8885 – 8911 Lundy's Lane

Phase One Environmental Site Assessment Update

Project Location:
8885 – 8911 Lundy's Lane
Niagara Falls, Ontario
L2H 1H5

Prepared For:
M5V Developments
10 Rolling Green Court
Kleinburg, Ontario, L4H 4K7

NIAGARA SOILS SOLUTIONS LTD.

Prepared By:
Niagara Soils Solutions Ltd.
3300 Merrittville Highway, Unit 5
Thorold, ON
L2V 4Y6

Date: June 10, 2022
NSSL File No.: NS2255-01

PHASE ONE LETTER UPDATE

A Phase One Letter Update was prepared in accordance with O. Reg. 153/04 (as amended). The Phase One Letter Update is detailed below and should be read along with Figures 1-4.

The Phase One Letter Update addresses the vacant property situated at 8885 – 8911 Lundy's Lane, Niagara Falls, Ontario herein referred to as the "Phase One Property" or the "Site". Refer to Figure 1 for the Site Location Map.

Site Description

The size of the study site is approximately 0.92 hectares. The site is located northeast of the intersection at Lundy's Lane and Garner Road in the City of Niagara Falls. The property is vacant with no structures on-site and is currently covered with fill / granular material. Initial land use was noted as agricultural in 1934. The site was later redeveloped in 1954/55 for commercial and residential purposes including one [1] motel and one [1] dwelling located on the southwestern portion of the property. The motel was noted as having various owners throughout the decades including Chateau-Gay Motel from 1960 to 1975, the Anchor Motel in 1990, and the three Diamond Inn since 1995. The site also developed a "Diamond Pizza and Sub" Store at the beginning of 2009. All buildings on-site were demolished and removed in 2018 for potential land development purposes. The site has since remained vacant with no activities or operations noted. The site location and layout are illustrated in Figures 1 and 2.

Previous Environmental Report

Amec Foster Wheeler [Amec] previously completed a Phase One Environmental Site Assessment [ESA] on June 5th, 2017, of 8885 & 8911 Lundy's Lane, Niagara Falls, ON [study site]. At the time of the ESA, the site contained two [2] parallel commercial motel buildings and one [1] residential dwelling. AMEC reviewed historical information pertaining to the study site and study area, including aerial photographs, fire insurance plans, EcoLog ERIS report, and other relevant information sources. Observations of the property and surrounding properties from a site inspection were also considered for the ESA. Amec concluded no environmental issues were identified at the site and the surrounding area in 2017.

Water Bodies & Areas of Natural Significance

The Welland Canal is located approximately 4.81 km west of the study site. NSSL did not identify any significant features including provincially significant wetlands, natural heritage features, or Areas of Natural Significance onsite or within the Study Area. The Site is not considered a sensitive site based on the definition of O. Reg. 153/04.

The BDSC [Beaver Dams Shriners Creek] Beaver Dams Creek [15,488,022 m2] was identified as the watershed associated with the study site and study area. Surface water runoff and groundwater flow were noted as northwest towards the BDSC watershed.

Underground Utilities

The site is currently serviced by hydro, natural gas, municipal water, and municipal sanitary sewer. The status and location of the buried utilities are unknown. No potable water supply well or other water source was observed during the site inspection.

Regional and Site Specific Geologic and Hydrogeological Information

A review of the Ministry of Natural Resources' "Quaternary Geology, Niagara-Welland Southern Ontario, Map M2496" indicates that the Site is in an area of the Glaciolacustrine deeper water clay and silt. A review of a nearby Domestic Water Well [ID 7292256] located approximately 100 m east of the subject site completed in 2017 reports dense clay from 0.31 – 6.71 m bgs over fractured rock until borehole termination [13.72 m bgs]. A review of the Ministry of Natural Resources' "Paleozoic Geology of Niagara M2344" indicates that the dark brown or black, bituminous dolostone is from the Lockport Formation.

Regional groundwater flow is expected to be northwest towards the Niagara River. The Phase One Property is not located within 30 m of a body of water. Ponded surface water was not encountered during the site visit.

Drinking-Water Wells

The MECP provides the public with access to their well record inventory. The study site and area are serviced by the municipal drinking water system, however, well records [if available] were accessed and reviewed for information pertaining to the area's hydrogeological and geological characteristics. Five [5] well records were found within the study area [250 m radius]. The record can contain descriptive information pertaining to soil stratigraphy and aquifer groundwater levels. The water well record in the closest proximity to the study site is summarized below. All available records are provided in Appendix B.

Well ID	Description
7292256 [100 m east of the site]	0 – 0.31 m Black Unconsolidated Topsoil 0.31 – 6.71 m Brown Dense Clay 6.71 – 13.72 m Black/Grey Fractured Rock

Roads Within the Phase One Study Area

Refer to Figure 1 for the names of the roads within the Phase One Study Area.

Uses of Properties Adjacent to the Site

The study area is a mix of residential, commercial, and industrial properties. Adjacent properties were documented as commercial to the north [Lundy's Lane Sewage Pumping Station and Scott's Tent & Trailer

Park], and east [Scott's Tent & Trailer Park], a vacant lot to the south, and industrial [BV Glazing Systems] to the west. All adjacent properties are highlighted on Figure 3.

Potentially Contaminating Activities

Based on information obtained and reviewed during this Phase One ESA, three [3] Potentially Contaminating Activities associated with the site and surrounding properties were identified revealing the presence of one [1] Area of Potential Environmental Concern (APEC) on the Phase One property. A copy of the list of PCAs prescribed in O.Reg. 153/04 is provided in Appendix D.

