TBT ENGINEERING
CONSULTING GROUP

December 20, 2017

TBTE Reference Number: 17-319

Dante Di Gregorio, H.B.A., J.D.
Lempiala Sand and Gravel Limited
dante@brunoscontracting.com

RE: Trout Lake Pit - Groundwater Summary Statement

1 INTRODUCTION

TBT Engineering Limited (TBTE) was retained by Lempiala Sand and Gravel Limited to complete a Groundwater Summary Statement (GWSS) for their Trout Lake Pit.

While the water table is partially controlled by topography, other factors also influence its elevation. Rock can have low porosity and low permeability, impeding the movement of water. Water movement through rock mainly occurs along fractures or faults, which are not necessarily interconnected or consistent.

Porosity and permeability are dictated by rock or soil type and geologic history. Complicated structures such as perched water tables may be present on specific sites, making the actual groundwater table difficult to assess. A perched water table is not typically considered for the purpose of establishing the on-site water table.

This summary relies upon hydrogeological interpretations based on a desktop review of available mapping, well records, and shallow test pit investigations (<6 m). This summary was reviewed by a qualified person (in accordance with the Professional Geoscientist Act, 2000). The development and preparation of this GWSS was carried out with guidance and reference to the Ministry of Natural Resources and Forestry Policy No. A.R.4.01.04 memorandum.

2 SCOPE

The intent of this GWSS is to mitigate the impacts of pit development on groundwater and surface water resources at the site by identifying extraction limitations and offsets in accordance with the Aggregate Resource Act (ARA) Policies.

This GWSS constitutes TBTE's professional opinion of the groundwater and site conditions determined through on-site field investigations and available mapping (geological and topographical).

3 SITE LOCATION

The Trout Lake Pit site is located approximately 20 km northwest of Thunder Bay at UTM Zone 16U Northing 5387483, Easting 324529. Access to the site is by road off of Highway 591. Figure 1 shows the location of the site.

