" type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (Conventional) <input type="checkbox"/> Rotary (Reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Air percussion <input type="checkbox"/> Other, specify	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Livestock <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Other, specify

Construction Record - Casing				Status of Well
Inside Diameter (cm)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm)	Depth (m)	
6 1/4	STEEL	.188	43'	<input checked="" type="checkbox"/> Water Supply
6 1/4	OPEN HOLE		43' 61'	<input type="checkbox"/> Replacement Well

Construction Record - Screen				Status of Well
Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m)	
				<input type="checkbox"/> Test Hole
				<input type="checkbox"/> Recharge Well
				<input type="checkbox"/> Dewatering Well
				<input type="checkbox"/> Observation and/or Monitoring Hole
				<input type="checkbox"/> Alteration (Construction)
				<input type="checkbox"/> Abandoned, Insufficient Supply
				<input type="checkbox"/> Abandoned, Poor Water Quality
				<input type="checkbox"/> Abandoned, other, specify
				<input type="checkbox"/> Other, specify

Water Details		Hole Diameter	
Water found at Depth (m)	Kind of Water: <input checked="" type="checkbox"/> Fresh <input type="checkbox"/> Untested	Depth (m)	Diameter (cm)
43	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	0 61'	6 1/4
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		
	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Business Name of Well Contractor <b>HERB LANGWELL DRILLING LTD</b>		Well Contractor's Licence No. <b>33617</b>
Business Address (Street Number/Name) <b>4852 HWY #7</b>		Municipality <b>ONESEE</b>
Province <b>ON</b>	Postal Code <b>K0L2W0</b>	Business E-mail Address
Bus. Telephone No. (inc. area code) <b>2631</b>		
Name of Well Technician (Last Name, First Name) <b>FRANKS TED</b>		
Signature of Technician and/or Contractor <i>Ted Franks</i>		
Date Submitted <b>2011/10/03</b>		

Results of Well Yield Testing			
After test of well yield, water was:		Draw Down	
<input checked="" type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify		Time (min)	Water Level (m)
If pumping discontinued, give reason:		Static Level	
Pump intake set at (m)		1	11'
Pumping rate (l/min / GPM)		2	12'9"
Duration of pumping		3	14'7"
4 hrs + 00 min		4	16'9"
Final water level end of pumping (m)		5	18'
If flowing give rate (l/min / GPM)		10	24'2"
Recommended pump depth (m)		15	27'
58		20	29'3"
Recommended pump rate (l/min / GPM)		25	31'
3 GPM		30	33'8"
Well production (l/min / GPM)		40	41'
212 GPM		50	43'5"
Disinfected?		60	48
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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
<input checked="" type="checkbox"/> Yes	2011/09/26
<input type="checkbox"/> No	Date Work Completed
	2011/10/03
Ministry Use Only	
Audit No.	2139560
Received	JAN 19 2012