On-site

- **PCA-1/APEC-1: #30 Importation of Fill Material of Unknown Quality.** Based on a review of aerial photographs, a review of the previous Phase One ESA, and notes made from the site analysis, NSSL identified three [3] potential areas of fill material at the study site. The aerial photographs historically identified two [2] parallel elongated commercial buildings and one [1] residential dwelling occupying the study site from 1954/55 to 2018. The buildings were demolished in 2018 and the site was made vacant with no remaining structures within the property limits. Currently, the site is relatively flat and appears to have been regraded post demolition activities. The potential of fill material of unknown quality being introduced on the site for backfilling and regrading is a PCA resulting in an APEC to the study site's soil.

Off-site

- **PCA-2: #29 Glass Manufacturing, #32 Iron and Steel Manufacturing and Processing, #33 Metal Treatment, Coating, Plating, and Finishing, #34 Metal Fabrication, #39 Paints Manufacturing, Processing, and Bulk Storage, #43 Plastics [Including Fibreglass] Manufacturing, and Processing, and #46 Rail Yards, Tracks, and Spurs.** Based on a review of the site analysis, NSSL identified a manufacturer of residential and commercial building equipment "BV Glazing Systems", approximately 30 m west of the study site. "BV Glazing Systems" was noted as a large-scale manufacturer and processor of metals and glass for walls, doors, railings, and other building equipment for residential houses and commercial sky scrappers. This commercial activity was also noted as containing a railway line connected to the "Canadian National Railway" line for shipping and receiving materials and goods. "BV Glazing Systems" represents a PCA however does not result in an on-site APEC due to the distance away from the site and inferred groundwater direction.

- **PCA-3: #46 Rail Yards, Tracks, and Spurs.** Based on a review of the site analysis, NSSL identified the "Canadian National Railway" approximately 125 m north of the study site. The presence of potential railway material [slag] and operational railway activities is a PCA, however, did not result in an on-site APEC due to the distance away from the site and inferred groundwater flow direction.

The PCAs identified above result in one [1] onsite Area of Potential Environmental Concern (APEC) on the Phase One ESA property with the potential to have impacted the study site's soil. These are depicted on Figure 4 and tabulated below:

Area of potential environmental concern[1]	Location of area of potential environmental concern on phase one property	Potentially contaminating activity[2]	Location of PCA (on-site or off-site)	Contaminants of potential concern[3]	Media potentially impacted (Groundwater, soil and/or sediment)
APEC-1A APEC-1B APEC-1C APEC-1D	Within the previous residential and commercial building footprints	#30 Importation of Fill Material of Unknown Quality	On-site	Metals, PHC/ BTEX, PAHs, and pH/SAR/ EC	Soil

The Phase One ESA identified three [3] potentially contaminating activities within the study area resulting in one [1] on-site area of environmental concern on the Phase One property. NSSL, therefore recommends a Phase Two ESA be completed to investigate the potential for soil contamination at the study site resulting from the on-site historical fill material being introduced in 2018.

Phase One ESA Conclusions - Addendum

NSSL assessed the material on-site during the geotechnical drilling investigation completed by Niagara Testing & Inspection on June 3rd, 2022. Boreholes were placed within the former building locations and suspected fill areas across the site. The material in question was determined to be representative of imported granular A [crush or run limestone] material, and not "fill material of unknown quality". Therefore, a Phase Two ESA is not required.

FIGURES

LEGEND

Phase One ESA Property Boundary

250 m Study Area

NIAGARA SOILS SOLUTIONS LTD

CLIENT:
M5V Developments

PROJECT:

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
8885 - 8911 Lundy's Lane, Niagara Falls, Ontario

TITLE:

SITE LOCATION PLAN

DRAWN BY: DN

CHECKED BY: JM

DATE: June 2022

PROJECT NO: NS2255-01

SCALE: AS SHOWN

NO:

Figure 1

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, https://maps-beta.niagararegion.ca/Navigator/
NOTE: FOR ILLUSTRATION PURPOSES ONLY, ALL LOCATIONS APPROXIMATE.

LEGEND

Phase One ESA Property Boundary

NIAGARA SOILS SOLUTIONS LTD.