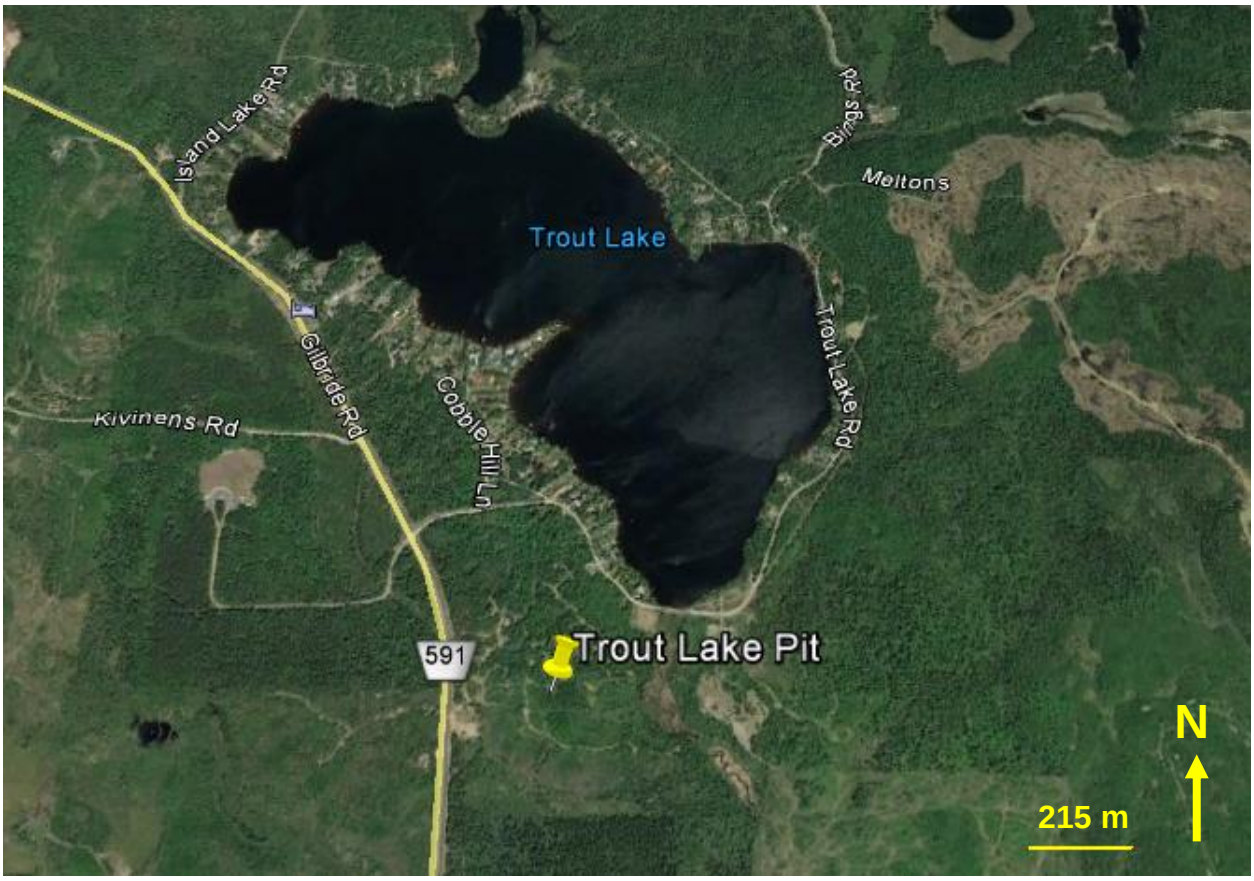


Figure 1: **Trout Lake Pit Site Location**

Figure 2 shows the approximate permit boundary on site. Bracketed numbers correspond with the surface water features listed in Table 1.