CLIENT:
M5V Developments

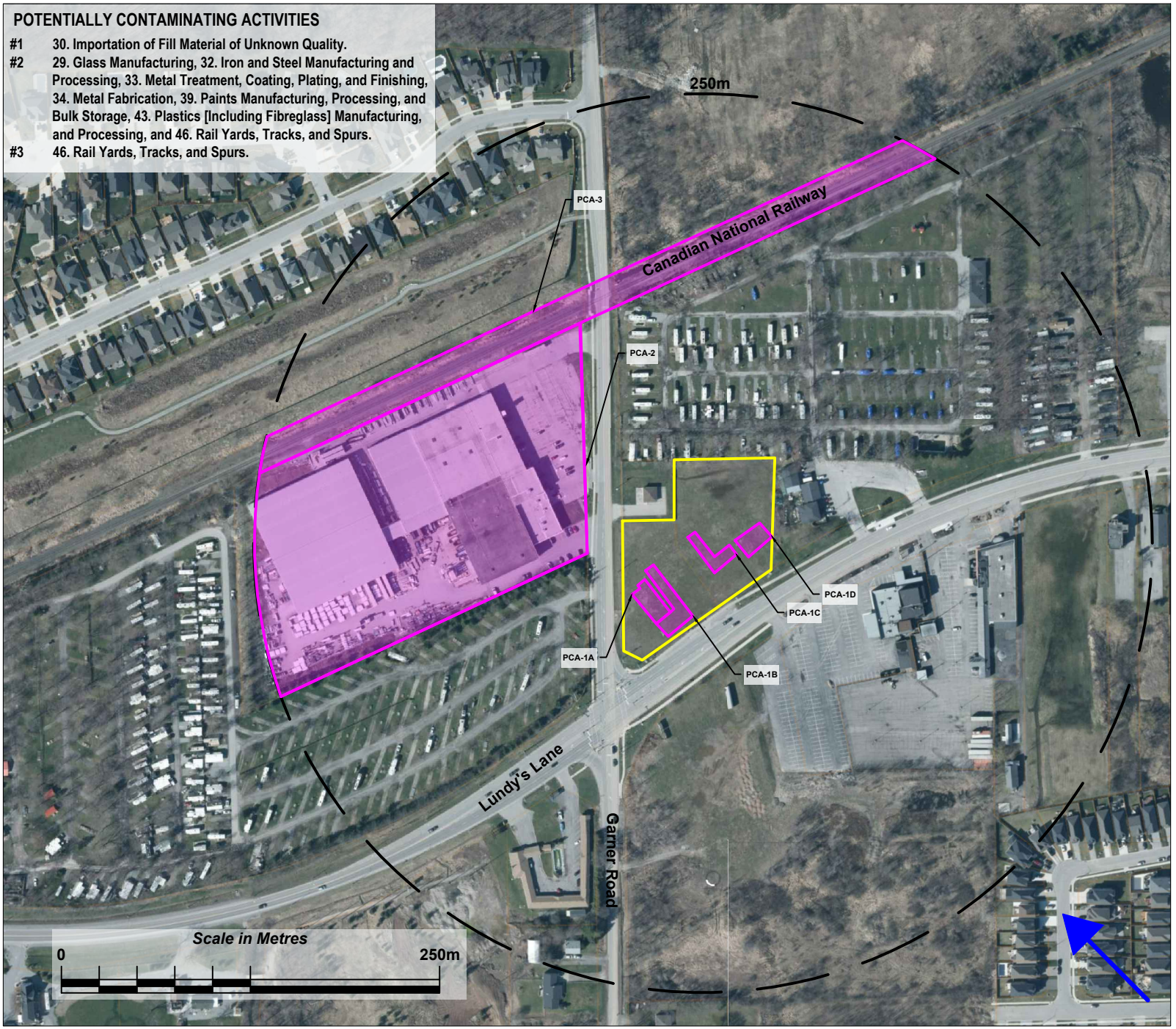
PROJECT:

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
8885 - 8911 Lundy's Lane, Niagara Falls, Ontario

TITLE:
SITE LAYOUT & FEATURES

DRAWN BY:	DN
CHECKED BY:	JM
DATE:	June 2022
PROJECT NO:	NS2255-01
SCALE:	AS SHOWN
NO:	Figure 2

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, https://maps-beta.niagararegion.ca/Navigator/
NOTE: FOR ILLUSTRATION PURPOSES ONLY, ALL LOCATIONS APPROXIMATE.



LEGEND

- Phase One ESA Property Boundary
- 250 m Study Area
- PCA Areas
- Inferred Groundwater Flow Direction

NIAGARA SOILS SOLUTIONS LTD.

CLIENT: **M5V Developments**

PROJECT:

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
8885 - 8911 Lundy's Lane, Niagara Falls, Ontario

TITLE: **POTENTIALLY CONTAMINATING ACTIVITIES**

DRAWN BY: DN

CHECKED BY: JM

DATE: June 2022

PROJECT NO: NS2255-01

SCALE: AS SHOWN

NO: Figure 3

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, https://maps-beta.niagararegion.ca/Navigator/
NOTE: FOR ILLUSTRATION PURPOSES ONLY, ALL LOCATIONS APPROXIMATE.

LEGEND

Phase One ESA Property Boundary

APEC Areas

NIAGARA SOILS SOLUTIONS LTD

CLIENT:
M5V Developments

PROJECT:

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
8885 - 8911 Lundy's Lane, Niagara Falls, Ontario

TITLE:
AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

DRAWN BY: DN

CHECKED BY: JM

DATE: June 2022

PROJECT NO: NS2255-01

SCALE: AS SHOWN

NO:

Figure 4

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, https://maps-beta.niagararegion.ca/Navigator/
NOTE: FOR ILLUSTRATION PURPOSES ONLY, ALL LOCATIONS APPROXIMATE.

APPENDIX A

AERIAL PHOTOGRAPHS

AERIAL PHOTOGRAPHS

Photograph No.1-1934

AERIAL PHOTOGRAPHS

Photograph No.2-1954-55

AERIAL PHOTOGRAPHS

Photograph No.3-1965

AERIAL PHOTOGRAPHS

Photograph No.4-1972

AERIAL PHOTOGRAPHS

Photograph No.5-2000

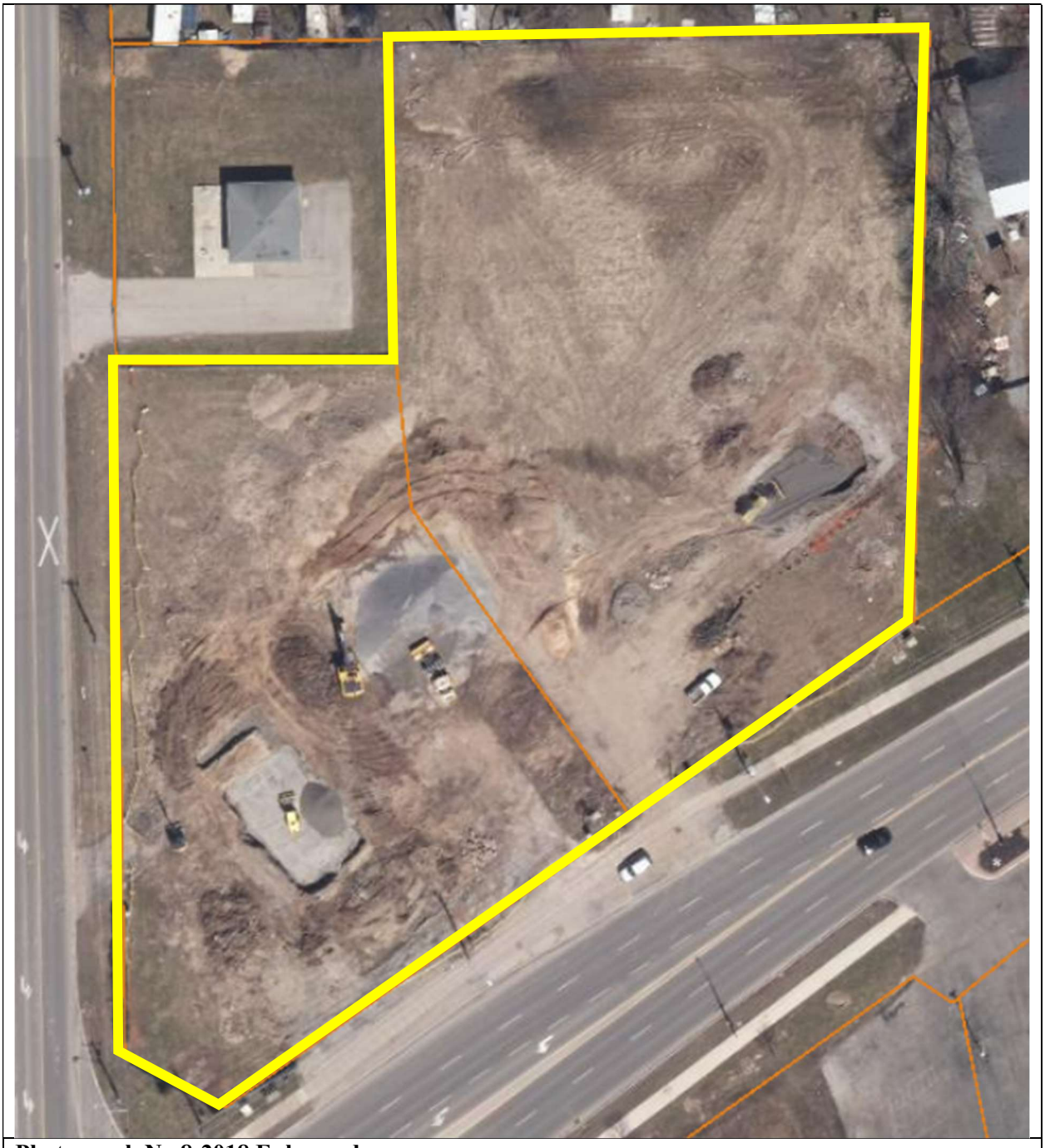
AERIAL PHOTOGRAPHS

Photograph No.6-2010

AERIAL PHOTOGRAPHS

Photograph No.7-2018

AERIAL PHOTOGRAPHS



Photograph No.8-2018 Enhanced

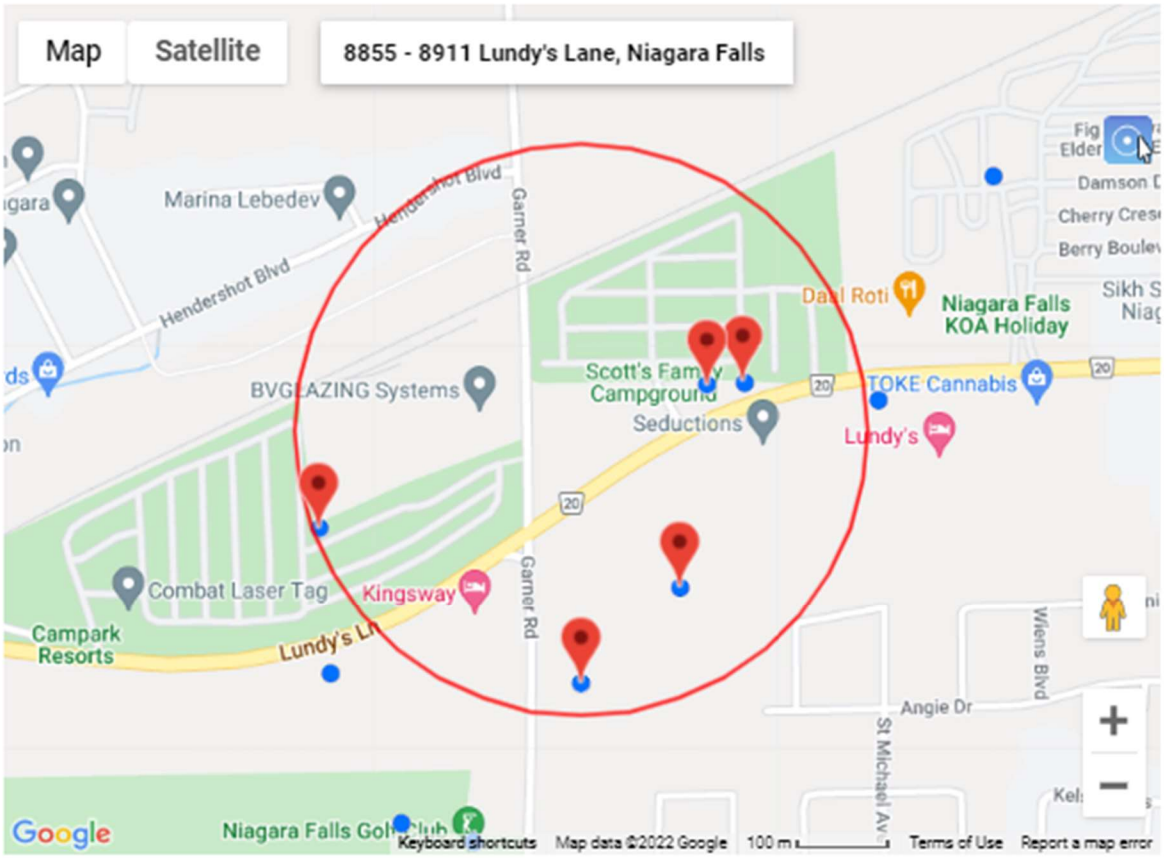
AERIAL PHOTOGRAPHS

Photograph No.9-2020

APPENDIX B

WELL RECORDS

WATER WELL RECORDS



Latitude:43.08977, Longitude:-79.14292 (UTM Zone:17, Easting:651149, Northing:4772457)

Well ID

Well ID Number: 7269489
Well Audit Number: *Z189217*
Well Tag Number: *A165828*

Well Location

Address of Well Location	5855 GARNER ROAD
City/Town/Village	Niagara Falls
UTM Coordinates	NAD83 — Zone 17 Easting: 650436.00 Northing: 4772147.00

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	CLAY	SILT	SOFT	0 ft	10 ft
GREY	CLAY	SILT	SOFT	10 ft	25 ft

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)
14 ft	0 ft	3/8 BENTONITE CHIPS
25 ft	14 ft	#3 SILICA SAND

Observation Wells / Monitoring / Water Found at 20', and Untested

Construction Record – Casing / Screen

Inside/ Outside Diameter	Open Hole or material	Depth From	Depth To
2 inch	PLASTIC	0 ft	15 ft
2.125 inch	PLASTIC	15 ft	25 ft

Audit Number: Z189217, **Well License#** 7484

Date Well Completed: July 19, 2016

Date Well Record Received by MOE: August 18, 2016

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. *(Place Sticker and/or Print Below)* Decommission A092687

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
10413 Lakeshore Rd	Wainfleet		

County/District/Municipality	City/Town/Village	Province	Postal Code
Niagara District	Wainfleet	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	1	650904	4772319		