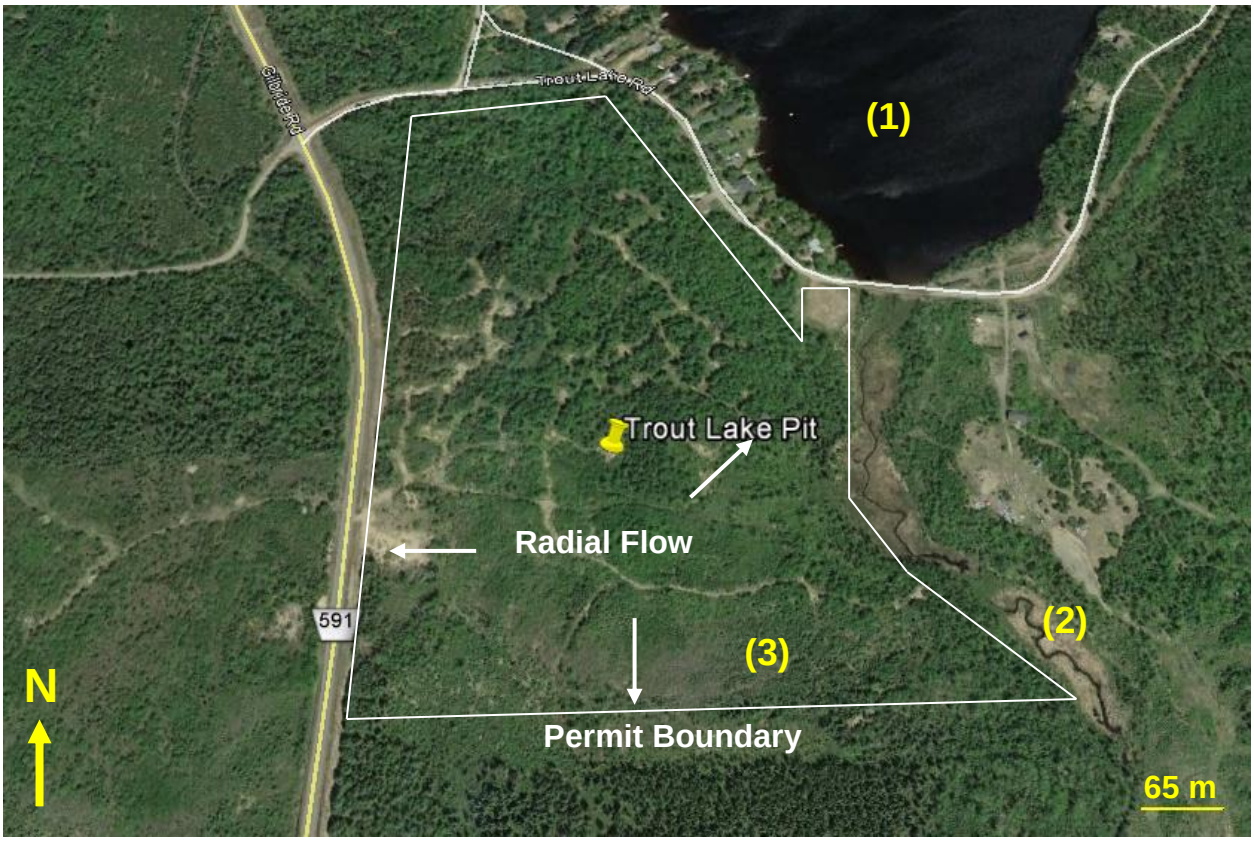


Figure 2: **Trout Lake Pit Approximate Permit Boundary**

4 PHYSICAL GEOGRAPHY

The site is located in the boreal forest. According to the Northern Ontario Engineering Geology Terrain Study (NOEGTS), the proposed pit is located on an outwash plain bordering bedrock knobs. The site is heavily forested and hosts a network of trails. There are oversized boulders present at surface throughout the site.

5 EXISTING WELL DATA

There are several MOECC wells near to the site. Wells 6107269 and 6102040 were considered most relevant for analysis given their depths and geographic locations north and south of the site. Well 6107269 is located in UTM Zone 16 around Northing 5387671 and Easting 324680, around the northeast boundary the site. Water was identified at 431 mASL. Well 6102040 is located in UTM Zone 16 around Northing 5386602 and Easting 324370.3 approximately 660 m

south of the site. Water was identified at 446.5 mASL. The bedrock within these wells was identified as granite. Well records are included at the rear of this letter.

6 SURFACE WATERS

In general, the site slopes toward the southeast. As shown in Figure 2, surface waters flow radially from the topographic high near the centre of the site. According to Land Information Ontario's Metadata Management Tool, the site is located in the Dog Lake Watershed. Flows from the site eventually drain to Lake Superior.

Surface water features in the area surrounding the site are summarized in Table 1.

Table 1: Surface Water Feature Characteristics

Feature	Distance from Site	UTM Zone 16U		Approximated Elevation (mASL)
		Easting	Northing	
Trout Lake (1)	88 m NE	324783.54	5387799.54	451
River (2)	45 m E	324915.68	5387291.23	450
Floodplain (3)	S side	5387288.18	5387288.18	450

7 FIELD INVESTIGATION

The site was inspected on August 3, 2017. Five (5) test holes were excavated on site to determine the composition of the subsurface. Figure 3 shows the locations of the test holes. Test hole logs are included at the rear of this memo. The subsurface primarily consists of sand with varying fractions of gravel and silt.

Figure 4 shows a photo depicting the foliage and on site.

Figure 3: Test Hole Locations

Figure 4: Site Photo

8 GROUNDWATER TABLE

Water elevations used for the estimation of the groundwater table were obtained from the field investigations and Google Earth imagery. Surface water features are assumed to be hydraulically connected to the groundwater system. Water elevations are assumed to grade uniformly between surface features. Water elevations on site were estimated by extrapolating on this data. The more conservative (higher) value was used in analysis.

Groundwater was encountered in TH3 at 5.0 m below grade, having an estimated elevation of 455 masl based on available topographic details.

The attached water well records were obtained from the existing wells in 1978 and 2004. The wells are located further from the site than the surface water features; thus their water levels are considered irrelevant for this study. However, the wells do provide an indication of subsurface composition.

Figure 5 shows an estimated groundwater level contour plan. The cyan numbers represent known groundwater elevations. It should be noted that this plan is an estimate as the actual location of the groundwater contours are dependent on factors such as subsurface layer permeability.

Based on the surface water features, the groundwater table is anticipated to grade from 455 to 452 masl along the western boundary with groundwater mounding to 460 masl near the centre of the site, and grading from 455 masl at the northeast corner sloping to 450 masl at the southeast corner, illustrated in Figure 5. In general, the gradient of the groundwater flows outward (to the west and east) from the centre of the site and is anticipated to mimic the shape of ground surface.

9 EXTRACTION LIMITS

For a pit above water, the final depth of extraction must be at least 1.5 m above the established groundwater table. Based on the estimated groundwater levels, the extraction limit to maintain a 1.5 m vertical buffer between the pit extraction limit and the estimated groundwater table ranges from 456.5 masl to 453.5 masl in the west, grading upward to 461.5 masl within the centre of the site, and 456.5 to 451.5 masl along the eastern boundary.