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

General Colour	Most Common Material	Other Materials	General Description	Depth (*m/ft*) From	Depth (*m/ft*) To
	Bentonite Hole Plug			0	33
	All casing removed				

Annular Space

Depth Set at (*m/ft*) From	To	Type of Sealant Used (*Material and Type*)	Volume Placed (*m³/ft³*)

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, *specify* _____

Well Use

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

Construction Record - Casing

Inside Diameter (*cm/in*)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (*cm/in*)	Depth (*m/ft*) From	To

Construction Record - Screen

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

Status of Well

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

Water Details

Water found at Depth (*m/ft*)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, *specify*
Water found at Depth (*m/ft*)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, *specify*
Water found at Depth (*m/ft*)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, *specify*

Hole Diameter

Depth (*m/ft*) From	To	Diameter (*cm/in*)

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify* _____

If pumping discontinued, give reason:

Pump intake set at (*m/ft*)

Pumping rate (*l/min / GPM*)

Duration of pumping _____ hrs + _____ min

Final water level end of pumping (*m/ft*)

If flowing give rate (*l/min / GPM*)

Recommended pump depth (*m/ft*)

Recommended pump rate (*l/min / GPM*)

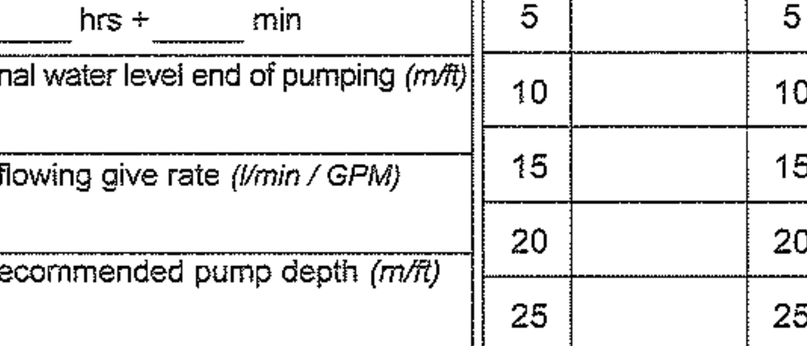
Well production (*l/min / GPM*)

Disinfected? ☐ Yes ☐ No

Draw Down Time (*min*)	Draw Down Water Level (*m/ft*)	Recovery Time (*min*)	Recovery Water Level (*m/ft*)
Static Level			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Ted van der Zalm well Drilling	7179

Business Address (Street Number/Name)	Municipality
840 Concession 2 Rd	Niagara on the Lake

Province	Postal Code	Business E-mail Address
ON	L0S1J0	ted@vanderzalmwelldrilling.com

Bus. Telephone No. (*inc. area code*)	Name of Well Technician (Last Name, First Name)
2896879355	van der Zalm, Ted

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
2957	[signature]	2017/07/19

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2017/07/04

Ministry Use Only

Audit No. Z242658

Received JUL 24 2017

0506E (2014/11) Ministry's Copy

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. *(Place Sticker and/or Print Below)*: Tag#: A 212799

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☑ Well Constructed by Well Owner
	461426 Ontario Limited		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
8845 Lundy's Lane	Niagara Falls	Ontario	L2H1H5	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
8845 Lundy's Lane		Lots 133 & 134	

County/District/Municipality	City/Town/Village	Province	Postal Code
Niagara District	Niagara Falls	Ontario	L2H1H5

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	638552	4776936	Pt STMFD TWP	

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

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Black	Topsoil		unconsolodated	0	1'
Brown	clay		dense	1'	22'
Black/Grey	rock		fractured	22'	45'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
0	20	Bentonite	12 ft³

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☑ Air percussion
☐ Other, *specify* _____

Well Use

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

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
6.25	Steel	188	+18"	22'
6.25	Open		22'	45'

Construction Record - Screen

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

Status of Well

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

Water Details

Water found at Depth (m/ft)	Kind of Water	Hole Diameter Depth From (m/ft)	Depth To	Diameter (cm/in)
37 (m/ft) ☐ Gas	☐ Fresh ☑ Untested ☐ Other, *specify*	0	20	10"
(m/ft) ☐ Gas	☐ Fresh ☐ Untested ☐ Other, *specify*	20	45	6.25
(m/ft) ☐ Gas	☐ Fresh ☐ Untested ☐ Other, *specify*			

Results of Well Yield Testing

After test of well yield, water was:
☑ Clear and sand free
☐ Other, *specify* _____

If pumping discontinued, give reason:

Pump intake set at (m/ft): 40'

Pumping rate (l/min / GPM): 8 gpm

Duration of pumping: 1 hrs + 0 min

Final water level end of pumping (m/ft): 36'

If flowing give rate (l/min / GPM):

Recommended pump depth (m/ft): 40'

Recommended pump rate (l/min / GPM): 8 GPM

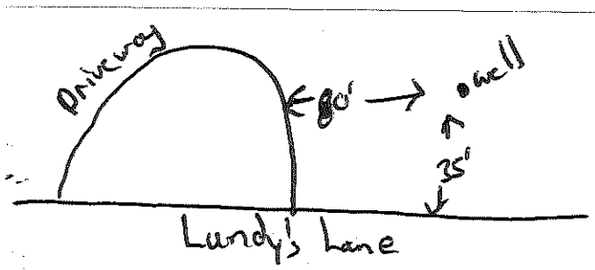
Well production (l/min / GPM): 8 GPM

Disinfected? ☑ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level		13'		36'
1	13'6"		1	29'
2	13'10"		2	23'6"
3	14'		3	20'
4	14'3"		4	14'6"
5	14'6"		5	13'
10	16'1"		10	13'
15	17'4"		15	13'
20	19'1"		20	13'
25	21'		25	13'
30	23'6"		30	13'
40	28'		40	13'
50	32'		50	13'
60	36'		60	13'

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Ted van der Zalm Well Drilling	7579

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
840 Concession 2 Rd	Niagara on the lake	Ontario	L0S1J0	tedvanderzalmwelldrilling.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted (Y Y Y Y M M D D)
289 687 9355	vanderZalm, Ted	2957		

Well owner's information package delivered: ☑ Yes ☐ No

Date Package Delivered: 2017 07 10

Date Work Completed: 2017 07 10

Ministry Use Only

Audit No. Z267880

Received AUG 11 2017

0506E (2014/11) Ministry's Copy

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
A 279202

Type *

☑ Construction ☐ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
COPACABANA COMPANIES	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
[redacted]			

Country	Province	Postal Code	Telephone Number
CANADA	ONTARIO	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	n/a	GARNER RD. & LUNDY'S LANE	

Lot	Concession	County/District/Municipality
		NIAGARA (WELLAND)

City/Town	Province	Postal Code
NIAGARA FALLS	Ontario	

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	650839	4772090	Test UTM in Map	

Other
* SE corner ; BH/MW 9

3. Overburden and Bedrock Material *

Well Depth * 6 (m)

General Colour	Most Common Material	Other Materials	General Description	Depth From (m)	Depth To (m)
Brown	Fill			0	2.1
Brown	Silt			2.1	6

4. Annular Space *

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	0.3	concrete	0.01
0.3	4.2	bentonite chips	0.135

5. Method of Construction *

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☑ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify) _____

6. Well Use *

☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
☐ Domestic ☐ Commercial ☐ Not Used
☐ Livestock ☐ Municipal ☑ Monitoring
☐ Irrigation ☑ Test Hole ☐ Dewatering
☐ Other (specify) _____

7. Status of Well *

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

8. Construction Record - Casing * (use negative number(s) to indicate depth above ground surface)

Inside Diameter (cm)	Open Hole **or** Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness	Depth From (m)	Depth To (m)
5.1	Plastic	0.65	0	4.5

9. Construction Record - Screen

Outside Diameter (cm)	Material (Plastic, Galvanized, Steel)	Slot Number	Depth From (m)	Depth To (m)
6.4	Plastic	10	4.5	6