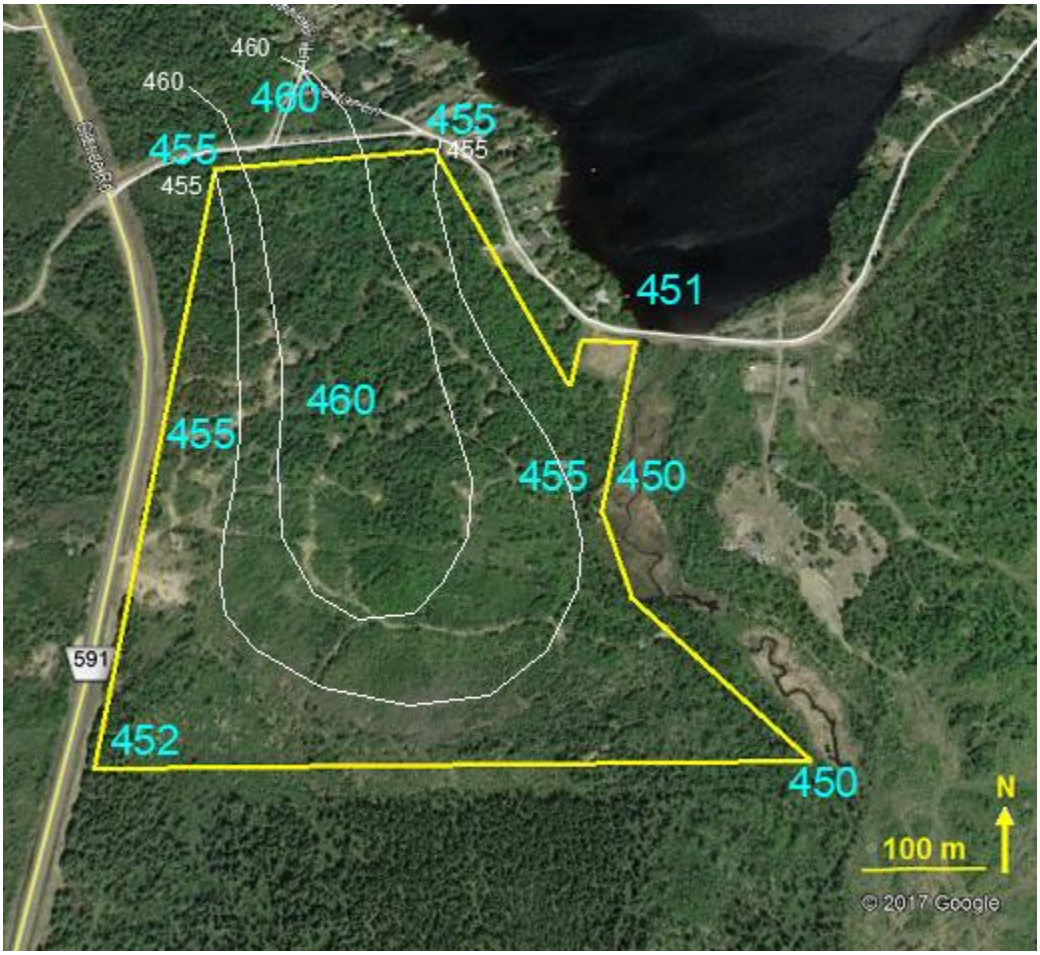


Figure 5: Groundwater Contour Estimate

10 SUMMARY

The groundwater table is anticipated to grade from 455 to 452 masl along the western boundary with groundwater mounding to 460 masl near the centre of the site, mimicking topographical conditions, and grading from 455 masl at the northeast corner sloping to 450 masl at the southeast corner. The extraction limit to maintain a 1.5 m vertical buffer between the pit extraction limit and the estimated groundwater table ranges from 456.5 masl to 453.5 masl in the west, grading upward to 461.5 masl within the centre of the site, and 456.5 to 451.5 masl along the eastern boundary.

11 CLOSURE

Conclusions and recommendations presented in this Groundwater Summary Statement are based on the best available information at the time of preparation, TBTE's field investigations, and published mapping. This report constitutes the professional opinion of TBTE.

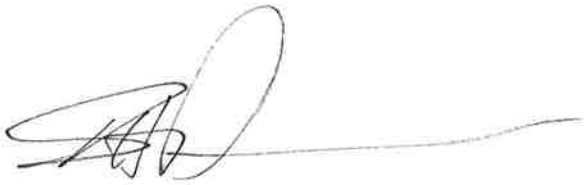
Conditions may become apparent during extraction that were not detected and could not be anticipated at the time of the site investigation. It is recommended that TBTE be contacted to review the significance of the new information, and its potential impact on the recommendations provided in this report.