10. Water Details

Water found at Depth (m) ☐ Gas | Kind of Water ☐ Fresh ☑ Untested ☐ Other (specify)

11. Hole Diameter

Depth From (m)	Depth To (m)	Diameter (cm)
0	6	21

12. Results of Well Yield Testing

☐ Pumping Discontinued

Explain _____

If flowing give rate

☐ Flowing _____ (L/min)

Draw down *

Time (min)	Static Level	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)														

Recovery *

Time (min)	1	2	3	4	5	10	15	20	25	30	40	50	60
Water Level (m)													

After test of well yield, water was

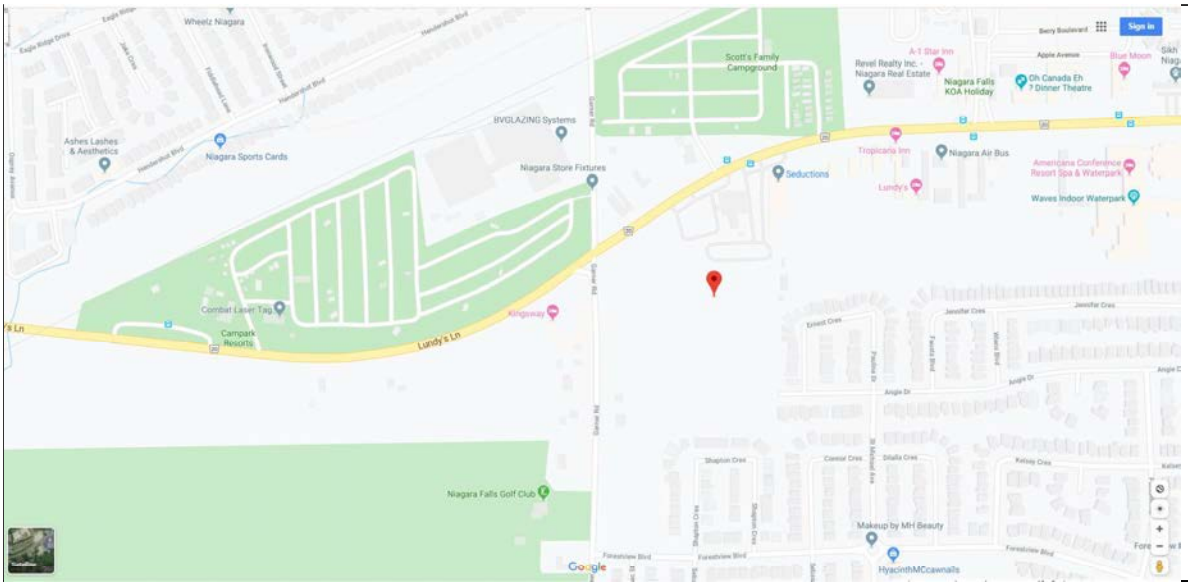
☐ Clear and sand free ☐ Other (specify)

Pump intake set at (m)	Pumping rate (L/min)	Duration of pumping hrs + min	Final water level end of pumping (m)	Disinfected? *
				☐ Yes ☑ No

Recommended pump depth (m)	Recommended pump rate (L/min)	Well production (L/min)

13. Map of Well Location *

Map 1. Please Click the map area below to import an image file to use as the map. ☐ Make map area bigger



14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☐ No		2019/11/29

Comments

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
Geo-Environmental Drilling Inc.	6607

Business Address

Unit Number	Street Number	Street Name *
	1	Mansewood Court

City/Town/Village *	Province	Postal Code *
Halton Hills	Ontario	L7J 0A1

Business Telephone Number	Business Email Address
905-876-3388	dgunn@geo-environmentaldrilling.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
PAQUETTE	JEFF	2386

16. Declaration *

☑ I hereby confirm that I am the person who constructed the well and I hereby confirm that the information on the form is correct and accurate.

Last Name	First Name	Email Address
PAQUETTE	JEFF	romana@geo-environmentaldrilling.com

Signature	Date Submitted (yyyy/mm/dd)
Jeff Paquette Digitally signed by Jeff Paquette Date: 2019.12.18 09:08:15 -05'00'	2019/12/18

17. Ministry Use Only

Audit Number

NF6P 2GT2

Notice of Collection of Personal Information

Personal information contained on this form is collected pursuant to sections 35-50 and 75(2) of the *Ontario Water Resources Act* and section 16.3 of the Wells Regulation. This information will be used for the purpose of maintaining a public record of wells in Ontario. This form and the information contained on the form will be stored in the Ministry's well record database and made publicly available. Questions about this collection should be directed to the Water Well Customer Service Representative at the Wells Help Desk, 125 Resources Road, Toronto Ontario M9P 3V6, at 1-888-396-9355 or wellshelpdesk@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Well Tag Number *
A279513

Type *

☑ Construction ☐ Abandonment

Measurement recorded in: *

☑ Metric ☐ Imperial

1. Well Owner's Information

Last Name and First Name, or Organization is mandatory. *

Last Name	First Name
[redacted]	

Organization	Email Address
COPACABANA COMPANIES	[redacted]

Current Address

Unit Number	Street Number *	Street Name *	City/Town/Village
[redacted]			

Country	Province	Postal Code	Telephone Number
CANADA	ONTARIO	[redacted]	

2. Well Location

Address of Well Location

Unit Number	Street Number *	Street Name *	Township
	n/a	GARNER RD. & LUNDY'S LANE	

Lot	Concession	County/District/Municipality
		NIAGARA (WELLAND)

City/Town	Province	Postal Code
NIAGARA FALLS	Ontario	

UTM Coordinates	Zone *	Easting *	Northing *		Municipal Plan and Sublot Number
NAD 83	17	650731	4771981	Test UTM in Map	

Other
* SE corner ; BH/MW 2

3. Overburden and Bedrock Material *

Well Depth * 6 (m)

General Colour	Most Common Material	Other Materials	General Description	Depth From (m)	Depth To (m)
Brown	Clay			0	4.2
Brown	Clay			4.2	6

4. Annular Space *

Depth From (m)	Depth To (m)	Type of Sealant Used (Material and Type)	Volume Placed (cubic metres)
0	0.3	concrete	0.01
0.3	4.2	bentonite chips	0.135

5. Method of Construction *

☐ Cable Tool ☐ Rotary (Conventional) ☐ Rotary (Reverse) ☑ Boring ☐ Air percussion ☐ Diamond
☐ Jetting ☐ Driving ☐ Digging ☐ Rotary (Air) ☐ Augering ☐ Direct Push
☐ Other (specify) _____

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☐ Public ☐ Industrial ☐ Cooling & Air Conditioning
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☐ Other (specify) _____

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Explain _____

If flowing give rate

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Draw down *

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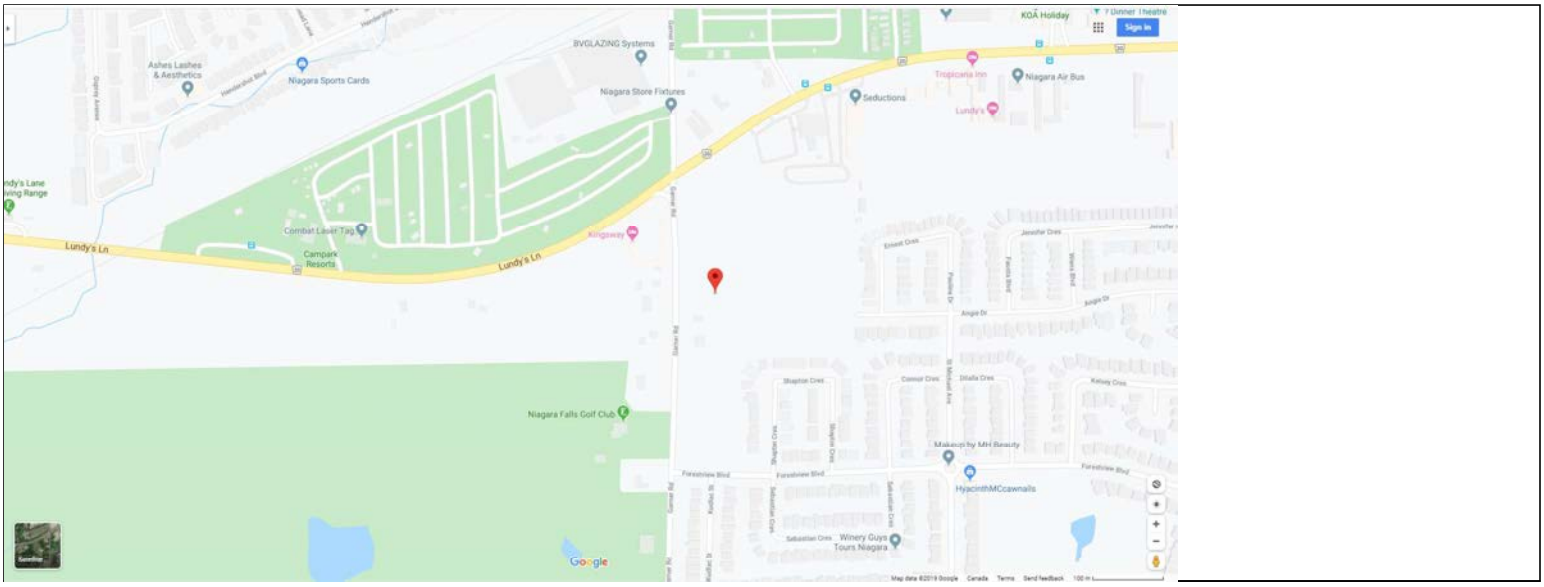

14. Information

Well owner's information package delivered	Date Package Delivered (yyyy/mm/dd)	Date Work Completed (yyyy/mm/dd) *
☐ Yes ☐ No		2019/11/28

Comments

15. Well Contractor and Well Technician Information

Business Name of Well Contractor *	Well Contractor's License Number *
Geo-Environmental Drilling Inc.	6607

Business Address

Unit Number	Street Number	Street Name *
	1	Mansewood Court

City/Town/Village *	Province	Postal Code *
Halton Hills	Ontario	L7J 0A1

Business Telephone Number	Business Email Address
905-876-3388	dgunn@geo-environmentaldrilling.com

Last Name of Well Technician *	First Name of Well Technician *	Well Technician's License Number *
PAQUETTE	JEFF	2386

16. Declaration *

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Last Name	First Name	Email Address
PAQUETTE	JEFF	romana@geo-environmentaldrilling.com

Signature	Date Submitted (yyyy/mm/dd)
Jeff Paquette Digitally signed by Jeff Paquette Date: 2019.12.18 08:56:27 -05'00'	2019/12/18

17. Ministry Use Only

Audit Number

VPTB S3RE