TBTE accepts no responsibility for damages suffered by any third party as a result of decisions made based on this report. Should there be any changes to project details, or should you have any questions, please contact the undersigned.

Prepared by:

Leah Cosby, P.Eng
TBT Engineering Limited

Reviewed by:



Scott Peterson, P.Geo
TBT Engineering Limited

LOG OF TEST HOLE TH-01

PROJECT: **NEL 1 & GWSSs**
LOCATION: **Trout Lake Pit**
Gorham, Ontario
CLIENT: **Lampiala Sand and Gravel Limited**
SURFACE ELEV.: **469.0 metres**

EQUIPMENT: **Excavator**
DIAMETER: **N/A**
COORDINATES: **16U N 5387580 E 324372**
VV EQUIPMENT:
DATE: **3 August 2017**
TBT Ref. No. **17-319**

DEPTH	ELEV.	DESCRIPTION	STRAT PLOT	% RECOVERY	TYPE	"N" VALUES	GROUND WATER CONDITIONS
0	469	SILT					
1	468						
2	467	GRAVEL - Sandy					
3	466	SAND - Gravelly					
4	465						
5	464	End of Test Hole @ 5.0 m.					
6	463						
7	462						

DEPTH SCALE: 0, 1, 2, 3, 4, 5, 6, 7

VOLATILE VAPOURS
◆ PPM
40 80 120 160 200
✖ LEL ▪ SPT (N)
0 20 40 60 80 100

PLASTIC LIMIT (W_P) | NATURAL MOISTURE CONTENT (W) | LIQUID LIMIT (W_L)
WATER CONTENT (%)
20 40 60

REMARKS
GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

TBT Engineering Limited
1918 Young Street
Thunder Bay, Ontario P7E 6T9
PH: 807-624-5160
FX: 807-624-5161
Email: tbte@tbte.ca
Web: www.tbte.ca

SAMPLE TYPE LEGEND

AS	Auger Sample
SS	Split Spoon Sample
TW	70mm Thin Wall Tube
CC	Concrete Core
RC	Rock Core
PS	Ponar Sample
CB	Core Barrel
WS	Wash Sample

NOTES:
Elevations are based on GPS estimate.

ENCLOSURE 1

PAGE 1 OF 1

02A-1 GEO WITH MW 17-319 TROUT LAKE.GPJ TBT.GDT 19/12/17

LOG OF TEST HOLE TH-02

PROJECT: **NEL 1 & GWSSs**
LOCATION: **Trout Lake Pit**
Gorham, Ontario
CLIENT: **Lampiala Sand and Gravel Limited**
SURFACE ELEV.: **471.0 metres**

EQUIPMENT: **Excavator**
DIAMETER: **N/A**
COORDINATES: **16U N 5387720 E 324499**
VV EQUIPMENT:
DATE: **3 August 2017**
TBT Ref. No. **17-319**

DEPTH	ELEV.	DESCRIPTION	STRAT PLOT	% RECOVERY	TYPE	"N" VALUES	GROUND WATER CONDITIONS
0	471	SAND & SILT					
1	470						
2	469						
3	468	SAND - with silt					
4	467	SAND - Gravelly					
5	466	End of Test Hole @ 5.0 m.					
6	465						
7	464						

VOLATILE VAPOURS ◆ PPM: 40 80 120 160 200
✖ LEL ▪ SPT (N)
DEPTH SCALE: 0 20 40 60 80 100

PLASTIC LIMIT (w_P) | NATURAL MOISTURE CONTENT (w) | LIQUID LIMIT (w_L)
WATER CONTENT (%): 20 40 60

REMARKS
GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

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Web: www.tbte.ca

SAMPLE TYPE LEGEND

AS	Auger Sample
SS	Split Spoon Sample
TW	70mm Thin Wall Tube
CC	Concrete Core
RC	Rock Core
PS	Ponar Sample
CB	Core Barrel
WS	Wash Sample

NOTES:
Elevations are based on GPS estimate.

ENCLOSURE 2

PAGE 1 OF 1

02A-1 GEO WITH MW 17-319 TROUT LAKE.GPJ TBT.GDT 19/12/17

LOG OF TEST HOLE TH-03

PROJECT: **NEL 1 & GWSSs**
LOCATION: **Trout Lake Pit**
Gorham, Ontario
CLIENT: **Lampiala Sand and Gravel Limited**
SURFACE ELEV.: **460.0 metres**

EQUIPMENT: **Excavator**
DIAMETER: **N/A**
COORDINATES: **16U N 5387483 E 324701**
VV EQUIPMENT:
DATE: **3 August 2017**
TBT Ref. No. **17-319**

DEPTH	ELEV.	DESCRIPTION	STRAT PLOT	% RECOVERY	TYPE	"N" VALUES	GROUND WATER CONDITIONS	DEPTH SCALE	REMARKS
0	460	SAND						0	
1	459							1	
2	458							2	
3	457	SAND - Silty						3	
4	456							4	
5	455	End of Test Hole @ 5.0 m.						5	Water table @ 5.0 m depth.
6	454							6	
7	453							7	

VOLATILE VAPOURS ◆ PPM: 40 80 120 160 200
✖ LEL ▪ SPT (N): 0 20 40 60 80 100

PLASTIC LIMIT (w_P) | NATURAL MOISTURE CONTENT (w) | LIQUID LIMIT (w_L)
WATER CONTENT (%): 20 40 60

REMARKS: GRAIN SIZE DISTRIBUTION (%) — GR SA SI CL

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Web: www.tbte.ca

SAMPLE TYPE LEGEND

AS	Auger Sample
SS	Split Spoon Sample
TW	70mm Thin Wall Tube
CC	Concrete Core
RC	Rock Core
PS	Ponar Sample
CB	Core Barrel
WS	Wash Sample

NOTES:
Elevations are based on GPS estimate.

ENCLOSURE 3

PAGE 1 OF 1

02A-1 GEO WITH MW 17-319 TROUT LAKE.GPJ TBT.GDT 19/12/17

LOG OF TEST HOLE TH-04

PROJECT: **NEL 1 & GWSSs**
LOCATION: **Trout Lake Pit**
Gorham, Ontario
CLIENT: **Lampiala Sand and Gravel Limited**
SURFACE ELEV.: **462.0 metres**

EQUIPMENT: **Excavator**
DIAMETER: **N/A**
COORDINATES: **16U N 5387320 E 324564**
VV EQUIPMENT:
DATE: **3 August 2017**
TBT Ref. No. **17-319**

DEPTH	ELEV.	DESCRIPTION	STRAT PLOT	% RECOVERY	TYPE	"N" VALUES	GROUND WATER CONDITIONS	DEPTH SCALE
0	462	SAND - Silty						0
1	461							1
		SAND - with gravel						
2	460							2
3	459							3
4	458							4
5	457							5
6	456	End of Test Hole @ 6.0 m.						6
7	455							7

VOLATILE VAPOURS ◆ PPM: 40 80 120 160 200
✖ LEL ▪ SPT (N): 0 20 40 60 80 100

PLASTIC LIMIT (w_P) | NATURAL MOISTURE CONTENT (w) | LIQUID LIMIT (w_L)
WATER CONTENT (%): 20 40 60

REMARKS
GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

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FX: 807-624-5161
Email: tbte@tbte.ca
Web: www.tbte.ca

SAMPLE TYPE LEGEND

AS	Auger Sample
SS	Split Spoon Sample
TW	70mm Thin Wall Tube
CC	Concrete Core
RC	Rock Core
PS	Ponar Sample
CB	Core Barrel
WS	Wash Sample

NOTES:
Elevations are based on GPS estimate.

ENCLOSURE 1

PAGE 1 OF 1

02A-1 GEO WITH MW 17-319 TROUT LAKE.GPJ TBT.GDT 19/12/17

LOG OF TEST HOLE TH-05

PROJECT: **NEL 1 & GWSSs**
LOCATION: **Trout Lake Pit**
Gorham, Ontario
CLIENT: **Lampiala Sand and Gravel Limited**
SURFACE ELEV.: **469.0 metres**

EQUIPMENT: **Excavator**
DIAMETER: **N/A**
COORDINATES: **16U N 5387518 E 324474**
VV EQUIPMENT:
DATE: **3 August 2017**
TBT Ref. No. **17-319**

DEPTH	ELEV.	DESCRIPTION	STRAT PLOT	% RECOVERY	TYPE	"N" VALUES	GROUND WATER CONDITIONS	DEPTH SCALE
0	469	SAND - trace gravel, trace silt						0
1	468							1
2	467							2
3	466							3
4	465	GRAVEL						4
5	464	GRAVEL - Sandy, trace silt						5
6	463	End of Test Hole @ 5.0 m.						6
7	462							7

VOLATILE VAPOURS ◆ PPM: 40 80 120 160 200
✖ LEL ▪ SPT (N)
0 20 40 60 80 100

PLASTIC LIMIT w_P | NATURAL MOISTURE CONTENT w | LIQUID LIMIT w_L
WATER CONTENT (%): 20 40 60

REMARKS
GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

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SAMPLE TYPE LEGEND

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SS	Split Spoon Sample
TW	70mm Thin Wall Tube
CC	Concrete Core
RC	Rock Core
PS	Ponar Sample
CB	Core Barrel
WS	Wash Sample

NOTES:
Elevations are based on GPS estimate.

ENCLOSURE 5

PAGE 1 OF 1

02A-1 GEO WITH MW 17-319 TROUT LAKE.GPJ TBT.GDT 19/12/17

52A11

Ministry of the Environment

Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

11 6102040 MUNICIP 61068 CON. CON 07

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC	LOT
THUNDER BAY	GORHAM TOWNSHIP	N½ of N.W. ¼ CONC 7	018

[redacted] .# 14 THUNDER BAY "P" ONT.

DATE COMPLETED: DAY 10 MO. 03 YR. 78

NG 86375 RC 5 ELEVATION 1550 RC 6 BASIN CODE 21

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Sand	Clay	Beach Sand	0	20
Grey	Granite		Hard	20	37
Red	Granite		Med. Hard	37	48
Grey	Granite		Med. Hard	48	94
Red	Granite		Hard	94	108
Grey	Granite		Hard	108	225

31 0020628 05 | 0037221 73 | 0048721 73 | 0094221 73 | 0108721 73 | 0225221 73

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0030	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	0023
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		23	0225
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

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

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
~~20~~	~~23~~	~~Casing set in rock~~
		~~Socket with Drive~~
		~~Shoe~~

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: ~~1/8~~ 0000 GPM

DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
019 FEET	225 FEET		FEET	222 FEET	FEET	219 FEET

IF FLOWING, GIVE RATE: GPM

PUMP INTAKE SET AT: 225 FEET

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

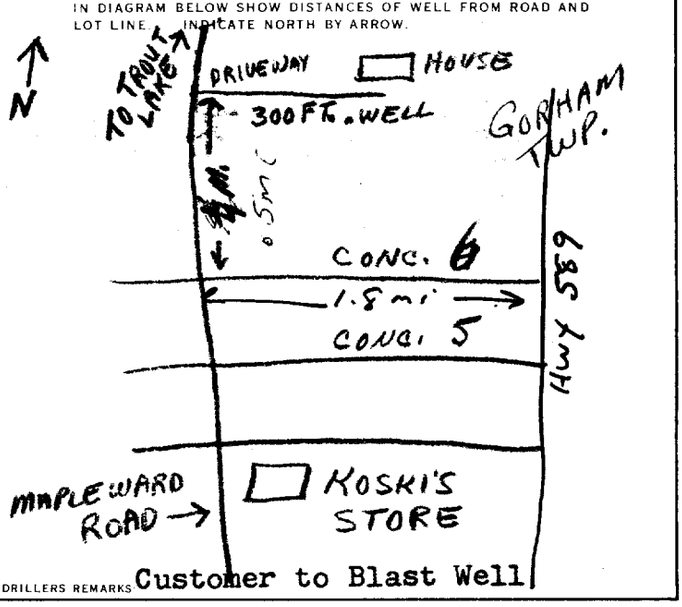
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☐ DEEP

RECOMMENDED PUMP SETTING: FEET

RECOMMENDED PUMPING RATE: GPM

LOCATION OF WELL

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



DRILLERS REMARKS: Customer to Blast Well

FINAL STATUS OF WELL: 5

1 ☐ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☒ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE

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

METHOD OF DRILLING: 4

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

CONTRACTOR

NAME OF WELL CONTRACTOR: HARDY ENTERPRISES — LICENCE NUMBER: 2568

ADDRESS: P.O. BOX 146 THUNDER BAY "F" ONT.

NAME OF DRILLER OR BORER: CHRISTINE HARDY — LICENCE NUMBER: 2567

SIGNATURE OF CONTRACTOR: Chris Hardy — SUBMISSION DATE: DAY 24 MO. 03 YR. 78

OFFICE USE ONLY

DATA SOURCE: 1 — CONTRACTOR: 2568 — DATE RECEIVED: 0 40478

DATE OF INSPECTION: Sept 05/78 — INSPECTOR: BS

REMARKS:

CSS.S8

MINISTRY OF THE ENVIRONMENT COPY

Map 52 9/11 1:50,000 Gr 243/864

FORM NO. 0506—4—77

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below) A018765

A018765

Well Record

Regulation 903 Ontario Water Resources Act

Instructions for Completing Form

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

Ministry Use Only: MUN 61068 CON CON 07 LOT 16

Well Owner's Information and Location of Well Information

[redacted]

Address of Well Location (County/District/Municipality)	Township	Lot	Concession
42 TROUT LAKE ROAD	GORHAM	16	M-118

RR#/Street Number/Name	City/Town/Village	Site/Compartment/Block/Tract etc.
42 TROUT LAKE ROAD	Ø	

GPS Reading NAD 83 Zone 16 Easting 324680 Northing 5387671 Unit Make/Model GARMIN VENTURE Mode of Operation: ☐ Undifferentiated ☑ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth Metres From	Depth Metres To
Brown	Gravel	stone's + Boulders	packed	0	22
pink Granet	Quarts		Medium - hard	22	73

Hole Diameter

Depth Metres From	Depth Metres To	Diameter Centimetres
0	22	25
22	73	15

Water Record

Water found at Metres	Kind of Water
21 m	☒ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
65 m	☒ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
m	☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was ☒ Clear and sediment free ☐ Other, specify

Chlorinated ☒ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth Metres From	Depth Metres To
Casing				
15	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.48	0	22
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen		Slot No.		
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
No Casing or Screen				
	☒ Open hole		22	73

Test of Well Yield

Pumping test method: 22 LPM

Pump intake set at - (metres) 47.8

Pumping rate - (litres/min) 22 Lpm

Duration of pumping 1 hrs + ___ min

Final water level end of pumping 45 metres

Recommended pump type. ☐ Shallow ☑ Deep

Recommended pump depth. 60 metres

Recommended pump rate. 22 (litres/min)

If flowing give rate - (litres/min)

If pumping discontinued, give reason.

Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level			
1	11.5	1	44
2	12.4	2	42.5
3	13.6	3	41.6
4	14.5	4	40.5
5	15.5	5	39.1
10	21.5	10	33.6
15	26.6	15	27.7
20	31.	20	22.5
25	35.9	25	18.6
30	38	30	14.9
40	40.4	40	11.7
50	42.6	50	10.6
60	45.	60	10.6

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	22	BENTONITE GROUT	5 CM.

Method of Construction

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

Water Use

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

Final Status of Well

☒ Water Supply ☐ Observation well ☐ Test Hole ☐ Recharge well ☐ Abandoned, insufficient supply ☐ Abandoned, poor quality ☐ Unfinished ☐ Dewatering ☐ Replacement well ☐ Abandoned, (Other)

Well Contractor/Technician Information

Name of Well Contractor: John Denkacz Wat. Well LTD

Well Contractor's Licence No. 1751

Business Address (street name, number, city etc.) P.O. Box 20091 Thunder Bay ON

Name of Well Technician (last name, first name) Chabot Darryl

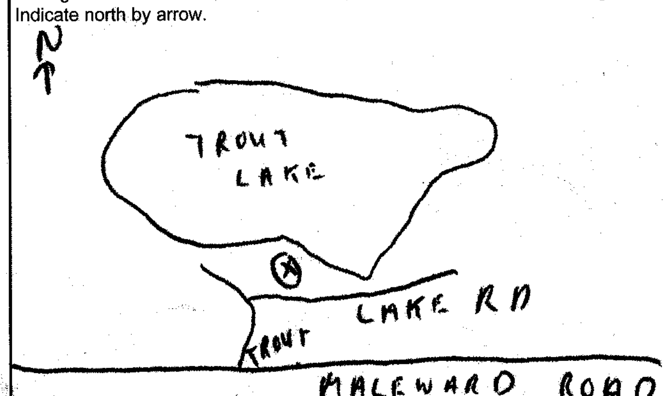
Well Technician's Licence No. T-3099

Signature of Technician/Contractor X [signature]

Date Submitted YYYY MM DD 2004 10 20

Location of Well

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



Audit No. Z 02395

Date Well Completed YYYY MM DD 2004 09 24

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

Date Delivered YYYY MM DD 2004 10 19

Ministry Use Only

Data Source

Contractor 1751

Date Received NOV 0 2 2004

Date of Inspection YYYY MM DD

Remarks

Well Record Number 6107269

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☑ Well Owner's Copy ☐ *Cette formule est disponible en français*